NASET SPECIAL EDUCATOR E-JOURNAL

EXCEPTIONAL TEACHERS TEACHING EXCEPTIONAL CHILDREN





Table of Contents

- Special Education Legal Alert. By Perry A. Zirkel
- Buzz from the Hub
- Reframing Pre-Service Teachers's Perceptions of Students with Disabilities
 through the PERMA Model. By Jemma Kim, Sang Nam, Roderick O'Handley,
 and Marissa Congdon
- The Need for Collaboration When Matching Computerized Assistive Technology
 Devices to Students Identified with Specific Learning Disabilities. By Lisa
 Thompson Sousa and Heather Haynes Smith
- <u>Disproportionate Exclusionary Discipline in Florida. By Helen Flores, Arianna</u> Barroso, Bernardina Fernandez
- Book Reviews
 - o School Culture Rewired. By Larybett Pirela Moreno
 - Connecting Teacher Leadership and School Improvement. By Eunjung
 Lim
 - If you Don't Feed the Teachers, They Eat the Students. By Krystal Fernandez Diaz
- Latest Employment Opportunities Posted on NASET
- Acknowledgements

Special Education Legal Alert

By Perry A. Zirkel © April 2021

This month's update identifies recent court decisions respectively illustrating (a) the interaction of IDEA with Section 504/ADA and (b) the ongoing evolution of FAPE analysis and remedies. For related information about these various issues, see **perryzirkel.com**

In an officially published decision in Reid-Witt v. District of Columbia (2020), a federal district court addressed the Section 504 and ADA claims of a student at a selective public high school who was hospitalized for suicidal ideation in the middle of ninth grade. The parents requested various accommodations and special education. Upon her return to school full-time, the school provided her with a 504 plan, which included various testing and learning accommodations, but formally denied her IDEA eligibility. After her attendance and emotional problems increased in grades 10 and 11 despite updated 504 plans, the school informed the parents that she no longer met the school's grade point average and community service hours requirements. Rather than agree to a transfer to one of the district's non-selective high schools, her parents unsuccessfully tried home-schooling and filed for a due process hearing. The D.C. hearing officer upheld the district's decision that she did not qualify under the IDEA and dismissed her Section 504/ADA claims for lack of jurisdiction. The parents appealed to federal court, and the district filed a motion to dismiss the Section 504/ADA claims, leaving the IDEA eligibility claim for further proceedings.

The first Section 504/ADA claim was the alleged failure of the school to provide sufficient accommodations for her individual disabilities, including her physician's recommendation for home study and her request for permission to photograph the classroom whiteboard to augment her notes.

Applying the bad faith or gross misjudgment standard, the court ruled that the district's four successive 504 plans did not amount to the requisite complete indifference to her disabilities. Although acknowledging that the ADA is slightly less strict than Section 504 for the causal standard, the court concluded that her accommodation allegations constituted "garden variety IDEA violations," thus granting the dismissal motion.

The second Section 504/ADA claim was an alleged district policy or practice of failing to provide special education services at its selective high schools, including the absence of any students with IEPs at her elite high school.

The court denied dismissal of this claim, concluding that at this early stage of the litigation, including the open question as to whether she qualified under the IDEA, it was premature to rule out the requisite bad faith or gross misjudgment of asserting non-eligibility of IDEA eligibility as a pretext for exclusion-type discrimination under Section 504 and the ADA.

This decision is another illustration of the tricky intersection of the IDEA, Section 504, and the ADA, including the nuanced and not well settled differences among them. It remains to be seen whether this particular case ends with a settlement or proceeds to a more definitive determination as to the IDEA eligibility and, separable but related, Section 504/ADA policy/practice claims.

In an officially published decision in R.B. v. Downingtown Area School District (2021), a federal district court in Pennsylvania addressed the various IDEA claims of a primary school student OHI (based on ADHD) and S/LI. The parents sought compensatory education for the kindergarten and first-grade IEPs and tuition reimbursement for the next year, for which they had unilaterally placed him in private school. The due process hearing officer's rulings for the three years at issue were (a) the IEP for kindergarten was appropriate except for the baseline present educational levels (PELs); (b) the next year's IEP resolved the PEL deficiency but was not appropriate in terms of its behavioral component; and (c) the district's proposed IEP for the third year, which corrected both the PEL and behavioral deficiencies, was appropriate. The resulting remedies were one hour per week of compensatory education for the first year and two hours per week for the second year, but no reimbursement due to the appropriateness of the district's proposed IEP for the third year. The hearing officer also denied the parents' requested reimbursement for its two IEEs in relation to the district's reevaluation for the third year. Both parties appealed the hearing officer's decision.

For year 1, the court concluded that the lack of PELs was a procedural violation and the requisite resulting harm was the "lack of guidance regarding expected progress."

Likely attributable to the deferential standard it applied to the hearing officer's FAPE rulings, the court did not make clear whether the resulting harm was based on substantive loss to the student, per the *Endrew F*. progress standard, or to the parents' right to meaningful participation.

For year 2, the court also upheld the hearing officer's FAPE determination based on the lack of timely and reasonable revisions to the BIP.

Although again within the deferential review standard for FAPE rulings, here the court clarified that its ruling was based on the substantive side of FAPE.

For year 3, the court also upheld the	For example, the court ruled that the
hearing officer's FAPE determination,	district provided a reasonable basis for
including the methodology issue for	the IEP's lack of Wilson reading within
reading instruction.	its discretion for the choice of
	methodology in the specific
	circumstances of this case.
Applying the quantitative approach of the	Agreeing with the hearing officer's
Third Circuit, the court also upheld the	conclusion that the FAPE denials were
hearing officer's limited compensatory	successively limited in years 1 and 2, the
education awards.	court found the hourly awards to be
	"equitable and reasonably-related
	[amounts]."
Finally, the court upheld the denial of IEE	[amounts]." Again, the court's ruling, like the
Finally, the court upheld the denial of IEE reimbursement based on alternative	
	Again, the court's ruling, like the
reimbursement based on alternative	Again, the court's ruling, like the hearing officer's IEE analysis, was less
reimbursement based on alternative grounds starting with the parents' failure	Again, the court's ruling, like the hearing officer's IEE analysis, was less than clear-cut in relation to the
reimbursement based on alternative grounds starting with the parents' failure to express disagreement with the district's	Again, the court's ruling, like the hearing officer's IEE analysis, was less than clear-cut in relation to the applicable regulations and case law. It
reimbursement based on alternative grounds starting with the parents' failure to express disagreement with the district's	Again, the court's ruling, like the hearing officer's IEE analysis, was less than clear-cut in relation to the applicable regulations and case law. It was imprecise whether the alternative

Although generally aligned with the prevalent trend of judicial deference to hearing officer decisions and to district methodology determinations, this case also illustrates on closer examination (a) the broad scope of this court's deference rather than being focused on the hearing officer's factual findings as contrasted with legal conclusions; (b) the resulting lack of nuanced precision in the specific IDEA rulings; (c) the relatively unusual treatment of FAPE as a divisible rather than unitary issue; and (d) the Third Circuit's quantitative approach to compensatory education, which the more flexible qualitative or hybrid approach is increasingly eclipsing (although it may result in a similar amount of compensatory education).



Buzz from the Hub

All articles below can be accessed through the following links:

https://www.parentcenterhub.org/buzz-march2021-issue2/

https://www.parentcenterhub.org/buzz-march2021-issue1/

https://www.parentcenterhub.org/buzz-feb2021-issue2/

Webinar | Act Early Ambassadors 2021

Just posted is this pre-recorded webinar featuring how Parent Centers can partner with CDC's Act Early Ambassadors in 2021.

CPIR Info Suites and Resource Collections

Here's a handy cheat sheet to speed you to the many suites and collections that CPIR has on key Parent Center and family-related topics such as behavior, early intervention, IEPs, transition planning, and much more!

Education/Training Connections

This resource is designed to help a transitioning student and members of his or her IEP team to consider the possibility of more education or training after high school—perhaps postsecondary education at a college, university, or community college; vocational education to learn a trade or specific job skill; or continuing and adult education.

Assistive Technology Act

Want to learn more about the ATA and the many ways the law and its program promote awareness of and access to assistive technologies for individuals with disabilities? Want to connect with your state-level AT project?

Considering Assistive Technology for Students with Disabilities

This page was first produced as part of the *Building the Legacy* training curriculum on IDEA 2004. It's a tool for IEP teams to use when they are considering whether a student with disabilities could benefit from assistive technology. In addition to updating the tool, we've added PDF and Word versions for easy printing and sharing.

8 Things I Wish People Knew About Parenting a Child With ADHD

This parent writes, "Eventually, I realized something that made it a little easier to handle how my son behaves in publish and in school sometimes. Most people who judge do it because they just don't know. So here's what I'd like them to understand about me, my son, and ADHD."

Accepting Yourself ADHD and All

This individual writes: "I was diagnosed with ADHD and Auditory Processing Disorder when I was five years of age. By middle and high school, I became more aware of and concerned with others' perceptions of me. *Rejection Sensitive Dysphoria (RSD)* is a condition that causes extreme emotional sensitivity to being criticized, whether that criticism is real or perceived. Although this mental health condition is gaining more attention, it is still relatively new and is not included in most diagnostic manuals." Learn more at about RSD in this candid resource.

Rare Disorders Fact Sheet Updated!

CPIR has updated its *Rare Disorders* fact sheet, where you can investigate the over 7,000 known rare disorders/diseases, find genetics information, learn about relevant laws and orphan drugs, and more.

How to Grandparent a Child With Special Needs

(Also available in **Spanish**) | Being the grandparent of a child with special needs can bring incredible joy but is also complicated, say grandparents like Oricchio, as well as advocates and other experts. About 17% of children are diagnosed with some kind of disability, which is one reason grandparents are so important. Find out more in this article, which features the voices of many grandparents.

Advocating for Myself

Students with disabilities are learning to advocate for themselves. But advocating for one's self takes practice. The youth you work with may find it instructive to hear tips from other students with disabilities who have learned to advocate for themselves in high school, at work, and at college. Connect them with PACER's collection of short videos so they can hear what their peers have to say.

My IEP Owner's Manual for Transition-Age Students

The "Advocating for Myself" page (just mentioned) also includes a wide range of written materials for youth, such as the IEP Owner's Manual. Youth can use the manual to learn about the different parts of their IEP that will help them succeed in their plans for life after high school.

A Family Toolkit: Pediatric to Adult Health Care Transition | Webinar Here's another 1-hour webinar, this one discussing Got Transition's Family Toolkit, which was developed for families to use during their young person's transition from pediatric to adult health care.

How to Improve Engagement Efforts

When Child Trends reviewed the literature, four basic themes emerged as ways to

improve on youth program recruitment, retention, and engagement. This article discusses their findings.

Youth Advisory Councils | Webinar

This 1-hour webinar is all about integrating authentic youth voice in your organization. Does your organization want to start a youth council or strengthen the way youth voice is utilized in your institution? Check out the webinar! From the National Youth Leadership Council.

Top

Reframing Pre-Service Teachers's Perceptions of Students with Disabilities through the PERMA Model

By

Jemma Kim, Ph.D.

Sang Nam, Ph.D., BCBA

Roderick O'Handley, Ph.D.

Marissa Congdon, Ph.D. BCBA-D

California State University, San Bernardino

Abstract

Teacher education programs should be tasked with producing prospective teachers as change agents toward equity in education for students with disabilities. Without substantial changes in teachers' perceptions of the capabilities of students with disabilities, significant changes in instructional practices in special education may not be possible. This paper provides rationales for why teacher education programs should focus on undoing pre-service teachers' preconceptions of students with disabilities and recommends a practical tool that can provide pre-service teachers with an opportunity to recognize the positive characteristics of students with disabilities by adopting the PERMA (Seligman, 2011) model. The PERMA model is expected to help prospective teachers reframe their perceptions of students with disabilities from a deficit view to a strengths-based view.

Keywords: teacher perceptions, students with disabilities, PERMA, strengths-based approaches

Introduction

Students with disabilities receiving special education services are entitled to access the same quality of education as their peers without disabilities to the maximum extent possible (Individuals with Disabilities Education Act [IDEA], 2004). Although many students continue to benefit from special education and related services, post-school outcomes of students with disabilities have not been as positive as their peers without disabilities. For instance, results from the National Longitudinal Transition Study (NLTS) and NLTS-2 suggest that despite relative improvements across post-secondary domains in areas such as post-secondary education, employment, and independent living, students with disabilities continue to have less favorable outcomes than their peers in the general population (Newman et al., 2010, 2011).

One factor that appears related to closing this gap is the extent to which students with disabilities participate in the general education curriculum. The results of several studies suggest that inclusion of students with disabilities into the general education curriculum is associated with more positive outcomes after high school (Mazzzotti et al., 2016; Test et al., 2009). Likewise, the focus of special education for students with disabilities has shifted from simply physical access to the same educational environment as general education students (PL 94-142 of 1975), to access to the same high-quality education as general education students (Every Student Succeeds Act [ESSA], 2015; IDEA, 2004). However, equal educational opportunities for special education students should be accompanied by a clear sense of mission from teachers, related service providers, and administrators who place high expectations on students with disabilities. The IDEA of 2004 and ESSA of 2015 also stress the importance of high expectations for students with disabilities, and also transition mandates that require educators to consider the individual child's needs including their strengths, preferences, and interests when designing transition services and support systems (Biggs & Carter, 2016). In this regard, beliefs, attitudes, or perceptions of teachers and other educational professionals about students with disabilities, as well as the functions and purposes of

special education, are fundamental for ensuring equity in education for students with disabilities.

Depending on teachers' perceptions of students with disabilities (i.e., strengths-based vs. deficit view), teachers present different understandings of educational goals and instructional practices for students with disabilities. Those with a strengths-based vision of instruction appear to hold high expectations for students with disabilities and try to provide intense individualized instruction to students with disabilities aligned with their grade level's general education curriculum by modifying it specifically in terms of meeting students' needs, as they believe that students with disabilities must continuously learn (Ruppar et al., 2018; Urbach et al., 2015). On the other hand, the deficit view of students in special education tends to limit teachers' instructional efforts for students with disabilities (Cameron & Cook, 2013; Feiker Hollenbeck, 2013; Morgan, 2015).

The relationship between teachers' beliefs, perceptions, and instructional practices has been well documented. Teachers' instructional practices are strongly affected by their beliefs (Parajes, 1992). Substantial changes in educational practices often require significant changes in teachers' perceptions of their students (Feiker Hollenbeck, 2013). Thus, teacher education programs should make deliberate efforts to examine pre-service teachers' perceptions of students with disabilities so that they can guide and shape prospective teachers' perceptions from a deficit view to a strengths-based view during their formative years (Morgan, 2015).

We assert that teacher education programs should be responsible for producing prospective teachers as agents for change toward equity in education for students with disabilities by proactively addressing the medical model of "disability as deficit" framing prevalent in special education at schools, as well as teacher education programs. Consistent with our assertion, this paper first discusses why teacher education programs should focus on constructing strengths-based perspectives on students with disabilities among pre-service special education teachers, by investigating the main factors in special education teachers' career choices and their predispositions regarding their roles. Next, we examine relationships between teachers' perceptions of students with

disabilities, teachers' expectations of their students' capabilities, and teachers' instructional practices based on their strengths-based versus deficit view of students with disabilities. Lastly, we discuss the PERMA model (Seligman, 2011), rooted in positive psychology, as a practical framework that can provide pre-service teachers with an opportunity to reflect upon their perceptions of students with disabilities and identify their positive characteristics across the five domain such as positive emotion (P), engagement (E), relationship (R), meaning (M), and achievement (A). We expect that the PERMA model will help prospective special education teachers reframe their perceptions of students with disabilities from a deficit view to a strengths-based view.

Predispositions of special education teacher candidates

Beliefs, attitudes, or perceptions of teachers and other educational professionals about students with disabilities become critical to ensure their equity in education. However, educators' teaching philosophies, beliefs, or perceptions do not change easily (Pajares, 1992). Teachers' beliefs about teaching tend to be already well-established by the time they reach college, developed during what Lortie (1975) called the "apprenticeship of observation" that takes place during the thousands of hours teachers spend in the classroom as students. Thus, understanding these thoughts and perceptions of teacher candidates would provide teacher educators with important information to help and determine curricular and program direction (Parajes, 1992).

Many special education teachers identify their prior experiences working with individuals with disabilities as a primary reason for choosing to pursue a career as a special education teacher (Desutter & Lemire, 2016). Indeed, their desire to help those in need seems to be their main factor in becoming special education teachers. Subsequently, special education teachers report their high job satisfaction and intention to remain on the special education career path because they perceive their profession to be rewarding, which provides them with personal fulfillment (Fish & Stephens, 2010; Stephens & Fish, 2010). In contrast, general education teacher candidates tend to avoid the special education profession because they do not have prior personal experience working with individuals with disabilities (Desutter & Lemire, 2016). Thus, it would be

hard to imagine an individual without personal or work experience with individuals with disabilities being devoted to special education (Zhang et al., 2014).

Unquestionably, the majority of special education teacher candidates come to teacher education programs with their prior experience, as well as their assumptions about individuals with disabilities, in addition to their interest and commitment to serving individuals with special needs. For this reason, teacher education programs need to be vigilant about the tendency of special teacher candidates to continue conventional practices, rather than change the current special education system with the prevalent deficit view of students with disabilities (Ferri et al., 2001). Teacher education programs should acknowledge that special teachers' perceptions of students with disabilities, and understanding of their roles as teachers, can play an important role in either changing or reproducing the education inequality experienced by students with disabilities.

