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Exceptional Teachers Teaching Exceptional Children

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Special Education Legal Alert

By Perry A. Zirkel
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This month's update identifies recent court decisions that illustrate the significance in some cases of the parties' course of conduct in the eyes of the ultimate adjudicator. This balancing of reasonableness and good faith, referred to as the "equities," includes not only the remedies, such as tuition reimbursement, but also extends with less frequent prominence, in the underlying merits, such as the determination of "free appropriate public education" and "least restrictive environment" (LRE).

In *Alvarez v. Swanton Local School District* (2020), a federal court in Ohio addressed the IDEA claims of the parents of a high school student with multiple disabilities, including apraxia and intellectual disabilities. In April of grade 10, her father kept her home after notifying the police and the school administration that a male student had been having inappropriate sexual contact with her. In response the parents' emotional insistence not to return her to school, rather than pursue truancy proceedings, the district agreed to amend her IEP to change her placement for the remaining month of the school year from a self-contained special education class to instruction in the home. Per the parties' agreement to revisit the issue for grade 11, after a cooling off period, the IEP team met in August. The team proposed two alternative in-school placements, including one with a 1:1 attendant for safety concerns. The parents countered with six conditions, including the special education director's signing a document promising to ensure the student's safety. The school assented to most of the conditions except the promissory document, but the parents and their new attorney kept delaying resolution until mid-March of grade 11, when they agreed to the IEP that placed the student in a cross-categorical classroom at the high school with a 1:1 safety attendant. However, the parents ultimately filed for a hearing, seeking compensatory education for alleged violations of procedural FAPE, substantive FAPE, and LRE. The hearing officer ruled in favor of the district, and, under Ohio's two-tiered system under the IDEA, the review officer affirmed. The parents appealed to federal court.

The parents' alleged procedural violations focused on the meeting` notice and members for the interim change in placement near the end of grade 10.	The court rejected this challenge, pointing out that the applicable procedures for an IEP amendment allow for a duly documented change without a full IEP team meeting (§ 300.324(a)(4)).

The parents' substantive FAPE claims on appeal did not seem to have a specific focus, although claiming the lack of parental training and counseling and insufficient speech/language services.	Based on a previous case in which the same judge ruled that the parents were responsible for the lack of FAPE (*Horen v. Bd. of Educ.*, 2013), he used a totality-of-the-evidence approach to reach "the logical conclusion . . that the parents unreasonably prevented [the district] from doing so."
The parents least restrictive environment (LRE) met the same fate in the view of this court.	"The record convincingly shows the parents . . . . caused the District to implement the more restrictive option of home instruction."
Avoid overgeneralizing this unpublished decision, which reflected the relatively unusual circumstances of the judge's earlier case; however, it illustrates the occasional overall parties'-conduct, balance-of-the equities approach to FAPE or LRE claims.	

A recent pair of successive decisions arising in New Jersey illustrate the steps of tuition reimbursement analysis beyond the foundational