Teachers as change agents

The efficacy of special education teacher education programs has been documented through studies of (a) special education teachers' retention and attrition (Billingsley & Bettini, 2019) and the relationship between teacher training and (b) the achievement of students with disabilities (Feng & Sass, 2013). Research on general education students and their teachers consistently find that teacher effectiveness is unrelated to the type of pre-service education they received (Harris & Sass, 2011). In contrast, students with disabilities whose teachers are certified in special education score substantially better on achievement tests than observationally equivalent students with disabilities whose instructors are not certified in special education (Feng & Sass, 2013). Special education teachers with a more extended pre-service period are more likely to stay in the profession (Boe et al., 2006), indicating that teacher education programs are properly preparing their candidates, even with some reservations.

In a case study of a district-nominated effective special education teacher's comprehension instruction (Feiker Hollenbeck, 2013), the teacher illustrated the complex interaction between teacher beliefs and practices. Although she emphasized her responsibility to provide effective instruction for students, she also excused herself from

modifying and changing those practices when students' outcomes were limited, by attributing the student's slow progress to a student-centered deficit view. Sailors (2009) requested teacher education programs to "undo" their teacher candidates' understandings of comprehension instruction that they have already experienced as students to ensure they learn how to effectively teach comprehension skills (i.e., instructional practices embedded in children's active cognitive engagement). Feiker Hollenbeck (2013) also emphasized that this notion of "undoing" special education teachers' current beliefs that were already formed before their teaching might be a prerequisite for substantial changes in practices for students with disabilities.

Leko et al. (2014) found that although pre-service teachers' core beliefs remained steadfast, their beliefs on reading instruction were influenced by concepts within the coursework, specifically the core concepts repeated throughout several courses. Teachers who believed a learning disability was a deficit within the child changed their views throughout their professional development, moving closer to a more contextual view (Ruiz et al., 1995). Thus, teacher education programs can shape and guide teacher candidates' beliefs, and consequently, their instructional practices as well (Morgan, 2015; Urbach et al., 2015).

When teachers have opportunities to observe students' strengths, they are more likely to implement more inclusive instructional strategies (Shogren et al., 2014). Therefore, teacher education programs should provide teacher candidates with opportunities to recognize the strengths of students with disabilities and, accordingly, to reflect on their perceptions as early as possible during the program. Such efforts in the teacher education programs for teacher candidates prior to entering the classroom would lead to a significant reduction in teachers' deficit views of students with disabilities (Morgan, 2015).

From a deficit view to strengths-based view of students with disabilities

The deficit view of students with disabilities assumes that problematic behaviors or negative educational outcomes reside with the student, rather than operating as a function of the school's failure to respond to students' needs (Trent et al., 1998). The deficit view of students in special education tends to limit teacher's instructional efforts

for students with disabilities. Although more students with disabilities have been integrated into general education classrooms (Goodman et al., 2011; McLeskey et al., 2012), teachers' goals and expectations for students with disabilities still appear to conform to their perceptions of the obviousness of the student's disability (Cameron & Cook, 2013). For students with severe disabilities, teachers tend to focus more on their social development even at the potential expense of academic learning opportunities (Cameron & Cook, 2013; Carter & Hughes, 2006). For students with mild disabilities, teachers often revert to a student-deficit model (e.g., academic plateau) when their instructional methods fail to produce the desired results (Feiker Hollenbeck, 2013). Ruppar et al. (2018) illustrated that for students with significant support needs, depending on educational professionals' personal views of students with disabilities (i.e., strengths-based vs. deficit view), educational professionals presented different understandings of special education teachers' expertise. Those with deficit-based thinking perceived that special education teachers' roles were to provide a safe space or a sense of security for students by caring, loving, and responding to their students' simplistic needs.

There is growing recognition in the field of special education that enhances the quality of life as overall outcomes for students with disabilities (Turnbull et al., 2003). Reflecting the social-ecological perspective that disability is not simply a condition characterized by functional limitations but is also the product of the interaction between individuals and their surroundings, a new disability paradigm has emerged. One of the characteristics of this emerging paradigm is personal well-being (Schalock, 2004). Personal-welling has two key concepts: positive psychology (Seligman & Csikszentmihalyi, 2000) and quality of life (Schalock & Verdugo, 2002). These two key concepts similarly focus on positive experiences and human potential, providing the framework upon which to construct quality services, decide on quality outcomes, and understand the multidimensionality of personal well-being. "These two aspects also provide the rationale and justification for individualized supports" (Schalock, 2004, p. 207). This personal well-being concept also aligns with strengths-based approaches that recognize that individuals with disabilities have personal competencies that also need to

be understood. This leveraged guide supports planning in the field of special education (Buntinx & Shalock, 2010; Niemiec et al., 2017).

Researchers have examined relationships between positive character strengths and quality of life for adolescents (Biggs & Carter, 2016; Proctor et al. 2011; Shogren et al. 2006). In particular, research into character strength as a means to promote valued outcomes (e.g., post-secondary outcomes, life satisfaction, and quality of life) in adolescents with disabilities has been productively conducted in recent years (Niemiec et al., 2017; Shogren et al., 2006). Transition-age youth with autism or intellectual disabilities were found that their positive characteristics (e.g., courage, empathy, forgiveness, gratitude, humor, kindness, optimism, resilience, self-control, and self-efficacy) were more closely associated with increased quality of life across multiple domains, while most demographic and disability-related factors did not predict the quality of life (Biggs & Carter, 2016). Biggs and Carter's findings (2016) confirm Shogren et al. (2006) and Proctor et al. (2011), in which positive traits (e.g., hope, or optimism) were predictors of the well-being of adolescents with and without disabilities.

Although special education teachers have been consistently exposed to language or terms such as strengths-based approaches, students' strengths, personal well-being, or quality of life that underline empowering students through education (Shalock, 2004), they appear to have a limited understanding of how those perspectives can be applied to their instructional practices. When trying to identify a student's strengths, special education teachers raise questions such as "what can this kid do?" or "what does this kid like to do?" (Ruppar et al., 2018, p. 323). The present level of performance and goals of students with disabilities in their individualized education programs (IEPs) still tend to be written in a deficit-based manner, with brief statements about what they can do and like to do (Elder et al., 2018). The concept of personal well-being should be understood as a multidimensional construct, not a substitute for personal happiness or security (Butler & Kern, 2016; Huppert and So, 2013; Kern et al., 2015). However, special education teachers with lower teaching efficacy consider supporting their students as protection, promoting their social/emotional well-being by attending to selfesteem for the "whole child" as their primary goal (Urbach et al., 2015). Such instructional practices, overemphasis of social-emotional well-being at the expense of

academic curricula, have been consistently observed among teachers with lower expectations or the deficit view of students with disabilities (Cameron & Cook, 2013; Ruppar et al., 2018).

It is important for teachers to recognize and understand the strengths of their students with disabilities, in order to undo the deficit view of the disabilities they have experienced as students. Niemiec and colleagues (2017) recommend strengths-spotting as an initial step for practitioners new to strengths-based approaches. This process helps build the vocabulary or language of strengths and facilitates creating a "strengths mindset" (p.5). Thus, we propose a practical tool based on Seligman's PERMA model (2011) that can provide teacher candidates with an opportunity to reflect upon their perceptions of students with disabilities, by retroactively recognizing the positive characteristics of students with disabilities.

Reframing the perceptions through the PERMA model

Seligman (2011) introduced the PERMA model of flourishing, in which psychological well-being is defined in terms of five domains: positive emotions (P), engagement (E), relationships (R), meaning (M), and accomplishment (A). The PERMA model is useful in that it takes the abstract concept of well-being and provides concrete domains that can be measured, developed, and sustained, while also aligning with existing school structures and strategies (Butler & Kern, 2016; Kern et al., 2015).

According to Seligman's (2011) model, positive emotions refer to hedonic feelings of happiness (e.g., feeling joyful, content, and cheerful). Engagement refers to flow, or an extreme level of psychological engagement that involves intense concentration, absorption, and focus, as well as connection to activities or organizations (e.g., feeling absorbed, interested, and engaged in life). Relationships include feeling socially integrated, cared about and supported by others, and satisfied with one's social connections (Butler & Kern, 2016; Kern et al., 2015). A sense of meaning can be defined as having direction in life, believing that one's life is valuable and connected to something greater than oneself (Steger, 20120). Accomplishment involves a sense of working toward and reaching goals, mastery, and efficacy to complete tasks (Butler & Kern, 2016).

Kern et al. (2015) tested the PERMA model with adolescents and found that except for the domain of meaning, all four domains (i.e., positive emotions, engagement, relationships, and accomplishment) were meaningful factors for the construct of wellbeing, as well as other life, health, and mental health variables. The PERMA domains offer more information to allow teachers to better ensure the well-being of students or classes (Kern et al., 2015). Researchers have developed a questionnaire that can measure the five domains with a relatively small number of items. For example, Butler and Kern (2016) have developed a 23-item PERMA-Profiler measure that focuses primarily on the PERMA domains while also addressing the desirability of including several items per feature, instead of just one or two (Huppert and So, 2013). Inspired by such psychometric measures, we have developed a reflective questionnaire that asks teacher candidates to retroactively evaluate the positive characteristics of one student with disabilities that they have worked with in the past or know personally (See Figure 1).

This questionnaire can also be used for teachers to identify the strengths of students with disabilities. However, we strongly recommend teacher educators use this questionnaire as a self-reflection tool for pre-service special education teachers when they start a teacher education program. If teacher candidates have no prior experience working with a student with disabilities or do not know any such students personally, they should be encouraged to complete a questionnaire considering one of their peers with disabilities from their K-12 schooling. In Part I, they will briefly describe a student with disabilities they are going to evaluate retroactively. Then they will complete a 20-item questionnaire that assigns four items for each domain of the PERMA. Teacher candidates could skip an item if they did not have a chance to observe or experience it (Part II). For Part III, they will add all scores for each domain, as well as the entire PERMA scale. At last, teacher candidates will have a chance to recognize the student's strengths based on their perception (Part IV).

Practical implications for pre-service teachers

The purpose of this PERMA questionnaire is to provide pre-service teachers with an opportunity to reflect on their perceptions of students with disabilities and to recognize positive characteristics of these individuals. Special education teacher candidates are more likely to have prior experience with students with disabilities, sometimes having known one personally before selecting their career choice (Fish & Stephens, 2010; Stephens & Fish, 2010; Desutter & LeMire, 2016). Due to their K-16 educational experience, where the prevalent view of people with disabilities is a deficit view, they often come to the teacher education program with the same deficit thinking.

Figure 1The PERMA questionnaire for Prospective Teachers

This questionnaire asks you to retroactively evaluate the well-being of one student with disabilities whom you have worked with or know personally.
Part I. Briefly describe the student:
(Ex. I worked with a 9-year old boy who was diagnosed with autism when I was volunteering as a tutor.)

Part II. Please complete the questionnaire below based on what you perceived about the student. If you did not have a chance to observe nor pay attention to a situation an item describes, you can skip the item. Otherwise, rate each item on a scale of o (never) to 10 (always).

Items Never						Always						
		0	1	2	3	4	5	6	7	8	9	1 0
1	When something good happens to the student, he/she has people who											
	he/she likes to share the good news with.											
2	The student finishes whatever he/she begins.											
3	The student is happy.											
4	The student likes having choices about activities, foods, and peers.											
5	When the student does an activity, he/she enjoys it so much that he/she loses track of time.											
6	The student has a lot of fun.											
7	The student gets completely absorbed in what he/she is doing.											
8	The student loves his/her friends, teacher, and assistants.											

9	The student keeps at his/her											
	schoolwork until he/she is done with											
	it.											
	747											
1	When the student has a problem,											
О	he/she has someone who will be											
	there for him/her.											
11	The student gets so involved in											
	activities that he/she forgets about											
	everything else.											
Ite	ms	Ne	ver								Alwa	ays
		0	1	2	3	4	5	6	7	8	9	1
		~	_	_	J		J	_	/	_)	_
												0
												О
1	When the student is learning											0
1 2	When the student is learning something new, he/she loses track of											
2	something new, he/she loses track of how much time has passed.											
2	something new, he/she loses track of how much time has passed. The student is safe and stable											
2	something new, he/she loses track of how much time has passed.											
2	something new, he/she loses track of how much time has passed. The student is safe and stable											
1 3	something new, he/she loses track of how much time has passed. The student is safe and stable emotionally.											
1 3 1 4	something new, he/she loses track of how much time has passed. The student is safe and stable emotionally. There are people in his/her life who really care about him/her.											
1 3 1 4	something new, he/she loses track of how much time has passed. The student is safe and stable emotionally. There are people in his/her life who											
1 3 1 4	something new, he/she loses track of how much time has passed. The student is safe and stable emotionally. There are people in his/her life who really care about him/her.											
1 3 1 4	something new, he/she loses track of how much time has passed. The student is safe and stable emotionally. There are people in his/her life who really care about him/her.											
1 3 1 4 5	something new, he/she loses track of how much time has passed. The student is safe and stable emotionally. There are people in his/her life who really care about him/her. The student is joyful and content.											

17	Once the student makes a plan to get						
	something done, he/she sticks to it.						
1	The student is positive, no matter						
8	how difficult they seem.						
1	The student is a hard worker.						
9							
2	The student is hopeful about his/her						
О	future and goals.						

Part III. Enter a score in the parenthesis next to each item. Then add all scores for each domain. Finally, add all of the Domain scores to determine the total score of the PERMA.

Domain	Items				Total
Positive emotions	3 ()	13 () +	15 () +	18 ()	
Engagement	5 ()	7 ()+	11 () +	12 ()	
Relationships	1 ()	10 () +	14 () +	16 () =	
Meaning	4 ()	6 () +	8 () +	20 ()	

2 ()	9 () +	17 () +	19 ()							
+			=							
			PERMA							
Part IV. Which domains can be considered as the student's strengths?										
	+	+	+	+ = PERMA						

The PERMA questionnaire first aims to help them reflect on their preconceptions about the personal traits of students with disabilities. Teacher candidates may not be able to complete the questionnaire as they do not have enough recollections of the information some items are asking for. The PERMA underlines that a person's wellbeing is not a unidimensional construct, but a multidimensional construct that all individuals should possess (Butler & Kern, 2016; Kern et al., 2015). When teachers only focus on emotional or social domains for students with disabilities because they want to promote their students' self-esteem or happiness (Ruppar et al., 2018; Urbach et al., 2015), they are missing other important domains as a means to promote valued outcomes for their students. This questionnaire will help pre-service teachers better understand students' strengths across multiple domains of the PERMA that they have otherwise not paid attention to before. Those special education teachers with a strengths-based vision of instruction try to understand students holistically, searching and collecting information from various sources, and seek information about strengths in multiple ways (Ruppar et al., 2018). Beyond focusing on what students can do or like to do, pre-service teachers will seek information about positive characteristics related to

the PERMA domains from their students. This PERMA questionnaire can also play a useful tool for "strengths-spotting" (Niemiec et al., 2017) for pre-service teachers to understand their students during their supervised fieldwork, without relying on psychometric measures with which they are not familiar.

Final thoughts

Teacher preparation programs in the special education field have continually performed the task of preparing effective special educators in line with the reforms and transformations that take place across several fields in education. Implementation of evidence-based practices, common core standards-aligned educational goals, technology-enabled learning, and collaborative teaching are some examples of reformative and transformative movements that can contribute to equity in education for students with disabilities, as entitled by federal legislation (McLeskey et al., 2017). Teacher educators, however, consistently point out that substantial changes in instructional practices should be preceded by changes in teachers' perceptions and expectations of their students with disabilities (Feiker Hollenbeck, 2013; Ruppar et al., 2018; Urbach et al., 2015). Studies on teachers' beliefs and perceptions commonly show that their perceptions should be explicitly addressed during their pre-service preparation period, prior to entering the classroom (Parajes, 1992). As teachers' pedagogical beliefs directly influence their instructional practices, teacher education programs need to provide their candidates with the opportunities to undo any preconceptions or deficit thinking about students with disabilities they had developed as students (Feiker Hollenbeck, 2013).

Research has shown that inclusion of students with disabilities into general education (Mazzotti et al., 2016; Test et al., 2009) and their personal strengths (Biggs & Cater, 2016; Niemiec et al., 2017; Shogren et al., 2006) are significant predictors of valued outcomes. As educators' lower expectations and the deficit view of students with disabilities are inversely associated with rigorous and relevant curricula for students with disabilities and their learning outcomes, it is critical for teacher educators to reinforce strengths-based approaches in teacher education programs. Such programs should prepare prospective special educators to resist and reframe their deficit thinking

about students with disabilities, to encourage high expectations so that students with disabilities can have the education they deserve.

This paper proposed a practical tool based on the PERMA model, which teacher educators can utilize when providing teacher candidates with an opportunity to reflect upon their perceptions of students with disabilities as part of efforts to challenge their deficit thinking. By completing the PERMA questionnaire, pre-service teachers are expected to reflect on their perceptions of students with disabilities and reframe them from a deficit view to a strengths-based view. The PERMA questionnaire also can be used as a strengths-building checklist for any students with disabilities. We expect this PERMA questionnaire to inspire more in-depth discussions on teachers' perceptions of students with disabilities among pre-service teachers.

References

- Biggs, E. E., & Carter, E. W. (2016). Quality of life for transition-age youth with autism or intellectual disability. *Journal of Autism and Developmental Disorders*, *46*(1), 190–204. https://doi.org/10.1007/s10803-015-2563-x
- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: a review of the literature. *Review of Educational Research*, 89(5), 697–744. https://doi.org/10.3102/0034654319862495
- Boe, E. E., Cook, L. H., & Sunderl, R. J. (2006). *Boe, E. E., Cook, L. H., & Sunderland, R. J. (2006). Attrition of beginning teachers: Does teacher preparation matter?*(Report No. 2006-TSDQ2) Philadelphia, PA: Center for Research and Evaluation in Social Policy, Graduate School of Education, University of Pennsylvania.

 http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.566.1197&rep=rep1&type=pdf
- Buntinx, W. H. E., & Schalock, R. L. (2010). Models of disability, quality of life, and individualized supports: Implications for professional practice in intellectual disability. *Journal of Policy and Practice in Intellectual Disabilities*, 7(4), 283–294. https://doi.org/10.1111/j.1741-1130.2010.00278.x

- Butler, J., & Kern, M. L. (2016). The PERMA-Profiler: A brief multidimensional measure of flourishing. *International Journal of Wellbeing*, *6*(3), Article 3. https://doi.org/10.5502/ijw.v6i3.526
- Cameron, D. L., & Cook, B. G. (2013). General education teachers' goals and expectations for their included students with mild and severe disabilities. *Education and Training in Autism and Developmental Disabilities*, 48(1), 18–30. https://www.jstor.org/stable/23879883
- Carter, E. W., & Hughes, C. (2006). Including high school students with severe disabilities in general education classes: perspectives of general and special educators, paraprofessionals, and administrators. *Research and Practice for Persons with Severe Disabilities*, 31(2), 174–185.

 https://doi.org/10.1177/154079690603100209
- Desutter, K. L., & Lemire, S. D. (2016). Exploring the special education versus regular education decisions of future teachers in the rural midwest. *Rural Special Education Quarterly*, *35*(4), 3–9. https://doi.org/10.1177/875687051603500402
- Elder, B. C., Rood, C.E., & Damiani, M.L. (2018). Writing strength-based IEPs for students with disabilities in inclusive classrooms. *International Journal of Whole Schooling*, 14(1), 116-153. https://files.eric.ed.gov/fulltext/EJ1182587.pdf
- Every Student Succeeds Act, 20 U.S.C. § 6301 (2015).
- Feiker Hollenbeck, A. R. (2013). Beyond talking about books: implications of the reading comprehension instruction and pedagogical beliefs of a special educator perceived as effective. *Learning Disability Quarterly*, *36*(2), 112–125. https://doi.org/10.1177/0731948712451975
- Ferri, B. A., Keefe, C. H., & Gregg, N. (2001). Teachers with learning disabilities: A view from both sides of the desk. *Journal of Learning Disabilities; Austin*, *34*(1), 22–32. http://doi.org/10.1177/002221940103400103

- Fish, W. W., & Stephens, T. L. (2010). Special education: a career of choice. *Remedial and Special Education*, *31*(5), 400–407.

 https://doi.org/10.1177/0741932509355961
- Garcia, C., & Chun, H. (2016). Culturally responsive teaching and teacher expectations for Latino middle school students. *Journal of Latina/o Psychology*, *4*(3), 173–187. https://doi.org/10.1037/lat0000061
- Goodman, J. I., Hazelkorn, M., Bucholz, J. L., Duffy, M. L., & Kitta, Y. (2011). Inclusion and Graduation Rates: What Are the Outcomes? *Journal of Disability Policy Studies*, *21*(4), 241–252. https://doi.org/10.1177/1044207310394449
- Haber, M. G., Mazzotti, V. L., Mustian, A. L., Rowe, D. A., Bartholomew, A. L., Test, D. W., & Feng, L., & Sass, T. R. (2013). What makes special-education teachers special? Teacher training and achievement of students with disabilities.
 Economics of Education Review, 36, 122–134.
 https://doi.org/10.1016/j.econedurev.2013.06.006
- Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics*, *95*(7), 798–812. https://doi.org/10.1016/j.jpubeco.2010.11.009
- Huppert, F. A., & So, T. T. C. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, 110(3), 837-861. http://dx.doi.org/10.1007/s11205-011-9966-7
- Individuals with Disabilities Education Improvement Act, 20 U.S.C 1400 et seq. (2004).
- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *The Journal of Positive Psychology*, *10*(3), 262–271. https://doi.org/10.1080/17439760.2014.936962
- Leko, M. M., Brownell, M. T., Sindelar, P. T., & Kiely, M. T. (2015). Envisioning the future of special education personnel preparation in a standards-based era. *Exceptional Children*, 82(1), 25–43. https://doi.org/10.1177/0014402915598782

- Liang, X., & Zhang, G. (2009). Indicators to evaluate pre-service teachers' cultural competence. *Evaluation & Research in Education*, *22*(1), 17–31. https://doi.org/10.1080/09500790903082354
- Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago: University of Chicago Press. Multon, K.
- Mazzotti, V. L., Rowe, D. A., Sinclair, J., Poppen, M., Woods, W. E., & Shearer, M. L. (2016). Predictors of post-school success: a systematic review of NLTS2 secondary analyses. *Career Development and Transition for Exceptional Individuals*, 39(4), 196–215. https://doi.org/10.1177/2165143415588047
- McLeskey, J., Barringer, M-D., Billingsley, B., Brownell, M., Jackson, D., Kennedy, M., Lewis, T., Maheady, L., Rodriguez, J., Scheeler, M. C., Winn, J., & Ziegler, D. (2017). *High-leverage practices in special education*. Arlington, VA: Council for Exceptional Children & CEEDAR Center.
- McLeskey, J., Landers, E., Williamson, P., & Hoppey, D. (2012). Are we moving toward educating students with disabilities in less restrictive settings? *The Journal of Special Education*, *46*(3), 131–140. https://doi.org/10.1177/0022466910376670
- Morgan, P. S. (2015). General and special education high school teachers' perspectives of full membership for students with disabilities. *Values and Ethics in Educational Administration*, 11(3). https://eric.ed.gov/?id=EJ1186309
- Newman, L., Wagner, M., Cameto, R., Knokey, A.-M., & Shaver, D. (n.d.). Comparisons across time of the outcomes of youth with disabilities up to 4 years after high school. a report of findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). 163.
- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., Wei, X., Cameto, R., Contreras, E., Ferguson, K., Greene, S., & Schwarting, M. (n.d.). *The post-high school outcomes of young adults with disabilities up to 8 years after high school.* 218.

- Niemiec, R. M., Shogren, K. A., & Wehmeyer, M. L. (2017). Character strengths and intellectual and developmental disability: a strengths-based approach from positive psychology. *Education and Training in Autism and Developmental Disabilities*, *52*(1), 13–25. JSTOR. https://doi.org/10.2307/26420372
- Pajares, M. F. (1992). Teachers' beliefs and educational research: cleaning up a messy construct. *Review of Educational Research*, 62(3), 307–332. JSTOR. https://doi.org/10.2307/1170741
- Proctor, C., Maltby, J., & Linley, P. A. (2011). Strengths use as a predictor of well-being and health-related Quality of Life. *Journal of Happiness Studies*, *12*(1), 153–169. https://doi.org/10.1007/s10902-009-9181-2
- Ruiz, N. T., Rueda, R., Figueroa, R. A., & Boothroyd, M. (1995). Bilingual special education teachers' shifting paradigms: complex responses to educational reform. *Journal of Learning Disabilities*, *28*(10), 622–635. https://doi.org/10.1177/002221949502801004
- Ruppar, A. L., Roberts, C. A., & Olson, A. J. (2018). Is it all about loving the kids? Perceptions about expertise in special education. *Teaching and Teacher Education*, *71*, 319–328. https://doi.org/10.1016/j.tate.2018.02.001
- Sailors, M. (2009). Improving comprehension through quality professional development. In S. E. Israel & G. G. Duffy (Eds.), *Handbook of research on reading comprehension* (pp. 645–657). New York, NY: Routledge.
- Schalock, R. L. (2004). The emerging disability paradigm and its implications for policy and practice. *Journal of Disability Policy Studies*, *14*(4), 204–215. https://doi.org/10.1177/10442073040140040201
- Schalock, R. L., & Verdugo, M.A. (2002). *Handbook on quality of life for human service* practitioners. Washington, DC: American Association on Mental Retardation.
- Seligman, M. E. P. (2011). Flourish A visionary new understanding of happiness and well-being. New York, NY: Free Press.

- Seligman, M. E. P.,& Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *The American Psychologist*, *55*, 5–14. https://doi.org/10.1007/978-94-017-9088-8 18
- Shogren, K. A., Lopez, S. J., Wehmeyer, M. L., Little, T. D., & Pressgrove, C. L. (2006). The role of positive psychology constructs in predicting life satisfaction in adolescents with and without cognitive disabilities: An exploratory study. *The Journal of Positive Psychology*, 1(1), 37–52. https://doi.org/10.1080/17439760500373174
- Shogren, K. A., Plotner, A. J., Palmer, S. B., Wehmeyer, M. L., & Paek, Y. (2014). Impact of the self-determined learning model of instruction on teacher perceptions of student capacity and opportunity for self-determination. *Education and Training in Autism and Developmental Disabilities*, 49(3), 440–448.

 https://www.jstor.org/stable/23881266
- Steger, M. F. (2012). Experiencing meaning in life: Optimal functioning at the nexus of well-being, psychopathology, and spirituality In P. T. P. Wong & P. S. Fry (Eds.), *Handbook of personal meaning: Theory, research, and application* (2nd ed., pp. 165-184). Mahwah, NJ: Lawrence Earlbaum.
- Stephens, T. L., & Fish, W. W. (2010). Motivational factors toward pursuing a career in special education. *Education*, *130*(4), 581–594.
- Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L., & Kohler, P. (2009). Evidence-based secondary transition predictors for improving postschool outcomes for students with disabilities. *Career Development for Exceptional Individuals*, 32(3), 160–181. https://doi.org/10.1177/0885728809346960
- Trent, S. C., Artiles, A. J., & Englert, C. S. (1998). From deficit thinking to social constructivism: A review of theory, research, and practice in special education. *Review of Research in Education*, *23*, 277-307. https://doi.org/10.2307/1167293.

- Turnbull, H. R., Turnbull, A. P., Wehmeyer, M. L., & Park, J. (2003). A Quality of Life framework for special education outcomes. *Remedial and Special Education*, 24(2), 67–74. https://doi.org/10.1177/07419325030240020201
- Urbach, J., Moore, B. A., Klingner, J. K., Galman, S., Haager, D., Brownell, M. T., & Dingle, M. (2015). "That's My Job": comparing the beliefs of more and less accomplished special educators related to their roles and responsibilities.

 Teacher Education and Special Education, 38(4), 323–336.

 https://doi.org/10.1177/0888406415591220
- Zhang, D., Wang, Q., Losinski, M., & Katsiyannis, A. (2014). An examination of preservice teachers' intentions to pursue careers in special education. *Journal of Teacher Education*, 65(2), 156–171. https://doi.org/10.1177/0022487113510743

Top



The Need for Collaboration When Matching Computerized Assistive Technology Devices to Students Identified with Specific Learning Disabilities

Lisa Thompson Sousa, PhD Sul Ross State University

Heather Haynes Smith, PhD
Trinity University

Abstract

Rates of use associated with assistive technology by individuals with specific learning disabilities were compared to the rates associated with low incidence disabilities. To address disproportionate practices for specific learning disabilities, four constructs (combined dependent variables) were created: (1) knowledge of specific learning disabilities (2) knowledge of computerized devices (3) expertise in assessment for computerized assistive technology devices with specific learning disabilities and (4) frequency of consideration. Based on the constructs, a survey was piloted and distributed online to professionals involved with assistive technology decisions. The participants were separated into four groups typically found in IEP meetings. The groups include: (1) related service providers (2) special education specialists, (3) general education instructional specialists (4) education technology specialists. The level of self-reported knowledge, expertise and frequency were analyzed and described by

comparing the groups. A fifth independent variable, collaboration, was created and compared among the constructs using ANOVA and significant findings were found regarding level of collaboration in relation to the four constructs associated with assessment of computerized assistive technology when paired with specific learning disabilities.

Key words: Assistive Technology, Online, Specific Learning Disability, Collaboration,
Pandemic, Covid

The Need for Collaboration when Matching Computerized Assistive Technology Devices to Students Identified with Specific Learning Disabilities

In special education, an assistive technology (AT) is an intervention used to compensate for disabilities related to human functioning. This can take the form of a service, a device, or both (IDEIA, 2004). An assistive technology device, in particular, may be any item that assists an individual with functioning to access general education curriculum. Assistive technology devices range from low to high technology, and consideration for the use of a device is environment dependent. Devices may be as simple as a modified handle or as complex as adapted technology or software for accessible computers.

Federal law mandates that assistive technology be considered for all disabilities (IDEIA, 2004). Assistive technology is considered during an initial evaluation and throughout the child's tenure receiving special education services. However, disproportionate practices exist in the consideration and evaluation practices for students with disabilities when considering assistive technology. Specific learning disabilities, a high-incidence disability, represents, 41% of the total student special education population (NCES, 2012). A larger representation would imply a greater consideration of assistive technology. However, consideration and use of assistive technology by students with high incidence disabilities is at 15% (Quinn et. al., 2009). In comparison, students with low incidence disabilities which represent about 1% of the special education population have a consideration and use rate of 54%. Sensory

disabilities, which is a low incidence disability has an anticipated use of 100% by comparison (Golden, 1998).

An additional complicating factor to assistive technology consideration is the increase in online instruction since the pandemic due to Covid. The pandemic has given rise to greater need for online instruction and there is a greater need among students for accessibility. There are sweeping changes in apps, computer software and online instruction marketed toward students with disabilities. While research shows limited documentation, consideration and use rate when pairing assistive technology with students identified with specific learning disabilities, research does not provide an indication on the type of assistive technology that is available on the continuum (i.e. "low tech" versus "high tech"). Given access to online apps and instruction due to the pandemic, there is an increased need to determine the need for computerized assistive technology.

Computerized Assistive Technology Research

Research for computerized assistive technology devices is measured in terms of outcomes. However, research design and procedural fidelity with devices frequently cited in the literature are weak. A large part of this lack of strength in research is because computerized assistive technology devices are commercial. Rust and Smith (2006) found that 55% of commercial product developers used formal designs (e.g., single subject or group comparison design). They also found that 67% of reported client satisfaction was used in lieu of formal research design "at least half the time." Suggested research designs include comparison research (e.g., computerized assistive technology versus low-technology devices that support similar functions) (Reichle, 2011), time series concurrent differentials (TSDA) (Smith, 2000), and single subject designs (Edyburn, 2005). Lenker and Paquet (2004) conducted a meta-analysis of 89 studies on computer assisted technology outcomes and found that many key indicators were absent including inter-rater reliability (88%), content validity (90%), criterion validity (93%) and construct validity (92%).

Lack of procedural fidelity in outcome research is also a problem in assistive

technology research for educational disabilities (Boone & Higgins, 2005; Golden, 1998) that creates difficulties in replication and validity (Reichle, 2011). Without procedural data, two professionals could yield entirely different outcomes when measuring outcomes of assistive technology device trials. Thus, procedural fidelity in computerized assistive technology research is a necessary component to ensure validity of devices becoming evidence-based practice (Yaw et al., 2011). Omissions in normative data because of procedural fidelity might contribute to the allure of some devices because of perceived or misperceived potentials to assure positive outcomes of an assessment.

A contributor to procedural fidelity is the use of standardized measurement to determine outcomes. However, non-standardized methods for measurement tools are frequently used in assistive technology outcome research in school settings. Edyburn (2005) and Rust and Smith (2006) substantiated that the frequency of use of formal instrumentation during commercial product development occurred 47% of the time when measuring functional performance outcomes.

Research design, validity, and procedural fidelity all affect the generalizability of computerized assistive technology devices. Specifically, these components ensure outcomes are generalizable and are based on the salient characteristics of the device. However, outcome reporting may not be based on sound research methods.

Methods

The framework of the study is the intersection of special education, assessment, instruction and computerized educational technology. This intersection has occurred over the past two decades to address service delivery (Gerston, 2010). Over the years, the focus shifted from broad programming, such as mainstreaming to inclusion for students with disabilities, and later to direct instruction by the 1990s. By 2000, research shifted to response to intervention (RTI), positive behavior supports (PBS), and universal design for learning (UDL) models which addressed diverse learning styles as opposed to just special education.

Concurrently with changes in service delivery models was the evolution of computerized technology. The capabilities of computers increased and they became

smaller, quicker, lighter, and easier to use. The Internet, social media, and mobile devices made computerized technology ubiquitous. In response to the knowledge base of digital natives (i.e., children who grew up in the digital age), classrooms began instituting learning platforms for multimedia instruction. With developments in education and technology, educators became increasingly focused on how technology could support diverse learners, particularly in inclusive settings. Thus, it became necessary to change assistive technology in education to address these rapid advances in technology.

The purpose of this study was to measure the self-efficacy and knowledge of assistive technology providers' evaluation practices when considering computerized assistive technology for students identified with specific learning disabilities. Variables were determined that influence the pairing of computerized assistive technology with individuals with specific learning disabilities. Variables include professional experience, collaboration, knowledge of computerized assistive technology, and knowledge of specific learning disabilities. As such, the following research questions guided this study:

- 1. What is the self-reported expertise of assistive technology practitioners in computerized assistive technology?
- 2. What is the expertise of assistive technology practitioners concerning specific learning disabilities?
- 3. What is the self-reported expertise of assistive technology practitioners when evaluating computerized assistive technology for students identified with specific learning disabilities?
- 4. Is there a difference in self-reported expertise between participants who collaborate versus those who do not when matching computerized assistive technology with students identified with specific learning disabilities?

Research Design

The study used a survey administered online to professionals involved with

assistive technology decisions. The participants were located through the Listservs of professional organizations associated with assistive technology.

Participants

Assistive technology practitioners are professionals involved in the evaluation of assistive technology to create functional access for persons with disabilities. Because assistive technology providers come from diverse backgrounds and include medical disabilities, participants were narrowed to researchers and practitioners whose focus is providing access for individuals identified with disabilities in education.

The participants were disaggregated into four service provider groups. Because specific learning disabilities is a population of individuals served in education, study participants were grouped according to typical professional service groupings as documented in IEPs. These groupings included related service providers, special education specialists, and general education instructional specialists. A fourth group consisted of education technology providers such as librarians and other computerized technology support roles and specializations (see Table 3.1).

Table 3.1

Professional Service Groups

Service Group	Professional Licensing or			
Credentialing				
D.1. 10 '	Occupational Therapist, Physical			
Related Service	Therapist, Adaptive Physical Therapist,			
	Adaptive P.E. Teacher, Vision Itinerant			
	Teacher, Auditory Itinerant Teacher,			
	Behaviorist			
Special Education Specialist	Licensed School Psychologist,			

	Educational Diagnostician,
	Psychometrician, Special Education
	Specialist
Instructional Service	Speech Language Pathologist, Reading
	Teacher, Content Mastery, General
	Education
Educational Technology	Educational Technology, Computerized
	Instruction, Librarian

Administration of the Survey

The survey was administered to participants of assistive technology organizations online. It was nationally distributed. Known as a purposive sample, a true stratified randomized sample was not obtained. Participants, found through these organizations, were solicited by email and received a cover letter and link to the survey. Participation was voluntary, confidential, and anonymous.

Determination of Variables

The variables were combined and mean responses that represented the constructs were used. Individual items used to represent the constructs were referenced from a variety of sources. The determination of computerized assistive technology devices used for the study was based on Reed (2007), and a synthesis of literature provided by Edyburn (2002; 2003; 2004). The determination of variables of specific learning disabilities and topics were referenced from IDEIA (2004) and Swanson, Harris, and Graham (2003). The independent variables in the study consisted of assistive technology participants, which were separated according to professional roles represented in an IEP. Collaboration was an independent variable and those variables were determined after referencing collaboration practices for assistive technology (Lahm, 2005).

The dependent variables were sets of data combined to represent the following

constructs: (1) computerized device knowledge, (2) knowledge of topics relating to specific learning disabilities, (3) self-reported expertise of assessment of involving computerized device knowledge with specific learning disabilities, (4) and frequency of consideration of the computerized devices for specific learning disabilities. Combining individual responses to a set of responses resulted in a mean score comparison to reduce respondent bias. For example, respondents' knowledge regarding a particular computerized device was not the focus; rather, the collective mean of the set of questions that represented overall knowledge of computerized assistive technology devices was the focus.

Data Analysis

A one-way analysis of variance (ANOVA) and a description of frequencies was used to determine differences between the dependent variables (self-reported level of device knowledge, learning disability knowledge, expertise and frequency) among the four professional groups. Participants' responses were analyzed by creating combined independent and dependent variables. Statistical Package for Social Sciences (SPSS), version 14.0 software was used for data analysis. Descriptive statistical analysis was chosen to determine patterns in the data that described variables associated with assessment decisions.

Results

The purpose of this study was to describe the extent of knowledge of assistive technology providers when matching computerized assistive technology devices with students with specific learning disabilities. Limited research exists in this regard because of changes in computerized devices and the flux of the professional best practices of assistive technology as a whole. The study examined the overall expertise with matching computerized assistive technology devices with specific learning disabilities. The groups studied included (1) related service providers, (2) special education specialists, (3) general education instructional specialists, and (4) education technology specialists. Expertise was determined based on the following four constructs: (1) knowledge of specific learning disabilities, (2) computerized assistive

technology, (3) self-reported expertise, and (4) frequency of consideration. Collaboration, addressed in Research Question 4, yielded significant differences in findings. Data were collected by survey and analyzed using a comparison of means and analysis of variance regarding collaboration.

Two types of results are provided. The first set of results includes a description of knowledge and frequency of expertise in terms the comparison of means among the four groups. Second, an analysis of variance (ANOVA) was used to compare collaboration among the constructs. Based on the literature review collaboration was expected to contribute to differences in knowledge, expertise, and frequency of consideration. The research questions were chosen to reflect current level of knowledge and whether collaboration influenced differences reported by respondents.

The mean scale scores were collected by measuring expertise in matching computerized assistive technology to specific learning disabilities. Of the 80 respondents, 51 met criteria for inclusion of the study based on the four professional groupings. The descriptive statistics that follow report the results of Research Questions 1, 2, and 3, which describe the level of knowledge, expertise, and frequency of consideration in comparison among four groups. The descriptive statistics indicated similar means with respect to frequency of consideration and levels of knowledge of computerized assistive technology. Differences in mean scores were found with respect to levels of knowledge of specific learning disabilities and expertise. Significant differences were noted with respect to Research Question 4, which addressed collaboration.

Knowledge Base of Assistive Technology

The first research question addressed the levels of knowledge of assistive technology providers as it related to computerized assistive technology devices. Mean scores were calculated based on overall level of knowledge of devices. Knowledge was represented using a 4-point Likert scale, and percentage responses were provided in quadrants. Mean and standard deviation were calculated and compared among the four professional groups. Table 3.2 presents the mean and standard deviations of the four

groups' responses regarding computerized assistive technology device knowledge. The overall mean and standard deviation of the groups are compared to illustrate differences.

Table 3.2

Overall Knowledge of Computerized Assistive Technology Devices

	N	M	SD
General Instructional Specialists	13	3.07	.869
Special Education Specialists	17	3.24	.559
Related Service Providers	24	3.30	.654
Educational Technology Specialists	18	3.15	.7

Assistive Technology Relating to Specific Learning Disabilities

The second research question addressed the level of knowledge of assistive technology providers as it related to specific learning disabilities. Mean scores were calculated based on overall knowledge of specific learning disabilities. Mean and standard deviation were calculated and compared among each of the four groups regarding specific learning disabilities.

Table 3.3 presents the mean and standard deviation in comparing each of the four groups' responses regarding knowledge of specific learning disabilities. The mean scores were calculated based on a 4-point Likert-type scale (none-expert). The overall mean scores and standard deviation of the groups are presented to illustrate differences. Some differences existed when comparing the knowledge of computerized devices across groups. While three of the four groups reported a level of knowledge described as average, educational technologists were below average in comparison (M = 2.72, SD = .528).

Table 3.3

Overall Knowledge of Specific Learning Disabilities

	N	M	SD
General Instructional Specialists	13	3.19	·755
Special Education Specialists	17	3.36	.52
Related Service Providers	24	3.05	.461
Educational Technology	18	2.72	.528
Specialists			

Expertise in Pairing Assistive Technology to Specific Learning Disabilities

The third research question described assistive technology providers' expertise in matching computerized assistive technology with individuals with specific learning disabilities. This question was answered in two ways. First, the mean set of self-reported responses on expertise when matching computerized assistive technology with specific learning disabilities was compared among the four groups (see Table 3.4). The mean scores were calculated based on a 4-point Likert-type scale (none-expert). The overall mean scores and standard deviation of the groups presented are compared to illustrate differences. As a group, educational technology specialists reported slightly below average expertise (M = 2.92, SD = .874) compared to an average level of expertise with the other three groups.

Table 3.4
Self-reported Expertise

	N	M	SD
General Instructional Specialists	12	3.05	.922
Special Education Specialists	16	3.27	.458
Related Service Providers	24	3.19	.68

Educational Technology Specialists	18	2.92	.875

Table 3.5 presents the means and standard deviations of the frequency of consideration for pairing computerized devices with specific learning disabilities. The mean scores were calculated based on a 4-point Likert-type scale (never-always). The overall mean scores and standard deviation of the groups presented are compared to illustrate differences. Some differences existed when comparing the levels of expertise across groups. However, the level of consideration for all groups was that computerized assistive technology devices, as a whole, were somewhat considered for individuals with learning disabilities.

Table 3.5

Frequency of Consideration of Devices

	N	M	SD
General Instructional Specialists	11	2.23	.613
Special Education Specialists	16	2.33	.499
Related Service Providers	23	2.36	.444
Educational Technology Specialists	17	2.29	.542

Results for Research Question 4

The fourth research question addressed differences in self-reported expertise between participants and their levels of collaboration when matching computerized assistive technology with students identified with specific learning disabilities. The mean of a set of responses were analyzed in terms of the following: (1) common topics associated with learning disabilities, (2) knowledge of computerized assistive

technology devices, (3) frequency of consideration for both areas, and (4) self-reported expertise for consideration of a computerized assistive technology device for specific learning disabilities (i.e. assessment). A one-way analysis of variance (ANOVA) was completed to compare means. A significant difference existed when comparing collaboration among the constructs (see Table 3.6).

Table 3.6

Collaboration

	df	F	Sig.
Specific Learning Disability Knowledge	4	1.167	.341
Computerized Assistive Technology Device	4	1.609	.193
Knowledge			
Frequency of Consideration	4	.443	.776
Expertise in Assessment for Both	4	1.690	.174

A significant main effect existed for collaboration in each of the four constructs. A significant difference was also found regarding the effect of collaboration on knowledge of specific learning disabilities, F(4, 37) = 1.17, p = .34. A significant difference was found regarding the effect of collaboration on knowledge of computerized assistive technology device knowledge, F(4, 37) = 1.16, p = .19. A significant difference was found regarding the effect of collaboration on frequency of consideration, F(4, 34) = .44, p = .78. Finally, a significant difference was found regarding the effect of collaboration on expertise of matching computerized assistive technology devices with specific learning disabilities, F(4, 36) = 1.69, p = .174.

Discussion

The purpose of this study was to describe the expertise of assistive technology providers when matching computerized assistive technology devices with students with

specific learning disabilities. Limited research exists in this regard due to the flux with computerized device technology and limited best practices as a whole. This section opens with significant findings associated with collaboration and their effect on current assessment practices. This discussion is followed by findings that describe differences among professional groups. The section closes with a summary of the implications for practice.

Collaboration

Collaboration represented the most significant findings of the study. Four constructs, combined dependent variables, were measured for significance between participants and their levels of collaboration. The constructs that represented expertise included combined variables representing (1) knowledge of specific learning disabilities, (2) knowledge of computerized assistive technology, (3) self-reported expertise, and (4) frequency of consideration. Overall, levels of collaboration contributed to significant differences among the four constructs that affect the assessment of computerized assistive technology with specific learning disabilities. Each of the constructs is discussed separately.

Collaboration and Computerized Assistive Technology Knowledge

Significant differences were found in reported computerized assistive technology device knowledge by assistive technology professionals based on their levels of collaboration. Thus, collaboration contributed to greater ratings in knowledge in computerized assistive technology for assistive technology professionals. This finding supports similar research that suggested collaboration is vital for assistive technology practices. Reed (2007) found that, in the absence of collaboration, there is greater likelihood of unsuccessful outcomes for assistive technology. This finding may also give further clarification as to why unsuccessful outcomes are occurring. Respondents also reported a significant difference in expertise when collaboration was a part of the evaluation process for matching computerized assistive technology devices with specific learning disabilities.

Collaboration and Specific Learning Disability Knowledge

Significant differences were found in reported knowledge of specific learning disabilities by assistive technology professionals according to their levels of collaboration. The fact that collaboration levels contributed to significant differences in learning disability knowledge suggest that knowledge of specific learning disabilities is necessary, and there is room for improvement. Consensus of the theoretical framework for evaluating specific learning disabilities would help create constant operational definitions to achieve such a task.

Collaboration and Self-Reported Expertise

Significant differences were found in self-reported expertise when matching computerized devices with specific learning disabilities by assistive technology professionals according to their level of collaboration. Collaboration contributed to greater ratings in expertise for assistive technology professionals. The significance of this result is important because self-reported expertise alone may be less subjective than assumed. Because collaboration contributed to differences in reported competence, it could be presumed that self-efficacy of those who collaborate in general is high.

Collaboration and Frequency of Consideration

Significant differences were found in frequency of consideration by assistive technology professionals according to their levels of collaboration. The significance of these results are particularly important in that it supports current research and has implications for further research. By demonstrating the significance of collaboration, these results suggest that computerized devices are not used as frequently for specific learning disabilities as could be. Although of narrow scope in terms of the type of assistive technology and disability served, these findings support the broader research that suggests assistive technology is under used (i.e., Bausch et. al, 2009; Zabala & Carl, 2005). The results of collaboration as they relate to frequency suggest that other factors may influence decision-making practices when considering computerized devices for specific learning disabilities. Furthermore, it suggests other differences may warrant further consideration for research as well.

Descriptive Analysis of Knowledge, Expertise, and Frequency

Other differences were reported in the study and described in the comparison between professional groupings typically documented in IEPs. These four groups included (1) general education instructional specialists, (2) special education specialists, (3) related service providers, and (4) educational technology specialists. The study yielded interesting findings based on the comparisons of the four professional groups that would not have been found had respondents not been separated in this fashion. Aside from collaboration, differences in the constructs comprising expertise were noted. These constructs included knowledge in specific learning disabilities, knowledge in computerized assistive technology devices, frequency, and self-reported expertise. Similarities and differences were noted in comparisons of the groups, which may suggest a need for further study.

Knowledge of Specific Learning Disabilities

Differences were found in the reported knowledge of specific learning disabilities among assistive technology professional groups. Educational technology specialists were the least knowledgeable as a group and reported less than average knowledge compared to the average ratings of the other three groups. Educational technologists, as a group, primarily consist of individuals with professional expertise in computerized technology and applications in education. Primary emphasis in this field is computerized software and hardware. Differences in the knowledge regarding specific learning disabilities may be because educational technologists formulate the inventory of technology available at school districts.

The differences in results among groups may give greater support to the argument posited by Yaw et al. (2008) in that contextual fit is frequently considered in assistive technology decisions. However, this factor is difficult to control with current conceptual evaluation models described in the literature review for assistive technology. This finding suggests that a lack of knowledge on specific learning disabilities could contribute to over reliance of contextual fit and contribute to procurement decisions; therefore, further research is needed.

Knowledge of Computerized Assistive Technology

All groups reported average knowledge of computerized assistive technology devices by assistive technology professional groups. Speculatively speaking, this finding may be due to the emergence of many computerized assistive technology devices; therefore, knowledge base and comfort may be the same. For example, more districts are adopting a bring your own device (BYOD) policy at the secondary level. Additionally, Universal Design for Learning (UDL) initiatives also support inclusion through computerized technology and increased exposure.

Expertise

Differences were found in reported knowledge of specific learning disabilities by assistive technology professional groups. These results supplement the finding of Abner and Lahm (2002), which suggest that lags in perceptions of competency for assistive technology expertise still occur. Although the scope of focus was narrowed to educational technology professionals for the purposes of the study, the results can still be broadened to describe the factors that influence expertise.

Frequency

Differences were found in reported frequency of consideration by assistive technology professional groups. While all four groups reported similar means in frequency, the result was lower than expected in comparison to the other constructs. Frequency of consideration of computerized assistive technology devices for specific learning disabilities was reported as occasionally considered. Examining this data alone could lead to the assumption that either the devices were not appropriate for specific learning disabilities, only occasional consideration of the devices was appropriate, or a different data analysis should have been used. A significant difference was noted regarding levels of collaboration and frequency of consideration. This significant finding suggests a greater potential in consideration practices for computerized devices for specific learning disabilities. Based on the results of collaboration, consideration of computerized devices is not considered enough for specific learning disabilities. Furthermore, the high interrater reliability obtained during the pilot study supports the

appropriateness of the devices as representing the construct measured (α = .937). Both of these findings support the validity of the result for frequency. Therefore, the construct of computerized assistive technology devices was accurately described. The results of the study show that computerized assistive technology devices could be considered more often for specific learning disabilities.

Implications for Practice

The study supports research on the necessity of collaboration in assistive technology. Results of the study provide greater guidance and support Bodine and Melanis' (2005) suggestion for transdisciplinary assessment teams because of differences among professional groups with respect to knowledge and expertise in given areas. Collaboration and type of collaboration, including transdisciplinary teaming, will help bridge these differences.

Collaboration is not a new concept in education and transdisciplinary teams are a preferred team model for collaboration in special education. The transdisciplinary model provides a type of assessment where discipline lines are blurred, and expertise and assessment are shared by professionals of diverse backgrounds for a common goal. This approach not only guides the assessment process but guides service delivery as well. It also builds knowledge in the constructs reported as lacking in the study. A greater investment of all professionals occurs during the consideration process and assures free and appropriate public education (FAPE). Additionally, a greater number of individuals involved in the process create a greater continuum of options. Therefore, the reliance of contextual fit lessens as does the risk of abandonment of the assistive technology.

The findings of the study also have implications for changes in assessment practices for specific learning disabilities with assistive technology. Specifically, it may be necessary to question whether current models are enough to guide decision-making practices for this population. In particular, as it relates to matching computerized devices to specific learning disabilities, additional tools may need to be developed to supplement current assessment framework. Such tool development could be done by

understanding that the focus of consideration is on technologically-enhanced performance (Edyburn, 2005) for specific cognitive processing deficits, which represent the scope of this study.

The degree of performance enhancement and type of processing deficits can be overlooked using current assistive technology frameworks. This is not to say that this occurs among all professionals. However, based on the results of the study, these deficits do occur. Therefore, a shift in perception is required for professionals to embrace a theoretical knowledge that goes beyond focusing on a functional outcome of a device or a problem-based approach.

Current framework options require a supplemental theoretical base when making assistive technology decisions for specific learning disabilities. This can be found in assessment models for identifying specific learning disabilities, and means that practitioners may need a theoretical understanding (e.g., of the Luria theory or CHC theory) to assist in the identification of specific learning disabilities. The operational definitions created using these theories can also facilitate appropriate decision making by providing a depth of assessment, which is intrinsic to the individual.

While the trend in educational research is to shun a deficit or discrepancy model for assessment, the truth remains that a deficit will always be prevalent to identify a specific learning disability. It is the nature of the disability to compare actual performance with projected performance. Whether a deficit occurs in comparison to peers, standards, curriculum, or intra individually, it must be present for the identification for specific learning disabilities. By incorporating cognitive processing models with the functional framework for assistive technology assessment, a common language can be created among practitioners. While a functional framework describes the observed behavior (e.g., reading comprehension difficulties), the proposed cognitive processing models serve as supplements by describing why the behavior is occurring (e.g., long-term retrieval). This process yields a depth of information that would not be available by matching a device based on functional outcome alone. It also creates a tighter decision-making process when matching computerized assistive technology with learning disabilities, and lessens the chance of abandonment because of greater clarity

in outcomes measured during device trials.

The rationale for incorporating the suggested theoretical models with assistive technology framework is best illustrated by the results of the study. Educational technologists' low levels of knowledge in specific learning disabilities and low levels of expertise in consideration for computerized devices were reported. This finding was in spite of the fact that their self-reported knowledge of computerized assistive technology devices was high. The findings of the study imply that specialists with the sole focus on educational technology may be at a disadvantage regarding collective knowledge to serve students with specific learning disabilities. Broadly speaking, knowledge of technology does not imply a full understanding of its applications for disabilities. With lower expertise reported by educational technologists for consideration decisions and knowledge of specific learning disabilities, sole reliance on professionals with expertise in general technology is inappropriate for decisions involving assistive technology for students with specific learning disabilities. As a profession, assistive technology decision makers are aware of this disadvantage. However, the practice still occurs, which has far reaching implications with device abandonment, unnecessary costs for procurement, and FAPE.

The levels of frequency of consideration reported not only with educational technologists but among all groups imply that greater diligence is needed for assistive technology to provide FAPE. Knowledge levels of assistive technology, or lack thereof, can be barriers to providing FAPE. An assurance of FAPE cannot be fully determined if a continuum of devices is not at hand or if a full understanding is not obtained for their potential applications to particular disabilities. As reported by Lahm (2005), the goal of assistive technology is to provide greater independence. Those with disabilities are still required to have competence in computerized technology just as their peers that are not identified with disabilities. By not considering computerized assistive technology for students with specific learning disabilities, a greater gap and dependence remain.

Barriers to FAPE have secondary implications that include device abandonment and unnecessary costs for procurement. Device abandonment occurs for a number of reasons. However, abandonment could occur simply because the device did not provide

the greater degree of independence. Abandonment of devices and procurement of devices without understanding the full needs of diverse learners has costly results. These results become a continuum of assistive technology that is obsolete.

While it is easy to conceptualize a need for computerized technology to serve diverse populations, it is difficult to achieve. A barrier to improvement in this area is the speed at which computerized technology is changing, which requires changes in skill set by readdressing competencies regarding specific learning disabilities relating to assistive technology. The Rehabilitation Engineering Assistive Technology Society of North America (RESNA) developed competencies for those responsible for implementing assistive technology. The requirements for certification include competencies for vision, hearing, communication, adaptive, and mobility issues. However, cognitive disabilities, whether mild or severe, are excluded from these core competencies. While RESNA is not involved in the certification and licensing criteria for professionals in education per se, it does influence the course of assistive technology for the future.

The role of RESNA has implications for certification programs in higher education settings. Knowledge in one area is not enough to contribute to expertise when pairing a continuum of assistive technology options to one of abilities. Just as assistive technology is meant to be infused into curriculum to support students with disabilities, assistive technology applications must be infused into methods and preparation courses for pre-service professionals. In the pre-service curriculum, the first step involves describing foundational knowledge. Infusing the requirements takes time, but it is not impossible, particularly when descriptions and competencies contribute to tighter operational definitions. This study contributed to the discussion of necessary competencies for an emerging field; that is, matching computerized assistive technology with specific learning disabilities.

Limitations

The study was delimited in terms of its narrow scope, criteria for grouping respondents, and methodology of study. To begin, the review of literature focused on

broad issues associated with assistive technology, disability research, and conclusions were drawn based on that research. Newly developed quality indicators for special education research (Odom et al., 2005) and computerized technology innovations since 1990 created a need to narrow the focus from assistive technology to computerized assistive technology devices. Research to determine evidence based practices appears slower emerging for specific learning disabilities in comparison to other disabilities such as autism, hence the need for a broader literature review to apply to a narrow focus of study.

The study was also limited in terms of participant criteria. As in other quantitative research designs, generalizability is significantly influenced by the size and representativeness of the sample. Respondents were grouped into similar professional groupings as documented in an IEP. Of the 80 respondents, 51 met the criteria for study.

The methodology of the research design relied on self-report in the form of a survey. This involved a number of limitations. First, self-reporting can result in a positivity bias among participants (Groves et al., 2012). Second, while the instrument used for the study had construct and face validity, it lacked concurrent validity because, after the review of literature, an instrument used for measurement was not found. Third, use of the Likert scale also has limitations. The answerable questions required close-ended responses; therefore, there was no opportunity for participants to explain or elaborate on their responses. Although the instrument was changed from a 5-point to a 4-point Likert Scale to reduce central tendency bias (Sclove, 2001), bias of self-reporting remained a limitation.

Conclusion

The consideration practices for computerized assistive technology devices when paired with specific learning disabilities were described. Most significant in the study was the influence of collaboration on assessment practices in terms of knowledge, expertise, and frequency of consideration for computerized devices for specific learning disabilities. It bears noting that, while gaps in knowledge and expertise exist among

professionals in this area, collaboration is the key to fill gaps and grow expertise. This study compared current expertise in the area of computerized technology in relation to specific learning disabilities. Collaboration was shown to be an increasing determinant in greater outcomes across all constructs. Further research is warranted regarding correlations between the self-reported expertise in computerized assistive technology for learning disabilities and the frequency of its consideration. This study provided an appropriate foundation for future research in an evolving area.

References

- Abner, G. H., & Lahm, E. A. (2002). Implementation of assistive technology with students who are visually impaired: Teachers' readiness. *Journal of Vision Impairment and Blindness*, 96(2), 98-105.
- Boone, R., & Higgins, K. (2007). The role of instructional design in assistive technology research and development. Reading Research Quarterly, 42, 135-140. doi:10.1598/RRQ.42.1.5
- DeVellis, R. F. (2011). *Scale development: Theory and applications* (Vol. 26). Thousand Oaks, CA: Sage.
- Edyburn, D. L. (2000). Assistive technology and mild disabilities. *Mental retardation*, 612, 10-6. Edyburn, D. L. (2001). 2000 in review: A synthesis of the special education technology literature. *Journal of Special Education Technology*, 16(2), 5-26.
- Edyburn, D. L. (2003). 2002 in review: A synthesis of the special education technology literature. *Journal of Special Education Technology*, 18(3), 5-28.
- Edyburn, D. L. (2004). 2003 in review: A synthesis of the special education technology literature. *Journal of Special Education Technology*, *19*(4), 57-80.
- Edyburn, D. L. (2002). Remediation vs. compensation: A critical decision point in

- assistive technology consideration. Retrieved from http://anzatresearch
 wikispaces.com/file/view/Edyburn+2002RemediationvsCompensation.pdf
- Edyburn, D. L. (2005). Assistive technology and students with mild disabilities: From consideration to outcome measurement. In D. Edyburn, K. Higgins, & Boone, R. (Eds.). *Handbook of special education technology research and practice* (pp. 239-270). Milwaukee, WI: Knowledge by Design.
- Gerston, L. N. (2010). *Public policy making: Process and principles*. Armonk, NY: ME Sharpe. Gersten, R., & Edyburn, D. (2007). Defining quality indicators for special education technology research. *JSET*, *22*(3), 3-18.
- Golden, D. (1998). *Assistive technology in special education: Policy and practice*. Albuquerque, NM: Council of Administrators of Special Education.
- Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). *Survey methodology* (2nd ed.). Hoboken, NY: Wiley.
- Individuals with Disabilities Act. 20 U.S.C. § 1400 (2004).
- Lahm, E. A. (2005). Improving practice using assistive technology knowledge and skills. In D.
- Edyburn, K. Higgins, & Boone, R. (Eds.). *Handbook of special education technology* research and practice (pp. 721-746). Milwaukee, WI: Knowledge by Design.

 National Center for Education Statistics. (2012). Retrieved from nces.ed.gov/ipeds/surveys/1998/pdf/Ic3.pdf 1998-09-04
- Reed, P. R. (2007). *A resource guide for teachers and administrators about assistive technology*. Oshkosh, WI: Wisconsin Assistive Technology Initiative. Retrieved from http://www.wati.org/content/supports/free/pdf/ATResourceGuideDeco8.pdf
- Lenker, J. A., & Paquet, V. L. (2004). A new conceptual model for assistive technology outcomes research and practice. *Assistive Technology*, *16*, 1-

- 10. doi:10.1080 /10400435.2004.10131069
- Melichar, J. F. (1978). ISAARE: A description. AAESPH Review, 3(4), 259-68. Odom,
 S. L., Brantlinger, E., Gersten, R., Horner, R. H., Thompson, B., & Harris, K.
 R. (2005). Research in special education: Scientific methods and evidence-based practices. Exceptional Children, 71(2), 137-148.
- Quinn, B. S., Behrmannn, M., Mastropieri, M., Bausch, M. E., Ault, M. J., & Chung, Y. (2009). Who is using assistive technology in schools? *Journal of Special Education Technology*, *24*, 2008-2009.
- Reichle, J. (2011). Evaluating assistive technology in the education of persons with severe disabilities. *Journal of Behavioral Education*, *20*, 77-85. doi:10.1007/s10863-011-9121-1
- Rust, J., & Smith, A. (2006). How should the effectiveness of social stories to modify the behavior of children on the autistic spectrum be tested? Lessons from the literature. *Autism*, *10*(2), 125-138. doi:10.1177/1362361306062019
- Sclove, S. L. (2001). *Notes on Likert scales*. Retrieved from http://www.uic.edu/classes/idsc/ids270sls/likert.htm
- Swanson, H. L., Harris, K. R., & Graham, S. (2003). *Handbook of learning disabilities*. New York, NY: Guilford.
- Yaw, J. S., Skinner, C. H., Parkhurst, J., Taylor, C. M., Booher, J., & Chambers, K. (2011). Extending research on a computer-based sight-word reading intervention to a student with autism. *Journal of Behavioral Education*, *20*, 44-54. doi:10.1007/s10864-010-9118-134
- Zabala, J. S., & Carl, D. F. (2005). Quality indicators for assistive technology services in schools. In D. Edyburn, K. Higgins, & Boone, R. (Eds.). *Handbook of special education technology research and practice* (pp. 179-207). Milwaukee, WI: Knowledge by Design.

Disproportionate Exclusionary Discipline in Florida

Helen Flores, Arianna Barroso, Bernardina Fernandez Florida International University

Abstract

Exclusionary discipline unequally affects minority students, especially black males. The inception of these disproportionate measures can be traced to zero tolerance policies and are continued on by the mismatch of the teacher workforce with publc schools' student population. The purpose of this study was to compare indoor suspension in the 2018-2019 school in Miami Dade County Public Schools and the state of Florida. We look at the difference in rates of suspension between White, Black, and Hispanic students as well as between male and female students. Preliminary results show that suspension is higher for Black students in the state of Florida, but there is no difference between White and Hispanic students. In Miami Dade County, race and ethnicity do not depend on rate of suspension. For both the state of Florida and Miami, males are suspended at higher rates than females. Limitations of the current study and implications are discussed.

Disproportionate Exclusionary Discipline in Florida Introduction

Data show a direct correlation between school suspensions, dropout rate, and marginalized students' tracking into the juvenile justice systems and, ultimately, prison due to zero-tolerance policies (Schiff, 2018). The current state of affairs reflects disparities across the nation, its communities, and the schools in its incarceration rate of marginalized groups and data reflective of bias and discriminatory school disciplinary actions. Controversy and disagreement envelopes the philosophy of zero tolerance, resulting in a demand for response and policy reform in criminal justice and school discipline policy and practice (Archerd, 2017).

Zero tolerance policies began in the United States at the end of the 20th century. Starting as country-wide legal policies that instilled mandatory minimums and strict sentencing around drugs and other minor crimes, they have also bled into the public school system in the form of exclusionary discipline. Both versions of zero tolerance policies have inequitably affected minority groups (APA, 2008; Heitzeg, 2014). In the school system, zero-tolerance policies stand on the foundation that disruptive students will be removed quickly and send a message to other students by taking swift, aggressive action. Yet, despite these assertions, there is little research that these methods are effective; instead, research shows that exclusionary discipline makes problem behaviors worse (Wiley et al., 2020). Combined with the fact that they disproportionately target culturally and linguistically diverse (CLD) students, especially black males, it is an especially troubling policy.

Findings from The United States Government Office of Accountability (2019), based on data from the Civil Rights Data Collection, found that although Black students only made up 19% of the K-12 student population in public schools, they received 36% total suspensions. Further, while Black and Hispanic students are only 40% of the student population, they account for 70% of arrests in school discipline issues.

Documented data illustrating school suspensions' effects include poor academic outcomes, behavioral outcomes, and post-school outcomes. Research shows that suspension leads to an increase in the likelihood of being retained, receiving lower grades, dropping out, and being suspended more than once. Post-school outcomes include tracking into the juvenile justice system, committing future offenses, and ending up in the prison system (Hemez et al., 2020).

Opponents to the view of disproportionate discipline cite reasons such as poverty or issues with home lives as the main problem, denying that race plays a part in exclusionary discipline. However, Skiba (2014) debunks that these beliefs are the leading cause of higher school suspension rates. The predominantly white teacher workforce does not match the predominantly minority population of their students. Studies have shown that teachers see their Black and Hispanic students as noisier, more antagonistic, disorderly, and uncontrollable than their white students (Okonofua & Eberhardt, 2015). Further, these same students are more likely to be punished than

their white peers for committing the same minor behaviors (Rocque & Paternoster, 2011).

Efforts to prevent, identify, reduce, and eliminate discriminatory discipline and unintended consequences are evident in the decreasing overall number of suspensions and expulsions in recent years. However, disparity across race, culture, and disability still exists, warranting continued scrutiny and adjustments in practice to reform discipline policy and practice to ensure that systems are fair and equitable. Actions to correct policies are evident in restorative practices (RP) and Culturally Responsible School-Wide Positive Behavior Interventions and Supports (CRPBIS) at the school level. The conscious effort to reduce racial disparities in the exclusionary discipline through effective practices and policy can reduce suspensions.

The purpose of this study is to determine how the rates of indoor suspension for culturally and linguistically diverse students in Miami Dade County compare to the state average and to identify disproportionate rates of indoor suspensions in Miami Dade County for the 2018-2019 school year. Due to the Covid 19 pandemic's effects, the 2019-2020 school year is inappropriate for this analysis. We will examine indoor suspension data as outdoor suspension as a punitive consequence is discouraged in recent years on national, state, and local levels. We will conclude our article with implications of our study and recommendations for future practice and research.

Literature Review

We conducted a brief literature review of seven studies to assess the condition of disproportionate exclusionary discipline across the country. The primary source of literature for the review was from the electronic database Academic Search Premier. Academic Search Premier was the primary database used as it is a popular database for use in educational research studies. The database allowed the researchers to find relevant information on disproportionality. Studies were conducted from 2010 to 2020 and included both state and national samples in K-12 schools. States included Arizona, California, Florida, and Ohio. Overall, exclusionary discipline disproportionately affected CLD students, even when controlling for other factors such as poverty and

socioeconomic factors. In line with our current study, we analyzed trends across ethnicity and gender.

Ethnicity

All seven studies addressed ethnicity but, based on location, focused more on certain ethnicities over others. All studies reviewed indicate that minorities are suspended at a much higher rate than their white peers. Three studies in Southern California, Arizona, and Ohio all showed a significant disparity in discipline data for African American students over their white peers (Brown & Tillio, 2013; Bryant & Wilson, 2020; Noltemeyer & Mcloughlin, 2010). These studies supported the existing literature and the results in all areas, including outdoor suspension, in-school suspension, expulsion, and discipline referrals. According to Gangon et al. (2017), there were higher discipline rates for black students and those on free and reduced lunch. There were significant racial disparities in initial referrals from the classroom and administrators' application of consequences in all of the studies. Overall, the findings supported the existing literature that there were significant differences in the discipline of minority students in all the studies.

Gender

Of the seven studies reviewed, three addressed gender as a variable (Brown & Tillio, 2013; Bryant & Wilson, 2020; Gagnon, 2017). In line with other research, Brown & Tillio found that male students in Arizona K-12 schools received 72% of discipline referrals. While Bryant & Wilson also found that males in a charter high school in California are more likely to receive referrals, socioeconomic status and ethnicity were more significant factors than gender in receiving a suspension. Gagnon (2017) reviewed more comprehensive data than just office referrals and suspension and found that in K-12 Florida schools, males are more likely to receive suspensions and corporal punishment, change of placement, restraint, and expulsion than female students.

Methods

Research Questions and Purpose

The purpose of this study is to determine how the rates of indoor suspension for students in Miami Dade County compare to the state average for the 2018-2019 school year. Our research questions are: 1) Is the proportion of indoor suspension of students that identify as White, Black and Hispanic in Miami Dade County the same as the proportion in Florida? 2) Is the proportion of indoor suspension of male and female students in Miami Dade County the same as the proportion in Florida?

Data Sources and Collection

We used secondary survey data from the Florida Department of Education (FL DOE) and Miami Dade County Public Schools (MDCPS) for our analyses in this study. From FL DOE, we used the 2018-2019 Student Discipline Data by Race/Ethnicity and Gender: School Level and Florida's PK-20 Education Information Portal. This data is collected annually by a survey completed by each school. The discipline datasheet indicates the total number of indoor suspensions, by race/ethnicity and gender, for each county in Florida. For this study, we chose to focus on comparing Miami Dade County to the state of Florida. The education information portal provided survey data for the total number of students in Florida by gender, which allowed us to convert total numbers from the discipline data into percentages. From MDCPS, we used the 2018-2019 MDCPS Student Membership Statistical Highlights. The information in these statistical highlights is collected based on the Student Data Base System. This data sheet provided us with the total number of students by race/ethnicity and gender for Miami Dade County, which allowed us to convert total numbers from the discipline data into percentages to compare to the state average and identify any disproportionate trends.

Variables

This research study has three independent variables: location, race/ethnicity, and gender. Location refers to Miami Dade County or the state of Florida, allowing us to compare percentages between the variables. Race/ethnicity focuses on White, Black, and Hispanic students in the sample. There are many other races and ethnicities in Florida and Miami Dade County, but these account for the most students affected by suspensions. Research literature documents their overrepresentation extensively. For

the variable of gender, two genders will be utilized; male and female. Most published findings report that males are more likely to be suspended than females. To verify this assumption, we chose to investigate Miami Dade County and Florida's data as well. The dependent variable for this study is the percentage of suspensions.

Study Design

We completed a descriptive case series with a retrospective study design with descriptive and analytical statistical analyses, appropriate for our inquiry as the data collected was in the 2018-2019 school year. This data simplifies our study to avoid the need to locate participants for participation in our inquiry. Our sample includes all PK-12 public school students in the state of Florida for the 2018-2019 school year (approximately 2,840,470 students) and the subgroup of students who experienced at least one indoor suspension in Florida for the same school year (about 188,173 students). Included in this total is a smaller population of the total number of PK-12 public school students in Miami Dade County (approximately 350,040 students) and the subgroup of students who experienced at least one indoor suspension in Miami Dade County during the same school year (about 9,737 students).

Data Analysis

Analysis for Research Question 1

Research question 1 was whether the proportion of students' indoor suspension that identify as White, Black and Hispanic in Miami Dade County is the same as Florida's proportion. We explain the general steps and details for the statistical procedures that aided in answering this question.

We utilized the following survey data available to us: total number of students in the state of Florida that identified as White, Black, and Hispanic, the total number of suspensions per student in Florida in each of those categories, the total number of students in Miami Dade County that identified as White, Black, and Hispanic, and the total number of suspensions per student in Miami Dade in each of those categories. To be able to compare across these two locations, we needed to convert those numbers into percentages. We calculated a simple percentage by dividing the number of suspensions for each race/ethnicity group and multiplying by 100. See Table 1 below.

We conducted Pearson's chi-square analysis to compare actual percentages to expected ones to test the assumption that there was no significant association between race/ethnicity and suspension rates when comparing Miami Dade County to Florida. See Table 2 below.

Analysis for Research Question 2

Research question 2 was whether the proportion of male and female students' indoor suspension in Miami Dade County is the same as Florida's proportion. We explain the general steps and details for the statistical procedures that aided in answering this question.

In a similar manner as to research question 1, the survey data available to us were the total number of male and female students in the state of Florida, the total number of suspensions per student in Florida in each of those categories, the total number of male and female students in Miami Dade County, and the total number of suspensions per student in Miami Dade in each of those categories. To be able to compare across these two locations, we needed to convert those numbers into percentages. The percentage was calculated by dividing the number of suspensions for each gender group by the total and multiplied by 100. See Table 3 below.

Next, we used Pearson's chi-square analysis to compare actual percentages to expected percentages to test the assumption that there was no significant association between gender and suspension when comparing Miami Dade County and Florida. See Table 4.

Results

Participant Characteristics

First, we report the student demographics for both Florida and Miami Dade County, based on the survey data and other data sources discussed above. Among the 2,846,857 students enrolled grades PK-12 in the state of Florida, 51.37% were male (n=1,462,446) and 48.63% were female (n=1,384,411). Students were primarily White

(37.37%, n=1,063,922), followed by Hispanic (33.37%, n=964,219), Black (21.93%, n=624,435), and Other (7.33%).

Among the 350,040 students enrolled in grades PK-12 in Miami Dade County, 51.19% were male (n=179,171) and 48.81% were female (n=170,869). Students were primarily Hispanic (71.47%, n=250,179), followed by Black (20.09%, n=70,39), White (6.67%, n=23,343) and Other (1.77%, n=6,189). Although the percentage of gender matches Florida's totals almost exactly, the opposite is evident for the ethnic/racial percentages. There are stark differences between the percentages of White students (37.37% in Florida compared to 6.67% in MDCPS), Hispanic students (33.37% in FL compared to 71.47% in MDCPS), and students that identify as Other (7.33% in FL compared to 1.77% in MDCPS). The percentage of Black students between the two locations is almost equal.

Table 1. Totals and Percentages of Student Indoor Suspension by Race/Ethnicity

	White			Black				Hispanic	
	Student	Suspension	Percent	Student	Suspension	Percent	Student	Suspension	Percent
	Total	Total	Suspended	Total	Total	Suspended	Total	Total	Suspended
Florida	1,063,922	59,429	5.56%	624,435	69,506	11.13%	964,219	49,387	5.12%
MDCPS	23,343	615	2.63%	70,329	1,788	2.54%	250,179	7,218	2.89%

Table 2. Results of Pearson Chi-Square Analysis by Race/Ethnicity

	White		Bla	ıck	Hispanic	
	Observed	Expected	Observed	Expected	Observed	Expected
Florida	5.56%	6.4%	11.13%	9.9%	5.12%	5.7%
MDCPS	2.63%	2.6%	2.54%	4.1%	2.89%	2.3%

Table 3. Totals and Percentages of Student Indoor Suspension by Gender

	Female			Male		
	Student	Suspension	Percent	Student	Suspension	Percent
	Total	Total	Suspended	Total	Total	Suspended
Florida	1,384,411	62,538	4.52%	1,462,446	125,635	8.59%
MDCPS	179,171	3,242	1.81%	170,869	6,495	3.8%

Table 4. Results of Pearson Chi-Square Analysis by Gender

	Fen	nale	Ma	ale
	Observed	Expected	Observed	Expected
Florida	4.52%	4.9%	8.59%	9.1%
MDCPS	1.81%	2.1%	3.8%	3.9%

Research Question 1

To answer research question 1, we looked at the SPSS output for our chi-square analysis. With two *df* and a=0.05, our chi-square value was 0.752 with a significance level of 0.687. This is non-significant (p>0.05). With this information, we can conclude that, overall, race/ethnicity is not significantly associated with Miami Dade County and Florida's number of suspensions. Given that three cells (50.0%) have an expected count of less than 5, we questioned the results' validity. We considered the Likelihood Ratio, reported at a value of .761 and a significance of .684 (p>.05). Therefore, the assumption that there is no significant association between race and suspensions for students in Miami-Dade County and Florida is supported. For Miami Dade County, the percentage of suspensions for black students was 33.3%, for white students, 33.3%, and for Hispanic students, 33.3%. In Florida, the percentage of suspensions for black students was 50%, for white students 27.3% and Hispanic students, 22.7%,

Research Question 2

To answer research question 2, we conducted a Pearson chi-square analysis to determine if an association exists between gender and the number of suspensions when comparing Miami Dade County and Florida. Using SPSS with two *df* and a=0.05, the chi-square value was 0.10 with a significance level of 0.919. Although the results were nonsignificant, three cells (75.0%) have an expected count less than 5; we questioned the results' validity. We considered the Likelihood Ratio, at a reported at a value of .011 and a significance of .918 (p>.05), allowing us to validate the assumption that there is no significant association with gender and the number of suspensions in Miami Dade County compared to the number of suspension in the state of Florida. In Florida, females account for 35.7% of suspensions, and males account for 64.3%. In Miami Dade County, females account for 33.3% of suspensions; males account for 66.7%.

Discussion

Race in Florida

Our results both fit into the existing literature and stand outside of it. Our analysis of Florida did agree with the extant literature in some ways. Although our chi-square produced nonsignificant results, this may be an issue of our use of the data. We only used data for indoor suspension in this analysis even though the discipline data sheet provided us with 12 different types of exclusionary discipline. Thus, our findings should be interpreted with caution. These are discussed in more detail in the limitations

section. However, despite the nonsignificant results, when looking at the percentages of students suspended in the state of Florida, black males represent the highest percentage even though they only account for 22% of the total population of Florida's PK-12 students. This falls directly in line with the research discussed in our literature review above.

Contrary to published work by Hwang (2018) and others, who state that Hispanic students were more likely to get suspended than their white peers, we did not find this across the state of Florida as a whole. The percentages of White students and Hispanic students in Florida are almost equal (37% and 33%, respectively). The portions of these groups' suspension are similarly equal (5.56% and 5.12%, respectively). Due to our limited data and analysis, we cannot say why this occurred in our sample. Although promising, future researchers should look at all types of discipline data and larger samples to ensure a complete picture before making overarching statements about discipline in the state of Florida.

Race in Miami Dade County

The results we found for Miami Dade County were utterly contrary to the present literature. Although keeping in mind the limitations mentioned above, this is an up-and-coming trend. As per our data and chi-square, Miami Dade County is not suspending minorities at a higher rate than other races. There is no significant difference in the amount of indoor suspension based on the students' race. Thus, to answer our first research question, there is a difference in suspension by race/ethnicity in the state of Florida and Miami Dade County. Reasons for this may be due to their focus on Multi-Tiered Systems of Support to address challenging behaviors and using exclusionary discipline solely as a last resort.

Gender

Our data analysis was similarly nonsignificant for gender in both Florida and Miami Dade County. Thus, to answer our second research question, there is no significant difference in suspension by gender between the state of Florida and Miami Dade County. The data showed that both Florida and Miami Dade County follow the same trends as the rest of the nation, with male students more likely to get suspended than their female counterparts. While male and female students are almost equal across

Florida (53.37% and 48.63%, respectively) and in Miami Dade County (51.19% and 48.81%, respectively), male students are more likely to be suspended than female students.

Limitations

Some limitations for our study are that our data sources on student demographics and discipline provided limited data. The accuracy may vary due to this information coming from surveys completed at each school site and district. The White House (2016) has recently encouraged schools to decrease exclusionary discipline to reduce disproportionality, affecting overall reporting measures. Suspension rates provided in statistical reports counted each student only once. It is possible that the data does not represent accurate information regarding CLD students that are being suspended multiple times over their white peers. Although, that is outside the scope of this study.

Regarding ethnicity data, students self-report their ethnicity and race, which may include inaccuracy in the demographic information. Finally, the categories of other or two or more races may consist of Black and Hispanic students. We did not include these categories in our analysis; we encourage researchers to consider the intersection of multiple races or ethnicities in future studies.

Further limitations are our use of only indoor suspension. Discipline data sheets provided information on corporal punishment, expulsion (with and without continuing educational services), seclusion, mechanical restraint, placement in an alternative educational site, physical restraint, other school environmental safety incidents, and change in placement. This data sheet also broke up suspensions into multiple types: inschool, out-of-school, and suspension extended pending a hearing. Although we chose indoor suspension due to the decrease in other types of exclusionary discipline and it containing the highest number of students, other disciplinary measures may also affect CLD students disproportionately and affect our analysis.

Implications for Research and Policy

While our research sheds some new light on the state of discipline in Florida, we acknowledge that this study is limited in many ways and that discipline is complex. We, therefore, propose the following suggestions to future researchers.

In the future, research should focus on assessing when the most suspensions occur and if variables are affecting the number of indoor suspensions for students. Knowing if there is a pattern on student suspension rates could possibly assist schools with lowering suspension rates by providing these details. Furthermore, researchers can see if other factors besides race/ethnicity and gender influence suspension rates.

Ongoing research aims to explain and solve issues related to the justice system's disproportionality and school discipline policy. Recommendations for study include looking at additional variables such as achievement gap, school processes, climate, and cultural representativeness of faculty and staff that implement policy (Heitzig, 2014; Stewart Kline, 2016). The current state of affairs recognizes the need to reform policy practice and perceptions to decrease suspensions and increase more favorable postschool outcomes for marginalized students (Noltemeyer et al., 2015; Schiff, 2018; Skiba, 2014). School districts will benefit from more qualitative studies into implementing restorative practices or multi-tiered systems of support (e.g., positive behavior interventions and supports) to see if there is a relationship between intervention and students' behavior outcomes. Looking into what methods and interventions are taking place in Miami-Dade that contribute to an equal distribution of consequences can help others follow suit in their efforts to lower disproportionality rates.

References

- American Psychological Association Zero Tolerance Task Force (2008). Are zero tolerance policies effective in schools? An evidentiary review and recommendations. American Psychologist 63(9), 852-862. https://doi.org/10.1037/0003-066X.63.9.852
- Acherd, E. R. (2017). Restoring justice in schools. *University of Cincinnati Law* Review, 85(3), 761-814. https://uclawreview.org/wpcontent/uploads/2018/08/85-3-5-archerd.pdf
- Brown, C. A., & Di Tillio, C. (2013). Discipline disproportionality among Hispanic and American Indian students: Expanding the discourse in U.S. research. *Journal of* Education and Learning, 2(4), 47–59. https://doi.org/10.5539/jel.v2n4p47
- Bryant, D., & Wilson, A. (2020). Factors potentially influencing discipline referral and suspensions at an affiliated charter high school. Journal of Educational Research and Practice, 10(1), 119–128. https://doi.org/10.5590/jerap.2020.10.1.08

- Executive Office of the President (2016). *Report: The Continuing Need to Rethink Discipline*. https://files.eric.ed.gov/fulltext/ED575980.pdf
- Gagnon, J. C., Gurel, S., & Barber, B. R. (2017). State-level analysis of school punitive discipline practices in Florida. *Behavioral Disorders*, *42*(2), 65–80. https://doi.org/10.1177/0198742916688652
- Heitzig, Nancy(2014). Criminalizing education: Zero tolerance policies, policies in the hallways, and the school to prison pipeline. *Counterpoints*, (453), 11-36.
- Hemez, P., Brent, J. J., & Mowen, T. J. (2020). Exploring the school-to-prison pipeline: How school suspensions influence incarceration during young adulthood. *Youth Violence and Juvenile Justice*, *18*(3), 235–255. https://doi.org/10.1177/1541204019880945
- Hwang, N. Y. (2018). Suspensions and achievement: Varying links by type, frequency, and subgroup. *Educational Researcher*, *47*(6), 363–374. https://doi.org/10.3102/0013189X18779579
- Noltemeyer, A., & Mcloughlin, C. (2010). Patterns of exclusionary discipline by school typology, ethnicity, and their interaction. *Penn GSE Perspectives on Urban Education*, 7, 27-40. https://files.eric.ed.gov/fulltext/EJ894465.pdf
- Noltemeyer, A. L., & Word, R. M. (2015). Relationship between school suspension and student. outcomes: A Meta-Analysis. *School Psychology Review*, 44(2), 224-240. https://doi.org/10.17105/spr-14-0008.1
- Okonofua, J. A., & Eberhardt, J. L. (2015). Two strikes: Race and the disciplining of young students. Psychological Science, 26(5), 617–624. https://doi.org/10.1177/0956797615570365
- Rocque, M., & Paternoster, R. (2011) Understanding the antecedents of the "school-to-jail" link: The relationship between race and school discipline. *The Journal of Criminal Law and Criminology*, 101(2), 633-666.

 https://scholarlycommons.law.northwestern.edu/jclc/vol101/iss2/7
- Schiff, M. (2018). Can restorative justice disrupt the 'school-to-prison pipeline?' *Contemporary Justice Review*, *21*(2), 121-140. https://doi.org/10.1080/10282580.2018.1455509
- Skiba, R.J., & Williams, N. T. (2014). Are Black kids worse? March, 1–8.
- Skiba, R. J., Horner, R. H., Chung, C. G., Rausch, M. K., May, S. L., & Tobin, T. (2011).

 Race is not neutral: A national investigation of African American and Latino

- disproportionality in school discipline. *School Psychology Review*, 40(1), 85–107. https://doi.org/10.1080/02796015.2011.12087730
- Stewart Kline, Dana M. (2016) Can restorative practices help to reduce disparities in school discipline data: A review of the literature. *Multicultural Perspectives*, *18*(2), 97-102. https://doi.org/10.1080/15210960.2016.1159099
- United States Government Accountability Office. K-12 EDUCATION (2018) *Discipline* disparities for black students, boys, and students with disabilities. https://www.gao.gov/products/GAO-18-258
- Wiley, S. A., Slocum, L. A., O'Neill, J., & Esbensen, F. A. (2020). Beyond the breakfast club: Variability in the effects of suspensions by school context. *Youth & Society*, 52(7), 1259–1284. https://doi.org/10.1177/0044118X19896716

Top

Book Review: School Culture Rewired

Larybett Pirela Moreno

Steve Gruenert and Todd Whitaker. *School Culture Rewired: How to Define, Assess and Transform It.* Alexandria, VA: ASCD, 2015. 170pp. \$26.95

"Just about everything that goes on in a school is a function of the school's culture to some degree." So say Steve Gruenert and Todd Whitaker in their groundbreaking book, *School Culture Rewired*, where they set out to outline a framework for defining, assessing, and transforming a school culture. Gruenert and Whitaker are both leading professors in the Educational Leadership department at Indiana State University, and they draw on decades of research to provide school leaders the necessary tools to establish organizational cultures that are optimal for student learning.

In *School Culture Rewired*, the authors essentially argue that to shape a new school culture, leaders must first understand the concept of a school culture; that is, they must know what a culture is and what is not. Next, leaders must understand the existing culture in their school. This would entail recognizing and acknowledging its past, as well as its current status, and knowing the existing culture's roadblocks and leverage points. Finally, leaders start to embark on the journey of shaping a new school culture as they build a capacity to change, appreciate what is working well in the existing culture, build a team, and describe the desired change.

The book is organized into 14 chapters. The first three chapters aim to define the concept of school culture. The next three chapters, (chapters 4 through 6), provide a framework to assess the existing school culture. The rest of the book, (chapters 7 through 14), is devoted to outlining a strategy to transform a school culture.

In describing the concept of school culture, Gruenert and Whitaker begin by pointing out that school cultures are fundamentally different from corporate cultures. They state that, "The culture of schools...is a world away from the culture of Big

Business" (p. 5). The implication is that using a business approach to inform school leadership is counterproductive; that is, doing so places an undue burden on schools to yield profits—which is antithetical to the non-profit nature of schools. The distinction between school culture and business culture, which is emphasized by Gruenert and Whitaker, contrasts previous approaches to organizational leadership. Namely, Michael Fullan's *Leading in a Culture of Change* outlines five dimensions of leadership that can arguably be successfully implemented in business as well as educational environments. Gruenert and Whitaker counter Fullan's approach by pointing out that schools are not on a mission to make profits, but to provide a service to the local population (pp. 5-6). Aside from making this obvious distinction, however, Gruenert and Whitaker fail to provide a convincing argument as to why schools cannot benefit from tweaking and applying methods that have proven successful in the business world. In fact, as they develop their claim throughout their book, they delineate certain elements that seem to contradict the existence of any marked distinctions between educational leadership and business leadership.

For instance, Gruenert and Whitaker argue—as they outline one of the components in their framework to shaping a new school culture—the need for school leaders to build a school team made up of teachers who will help rewire the school's culture. To do so, the authors suggest that principals should use a Rating Matrix (Gruenert and Whitaker provide a sample of such matrix) to rate teachers on the basis of their effectiveness and their ability to influence others (pp. 155-156). Needless to say, advocating the concept of plotting points on a matrix to measure your staff's effectiveness in accomplishing a particular goal seems to resemble a fundamental business approach to educational leadership.

In addition, it appears to become clear that some of the features in Gruenert and Whitaker's framework are indeed comparable to Fullan's model of effective leadership. For example, Gruenert and Whitaker argue that in order to change a culture, leaders must establish and communicate a school *mission*. The authors state that, "Without consensus among staff regarding the school's mission, improvement efforts may drift around a few common assumptions rather than strong, shared principles" (p. 92). It is clear that Gruenert and Whitaker's school *mission* is equivalent to Fullan's *moral purpose*—without which, Fullan argues, it is impossible to lead in a culture of change.

Another element that shares similarities with Fullan's approach is Gruenert and Whitaker's emphasis on *relationships* as one key aspect of improving the staff's morale and rewiring school cultures. In their book, the authors point out: "When we speak of changing schools into more collaborative organizations, what we really mean is that we want to change the nature of the relationships, or patterns of relating" (p. 51). This is akin to Fullan's stress on building relationships to ensure the organizational success of businesses and schools alike. In all, these examples indicate that, despite the clear distinction between educational leadership and business leadership the authors pinpoint at the beginning of their book, Gruenert and Whitaker's framework suggests an educational leadership model that shares commonalities with business leadership approaches.

Nonetheless, Gruenert and Whitaker do lay out a model which provides leadership tools that are specific to educational settings. For instance, the authors outline several activities and instruments that are specially tailored to assess school cultures. Some of these include the *School Culture Typology Activity*, which asks teachers and other staff members to evaluate various key aspects of their existing school culture—such as, student achievement, parent relations, etc. The goal of this activity is to determine which of the six types of school culture defined by the authors (toxic, fragmented, balkanized, contrived, comfortable, or collaborative) best describes the existing culture of the school. Another example of an education-specific tool is *The School Culture Survey*, which is an instrument the authors developed to be administered to teachers in order for leaders to gauge how collaborative their existing school culture is. Hence, Gruenert and Whitaker succeed in offering a leadership framework that affords school leaders practical tools, which are specific to educational environments.

Finally, Gruenert and Whitaker agree with Fullan on the unpredictable nature of change as they point out, "Cultural change is not an exact science; it is messy, unpredictable, and often uncomfortable" (p. 123). And they recognize that the process can be difficult and long. As they observed, "Rewiring a culture is like turning an ocean liner—it takes a long time" (p. 141). Overall, this book does an excellent job in providing practical tools and direction to school leaders interested in rewiring their school culture. In this sense, the book is geared towards principals, not teachers. Therefore, it makes

very clear the idea that leadership is key to any change, which is something that Fullan recognizes as well.

References

Fullan, M. (2001). Leading in a culture of change. San Francisco, CA: Jossey-Bass.

Gruenert, S., & Whitaker T. (2015). *School culture rewired: How to define, assess, and transform it.* Alexandria, VA: ASCD.

<u>Top</u>

Book Review: Connecting Teacher Leadership and School Improvement

Eunjung Lim

Murphy, J. (2005). *Connecting teacher leadership and school improvement*. Thousand Oaks, CA: Corwin.

Purpose and Thesis

Over the years, school improvement has been a critical theme with ongoing efforts to reach effective student achievement and school performance. The school leadership has been considered to play a crucial role to implement the school reform plans. The leadership has been viewed mainly from the administrative roles and focused on hierarchical organizational systems. However, the perspectives on teacher leadership have emerged as an important aspect in school improvement. The book titled *Connecting Teacher Leadership and School Improvement* by Joseph Murphy is designed to provide the full comprehended teacher leadership as a pathway to school improvement. This book aims to unpack teacher leadership into its core components and a more evolving reform concept. In addition, the author suggests how teacher leadership corresponds to the larger array of school reform initiatives.

The thesis of this book is to examine the ideological and empirical basis of teacher leadership. The author explores the prevailing concepts of leadership, investigates the emerging concept of teacher leadership, analyzes how teacher leadership is expected to promote professionalization and to enhance the school organization, describes comprehensive elements of teacher leadership, and examines the variety of pathways to operationalize teacher leadership. Additionally, the author offers teachers and principals with strategies to create productive relationships that will involve school improvement. The book focuses on getting the context right for teacher leadership to succeed by overcoming organizational and professional barriers, exploring the critical role of the principal in support of teacher leadership, and providing a general framework on developing professional development. As a new type of leadership, the

author emphasizes "the focus of this book is on teacher leadership beyond the classroom, primarily at the school level" (9).

Main Themes

The first part of the book explores the emerging core concepts of teacher leadership. Traditionally leadership has been focused on school administrators where decisions flowed downward to teachers. The author examines the dysfunctionality of traditional hierarchical structure and the struggle to rebuild the organizational foundations of schooling. Redefining school leadership draws considerable attention to teacher leadership that is nonhierarchical in nature and is considered a key element in improving the teaching profession and school reform. The book describes the embedded logic of teacher leadership into three sections- the professionalization of teaching, the strengthening of the school organization, and the promotion of classroom & school improvement-all connected to enhance the teacher leadership movement in action. As skills and attributes of teacher leaders based on a variety of analysts, the author concludes four broad domains of skills: visioning, interpersonal, collaborative, and management skills. With these skills, teacher leaders have identified their roles in helping teacher colleagues and facilitating school improvement. The author lays out a broad framework of tasks and activities for teachers "to maneuver in bring their leadership roles to life, acknowledging at the outset that the specific tasks of any teacher leader can only be known in the context of his or her own school" (74). The two broadbased pathways to teacher leadership are examined and outlined in detail. The first pathway is the role-based strategies that include teacher career-based strategies and broadened school leadership structure. The career-based approaches provide specific strategies for empowering teachers for leadership and the broadened leadership structures focus on connecting teachers to new roles and responsibilities. As the second pathway, community-based strategies are anchored in the belief that "all individuals in the school community have knowledge that can contribute to and enhance the work of the school and that teacher leadership needs to apply to all teachers in all schools" (89).

The second part of the book shows how to establish the context in schools to cultivate and support teacher leadership. As the teacher leadership approach is critical in school improvement, teachers are unlikely to engage in school leadership without

support systems. Overcoming organizational barriers that hinder teacher leadership, the author organizes three broad topics of structure, support, and culture to promote shared leadership and to enhance the activities of teacher leaders. The book describes some details in the principal's special roles in locating, planting, and nurturing the seeds of teacher leadership. The author points out the importance of the high quality of the relationship between administrators and teachers. As cited by Murphy, "the principalteacher relationship serves as a powerful precedent for teacher participation in new school decision-making structures" (133). The six key functions that principals engage to promote teacher leadership include crafting a vision, identifying teacher leaders and linking to leadership opportunities, legitimizing the work, providing direct support, developing leadership skills, and managing the leadership process at the school level. Another key component in supporting teacher leadership is to provide professional development that facilitates teacher leadership in school improvement. The elements of successful models for educating teacher leaders include organizing some form of learning community, providing opportunities to build collegial relationships with peers and mentors, and establishing a professional network to support ongoing learning. Additionally, the development of specific leadership knowledge and skills is a required component to facilitate effective teacher leaders.

Weak and Strong Points

One strong key point presented in this book is that how Murphy introduces teacher leadership by exploring the shift from traditional leadership to teacher leadership as an emerging phenomenon and an important part of a school improvement plan. The author cites that "without teachers' full participation and leadership, any move to reform education -no matter how well-intentioned or ambitious-is doomed to failure" (8). Although defining teacher leadership is complicated, Murphy suggests core components of the concept based on various definitions from the literature.

Another strong key point is that this book describes the skills, attributes, and knowledge of teacher leaders. Uncovering personal qualities and core principles allows providing distinct functions and patterns of a task associated with teacher leaders that will bring into action. Developing successful teacher leaders enables to create strong professional cultures that are essential for teachers' teaching practice. Improved

teaching is expected to produce benefits in students' progress which result in school improvement.

The other key points presented by the author are precise strategies to pave pathways to promote teacher leadership. One important strategy is to establish an appropriate school culture by confronting organizational conditions and cultural barriers. Reculturing the school organization includes providing support and settings where teachers are fully empowered partners in collaborating and participating in school decision making. The other critical strategy is presented in detail by defining the principal's role to nurture the seeds of teacher leadership. The author emphasizes the importance of principals' understanding of a new and nonhierarchical relationship with teacher leaders. An additional important strategy is to provide opportunities for teachers to fulfill their role as educational leaders through professional development. According to Murphy, "a quality program for teacher leadership development recognizes a continuum of teacher growth and challenges participants to imagine larger roles for themselves as professionals" (151).

Despite the strengths, there are some weaknesses regarding some of the strategies presented in this book. One weak point might be that the author underscores the social context to understand teacher leadership and its effects. Considering the specific context of the school, participants, the community, and the state is an important initiative in leadership. Preparing for teacher leadership within a context is an essential component to implement the leadership effectively. Another week point might be that the author fails to provide a strategy on how traditional leadership and teacher leadership can be collaborated to reach a common goal of school improvement. Considering teacher leadership is better than traditional leadership by school administrators would be a problematic assumption. As Murphy points out that shared leadership would be better than concentrated leadership in school organizations, the strategies how to collaborate both leaderships are not presented clearly. Regardless of these weaknesses, developing teacher leadership is considered an important component in school reform. Further evidence-based research could offer more effective strategies to strengthen teacher leadership.

Compare and Contrast to Other Books on Educational Leadership

Unpacking the concept of teacher leadership, Murphy introduces the concept as a fairly recent phenomenon compared to the traditional leadership that resided with school administrators. This term reflects the change of school culture to view on teacher's role and responsibility. The only job of teachers is not only to teach students in the classroom but also to participate in policy and restructure schools. The author commences the concept from the preposition that "teacher leadership is essential to change and improvement in a school" (7). Therefore, developing teacher leadership is considered as a part of culture change although the theme of teacher leadership is still an underdeveloped topic.

Similarly, Fullan (2001) enforces to understand change, "transforming the culture-changing the way we do things around here" (p. 44). Effective leaders know that the hard work of reculturing. This author adds that "leading in a culture of change means creating a culture of change. It does not mean adopting innovations, one after another; it does mean producing the capacity to seek, critically assess, and selectively incorporate new ideas and practices (Fullan, 2001, p.44).

Under Developing Teacher Leaders, in chapter eight of his book, Murphy suggests professional development as a learning community where teachers participate cooperatively as powerful and effective learning opportunities. The author views the professional learning community as "shared language, shared work, and focus on making historically self-contained and isolated teacher work open and public" (149).

Fullan (2001) refers to the same topic in a similar way when pointing out "school must also focus on creating schoolwide professional learning communities" (Fullan, 2001, p.64). Learning communities allow to focus on clear learning goals and to sustain over a period of time with program coherence. The role of leaders would be to create a common culture of expectations, to hold the various pieces together in a productive relationship and to hold individuals accountable for their contributions to the collective results.

Furthermore, both authors discuss similar approaches when referring to build quality relationships among administrators and teachers. Murphy points out that "relationships between principals and teachers form the cauldron in which new understandings of leadership will be forged and new forms of teacher leadership will

materialize" (130). Similarly, Fullan (2001) assures the importance of relationship, "In order to share personal knowledge, individuals must rely on others to listen and react to their ideas. Constructive and helpful relationship enables people to share their insights and freely discuss their concerns" (Fullan, 2001, p.82).

Despite many similarities, both authors discuss different approaches when referring to leadership skills. Murphy includes vision as one of four broad domains of teacher leadership skills, "vision includes a distinct strand of local insight, matching local needs and capabilities and solve problems in context" (71). While his concept of vision is very vague and abstract, Fullan (2001) emphasizes the importance of having moral purpose as a leadership skill. This author points out that "leadership, if it is to be effective, has to (1) have an explicit making-a-difference sense of purpose, (2) use strategies that mobilize many people to tackle tough problems, (3) be held accountable by measured and debatable indicators of success" (Fullan, 2001, p.20). Fullan describes the leadership skill in more specific and observable terms while Murphy presents it with an indistinct concept.

Conclusion

Research over the years has consistently identified that leadership is a critical component of school improvement. Teacher leadership is an emerging concept to extend the shared leadership within a school organization. The author's purpose from this book is to help the reader fully comprehend teacher leadership as a pathway to school improvement. It synthesizes diverse theories and literature to provide a comprehensive view on both concept and practice about teacher leadership. The author introduces the emerging concept of teacher leadership with a core component and traces its progression into a more mature concept. The book also describes how to establish teacher leadership with structure, support, and culture. Proposal for teacher leadership may challenge long-established traditional school leadership. However, new roles and responsibilities of teacher leadership are considered effective and essential to bring change and improvement in school. It is important to make people feel part of a success story. That is why teacher leadership can play a crucial role in improving teaching and student learning which will extend to bring positive school reform in the end.

References

Fullan, M. (2001). Leading in a culture of change. San Francisco: Jossey-Bass.

Murphy, J. (2005). Connecting teacher leadership and school improvement. Thousand Oaks, CA: Corwin.

Top

Book Review: If you Don't Feed the Teachers, They Eat the Students

Krystal Fernandez Diaz

The role of leadership in every sphere of life cannot be emphasized enough as times have become increasingly challenging. Pragmatic and accountable leadership is critical now more than ever before. If you Don't Feed the Teachers, You Eat the Students by Neila Connors is packed with wisdom and inspiration to help school administrators improve their school climate and enhance school year success. The author metaphorically uses the idea of food and eating to represent learners as the real victims of ineffective and incompetent school administrators and teachers. The author makes it clear that effective leadership is essential for creating a foundation for a productive environment. Connors' cautionary administration guide tells an important story that administrators can use to establish a healthy climate for teachers and students to enhance collective success. This article reviews Neila Connors' "If you Don't Feed the Teachers, You Eat the Students" to establish its themes, keynotes, as well as its strengths and weaknesses. The review will conclude by comparing Connors' book to Michael Fullan's Leading in a Culture of Change.

Key Themes

Effective leadership demands that leaders should be sensitive to the needs of their followers. In this context, the theme of human needs that determine the individual's behaviors stands out in the readers' minds. As the author provides the strategies that can help administrators create a productive and supportive climate, the need to meet the emotional and psychological needs of teachers comes out as one of the key pillars. For example, the author points out that, "Obviously, the more self-worth one has the more likely she or he is likely to reflect, analyze, and determine to improve" (p. 13). That is, it is imperative for administrators to realize that teachers have needs that extend beyond basic physiological and safety needs. There are other sets of needs including psychological and self-fulfillment needs that must be met for teachers to be well-fed or for them to have a positive impact on the learners. The psychological needs may include

emotional needs, such as a sense of self-worth or accomplishment. It may also include the need for belongingness or friendship. In this context, it is noteworthy that the entire book is based on building a positive, conducive, and collaborative working environment for teachers. For example, the author says that "...educators must work together to ensure they touch the future they teach" (p. 12). The author seeks the basis for establishing a strong relationship between teachers and administrators to cultivate grounds for friendship and belongingness.

For leaders, it is important to motivate their employees or followers. Self-actualization is one of the most effective ways of keeping employees motivated. Self-actualization focuses on helping the followers to be the best version of themselves. This necessitates helping them attain growth or their peak performance levels. The reason this is effective is that it helps the followers to become the best they can be or reach their full potential. Notably, Connors' (2000) book is about helping teachers to become ideal versions of themselves in their profession. The book points out that for teacher's self-actualization entails having a positive impact on the future of their students by helping them to achieve their desired goals. This can be achieved by ensuring that teachers are supportive of all their students. Subsequently, the role of administrators is to ensure they establish a professional, secure, safe, and encouraging environments in which everyone feels appreciated and respected. As a result, administrators can motivate their employees by ensuring that they motivate their teachers and uplift the morale of their schools. Motivating teachers is a way of ensuring they are fed as a strategic way of helping students through their journey of success.

Writing about effective leadership is incomplete without discussing the qualities of an effective leader. In this case, the author discusses several qualities that sum up effective leadership. These qualities are crucial for a leader to possess to lead their followers effectively. For example, the author contends that a leader must be visionary and empathic. The essence of any leadership position is to move forward or to create growth and progress. To achieve this, it is necessary for leaders to be visionary for them to understand where and how to lead their followers. For administrators, this may entail leading their schools to be the best performers by establishing a conducive and collaborative environment. The desire or the drive to be successful starts with having a

vision of what needs to be accomplished. Additionally, leaders must care and be concerned with the welfare of their followers. Thus, the author points out that school administrators should strive to develop and design a climate of care. Leaders must be willing to understand and empathize with their followers to foster an environment of collaboration, which also encourages self-actualization. Leaders must demonstrate that they care about various aspects of their employees' lives, such as their health, welfare, emotional well-being, and their productivity or performance. The author asserts that people are happy when they are healthy or when they know that someone cares about their opinion and how they feel.

Leaders must have a passion for leading their followers to the visioned future. In this way, they can set the moral or climate of vigor and enthusiasm necessary to realize the envisioned future. Therefore, it is essential for school administrators to establish work environments where teachers can become risk-takers and guide or coach their students through the journey of success. Effective administrators must guide, ask, communicate, delegate, and encourage. Hence, it is vital for administrators or leaders to be risk-takers and consistently remind their followers that they are a significant part of the vision and the plan to achieve it. Notably, this is essential because it makes the followers understand how important they are and their contribution to achieving the desired objectives. Connors' book not only sets the morale of enthusiasm necessary for great students but also sets a framework that can help administrators understand their teachers.

Strengths and Weaknesses

Connors' book stands out as a practical guide for educators in various ways. Besides using humorous and plain language that is easy to understand, the book is relatable in various leadership contexts. The book is suitable for all types of leaders, genders, grade levels, and geographical locations, thus making it applicable universally. The author approaches the concept of leadership competency from an angle that makes the book an enjoyable read and relates to administrators, teachers, students, and parents' plight. Rather than stressing the need for competent leadership, Connor explains what competent leadership entails and what administrators can do to ensure they build a productive and inclusive environment in which the efforts of individual teachers are

recognized and appreciated. The author offers practical suggestions that administrators can implement to adjust their leadership styles to ensure their schools are successful.

The author has a unique approach to achieving the purpose of writing the book, which is to inspire teachers to be more positive and become teacher-focused leaders. She underscores the significance of the teaching profession while appreciating the associated difficulties. In this way, the author provides a foundation for building positive experiences to promote teachers through which their efforts can be appreciated. Additionally, the book provides a goal-setting template that can help administrators and teachers transform their leadership styles. Hence, the book is a valuable tool in the leadership and change realm not only for educators but also for leaders in all aspects of life. It spells out what effective and competent leadership entails, as well as provides a change process that can help transform leaders in any sector into effective ones.

The goal-setting survey template provided by the author is also effective because it helps the leaders to identify their leadership weaknesses. In this context, the goal-setting survey template can be analyzed using the SMART goal-setting framework. The SMART framework is a significant tool for planning and achieving the desired goals. SMART stands for specific, measurable, attainable, relevant, and time-bound framework. In this case, the first aspect to notice when using the goal-setting template provided by the author is that there is starting time and an ending time, thus making it time-bound. The template directs the users to state the specific professional goals that are important to them, including one specific professional risk they have recently taken. The specificity of the goal-setting template can be seen in the other leadership and personal development areas, including personal activity, individual's overall performance and leadership score, the goals individuals need to improve their overall score, as well as strengths that they have as leaders. While goal-setting is important for leaders, they require a plan or strategy to help them achieve the set goals.

Comparing Connors' Book to Michael Fullan's *Leading in A Culture of Change*

Significant similarities exist between Connors' book and Michael Fullan's Leading in a Culture of Change. The world has become highly dynamic. As such, the strategies and methodologies that work today may not be applicable in the future. This requires leaders to understand the intricacies of the change process. In their books, both authors challenge the tendencies of maintaining the status quo while encouraging the development of new practices or methods. For example, Connors (2000) points out that effective leaders applaud or appreciate the methods and practices made by individual teachers (p. 38). Notably, Connors elaborates that effective leaders do not confine their followers to the rules and regulations. Instead, administrators should encourage their teachers to be creative in their teaching methods and practices. In the same way, in his book Leading in A Culture of Change, Fullan teaches how leaders can adapt to the radically changing environment around them. In this context, both books are centered around the themes of change. While Connors (2000) advocates for change in administrators' leadership mantra by providing suggestions on how to create a conducive climate for their teachers, Fullan (2007) provides a comprehensive leadership theory that can help leaders to achieve success in the phase of dynamic and complex situations.

Both books highlight how to improve leadership through focusing on key areas or dimensions. For example, Fullan points out that all leaders, including CEOs of multinational corporations and school principals, can be more effective by developing new mindsets and focusing on key aspects of leadership. Similarly, Connors discusses various mindset and leadership responsibilities of school administrators towards their teachers. Both authors acknowledge that developing a new mindset is necessary for navigating leadership complexities and paradoxes, as well as challenges. Having a new mindset requires a change in perception of how the concept of leadership is approached. Both authors provide bases, strategies, and ideas that can help in dealing with complex leadership problems. Fullan (2007) reiterates that the purpose of leadership involves creating a positive relationship in the lives of employees, customers, and society (p. 17). On the other hand, Connors's book focuses on improving students' lives. The administrators can improve the childhood experiences and the future of students by establishing a favorable climate for the teachers. In Leading in a Culture of Change, Fullan (2007) elaborates that the key components of strategic leadership include

building hope, energy, and enthusiasm (p. 18). These crucial components are reiterated in Connor's book by pointing out strategies that can help administrators to build a collaborative environment in which teachers are motivated to take risks and find new methods and practices of connecting with the students.

The significance of establishing a strong relationship between leaders and employees is reinforced in both books. In Connors' book, the concept of relationship is brought out as a critical need that administrators need to satisfy to motivate their teachers. Satisfying needs for self-actualization helps administrators to build a strong relationship with the teachers. Fullan (2007), on the other hand, asserts that improving relationships enhances productivity outcomes. In this case, both authors point out that leaders must focus on cultivating strong relationships with diverse groups and people.

Connors' book differs from Fullan's in the area of focus. Connors (2000) focuses on improving the leadership of school administration and enhancing the productivity of teachers. In this case, Connors lays down strategies that can be employed by administrators to develop a supportive environment in which teachers are appreciated and encouraged to find new and creative ways of connecting with their students. On the other hand, Fullan's book does not focus on any specific realm area of leadership. Fullan takes a general approach and examines the context of leadership in the highly dynamic and ever-changing current environment.

Conclusion

Connors' *If you Don't Feed the Teachers, You Eat the Students* focuses on leadership transformation. It provides strategies that can help school administrators to become effective leaders. Connors' cautionary administration guide highlights an important story that administrators can use to establish a healthy climate for teachers and students to enhance collective success. Additionally, it provides self-assessment and goal-setting templates that can help teachers to improve their teaching practices, methodologies, and outcomes. The leadership components provided by Connors, including raising the energy of teachers through various motivation strategies, building their performance enthusiasm, and reinforcing their hope for growth and development are reiterated in

Michael Fullan's book. Teachers can be motivated to find new strategies of connecting to their students if they are energetic, enthusiastic, and hopeful that they can grow and develop in their current teaching positions.

References

Connors, N. A. (2000). If you don't feed the teachers, they eat the students. *Nashville: Incentive Publications*.

Fullan, M. (2007). Leading in a culture of change. John Wiley & Sons.

<u>Top</u>



Latest Employment Opportunities Posted on NASET

- * [2021-2022] Elementary Reading Interventionist This position will serve as a school resource for staff and parents with regards to special education services and regulations. The Intervention Specialist will work closely with the Student Support Team (SST) to assist in observing, documenting, and referring students with suspected special education impairments. The candidate should be able to monitor students; continuous progress through data collection and observation and provide information/support and training to teachers and parents around their child's needs. To learn more Click here
- * [2021-2022] ENL Teacher Reporting to the Academic Dean, the ENL Teacher will be responsible for designing and leading ELL instruction, and collaborating with school staff to provide English language support. This is an exciting opportunity for a dynamic educator who is passionate about improving student outcomes for all students, and eager to apply their vision for rigorous, whole-child education in a growing, collaborative school community. To learn more Click here
- * Special Education Teacher (All Specializations) We are looking for highly motivated and skilled Special Education Teachers to join our team at District of Columbia Public Schools (DCPS). We are primarily hiring for several Inclusion/Resource classrooms as well as Communication and Education Supports (Autism) classrooms. We seek individuals who are passionate about transforming the DC school system and making a signi?cant di?erence in the lives of our students with special educational needs. To learn more Click here
- * [2021-2022] ELA Special Education Teacher Reporting to the Academic Dean, the ELA Special Education Teacher will be responsible for providing tailored support to students with

special education needs, through integrated co-teaching, in small group settings, or a combination of both. This is an exciting opportunity for a seasoned educator who is passionate about ensuring all students succeed and thrive in school. To learn more - <u>Click here</u>

- * SPECIAL EDUCATION TEACHER (Early Childhood, Elementary, and Secondary) (Early Childhood, Elementary, and Secondary) To create a safe atmosphere conducive for learning and implements instruction in ways that allows all students to learn. Plans and provides for appropriate learning experiences for students. To learn more Click here
- * Lower Elementary SPED Teacher Reporting to the Academic Dean, the Lower Elementary SPED Teacher will be responsible for providing tailored support to students with special education needs, primarily through integrated co-teaching. This is an exciting opportunity for a seasoned educator who is passionate about ensuring all students succeed and thrive in school. To learn more Click here
- * Elementary ICT Teacher Reporting to the Academic Dean, the Elementary ICT Teacher will be responsible for providing tailored support to students with special education needs, primarily through integrated co-teaching. This is an exciting opportunity for a seasoned educator who is passionate about ensuring all students succeed and thrive in school. To learn more Click here
- * [2021-2022] Math Special Education Teacher Will be responsible for providing tailored support to students with special education needs, through integrated co-teaching, in small group settings, or a combination of both. This is an exciting opportunity for a seasoned educator who is passionate about ensuring all students succeed and thrive in school. To learn more Click here
- * [2021-22] Middle School Special Education Teacher Reporting to the Academic Dean, the Middle School Special Education Teacher will be responsible for providing tailored support to students with special education needs, through integrated co-teaching, in small group settings, or a combination of both. This is an exciting opportunity for a seasoned educator who is passionate about ensuring all students succeed and thrive in school. To learn more Click here
- * [2021-2022] Special Education Teacher (Learning Specialist) From our schools to our playing fields, DREAM is committed to building a team where each individual can bring their

full identity and experience to work because representation matters—it enriches our team culture, enhances our ability to innovate, and strengthens our impact in and out of the classroom. DREAM engages staff that represent and appreciate the diversity of our majority Black and Hispanic student body, while working to ensure that our practices are equitable, welcoming, and productive. To learn more - Click here

- * Autism Teacher JHU is looking for an energetic, flexible, and motivated teacher needed to work full-time with a young adult with autism. Teachers work on a multi-disciplinary team with specialists in autism, special education, speech-language pathology, fitness, art, and behavior analysis to address communication, academic, daily living, vocational, and leisure skills in home, educational, and community settings in and around New York City, Connecticut, and via Zoom. To learn more Click here
- * Director, Special Services Serves under the immediate direction of the Senior Executive Director, Student Services and must possess specialized in-depth knowledge and experience in leadership in the program and fiscal administration of special education programs with primary responsibilities that encompass compliance and program quality assurance, fiscal management, personnel matters, and more. To learn more Click here
- * Special Education Teacher Plan, prepare and deliver a quality instructional program based upon student Individual Education Plan goals, state standards, district curriculum, and effective instruction to students of diverse backgrounds and learning needs in inclusive settings. We offer medical, dental, vision, retirement, & AD&D/Life. To learn more Click here
- * Exceptional Children's Teachers Winston Salem/Forsyth County Schools are looking for a variety of experienced and certified EC Teachers at the elementary, middle and high school levels. We offer a variety of benefits including: health, dental, and life insurance. In addition, employees are enrolled in the state retirement plan, accrue paid time off, etc. To learn more Click here
- * New Visions Charter Special Education Teacher New Visions for Public Schools is the leading non-profit organization dedicated to the improvement of public education in New York City. Today, we support over 1,050 public schools and thousands of teachers, serving 700,000 students, in their most critical work: deciding what and how to teach, helping keep students on

track to graduation, and preparing students for success beyond high school. New Visions directly manages a network of 10 charter high schools across the Bronx, Brooklyn, and Queens. To learn more - Click here

- * High School Learning Specialist 20-21 and 21-22 Opportunity Charter School (OCS) teachers are trained in cutting-edge, research-based methodology of evaluating students' academic strengths and challenges. To maximize each child's personal development, an individualized education plan is created that is tailored to his or her unique needs. Students receive differentiated instruction in every curricular area with the goal of expanding their higher cognitive thinking. To learn more Click here
- * Assistant Principal DC Public Schools We are looking for highly mo vated and skilled talent to join our team at District of Columbia Public Schools (DCPS). We seek individuals who are passionate about transforming the DC school system and making a signi?cant di?erence in the lives of public school students, parents, principals, teachers, and central o?ce employees. To learn more Click here
- * Special Needs Tutors is seeking dynamic, state credentialed special needs teachers to tutor on our virtual platform teaching learners all over the world. This is a perfect second job to earn extra money from the safety of your own home. There is no minimum hourly requirement; all you need is a computer, reliable internet, a quiet space and willingness to teach. To learn more Click here
- * Special Education Teacher \$60,000/school year (185 days), summers off with year-round pay and year round appreciation. Special Education Teachers needed in Arizona (Phoenix and surrounding cities). Needs are in the self-contained and resource settings serving students with emotional disabilities (ED), Autism (A), Severe/Profound (S/P), and Intellectual Disabilities (ID). STARS is the largest school contract agency in AZ. You will be an employee and receive full benefits. To learn more Click here

Top



Acknowledgements

Portions of this or previous month's *NASET's Special Educator e-Journal* were excerpted from:

- Center for Parent Information and Resources
- Committee on Education and the Workforce
- FirstGov.gov-The Official U.S. Government Web Portal
- Journal of the American Academy of Special Education Professionals (JAASEP)
- National Collaborative on Workforce and Disability for Youth
- National Institute of Health
- National Organization on Disability
- Substance Abuse and Mental Health Services Administration
- U.S. Department of Education
- U.S. Department of Education-The Achiever
- U.S. Department of Education-The Education Innovator
- · U.S. Department of Health and Human Services
- U.S. Department of Labor
- U.S. Food and Drug Administration
- U.S. Office of Special Education

The National Association of Special Education Teachers (NASET) thanks all of the above for the information provided for this or prior editions of the Special Educator e-Journal.

<u>Top</u>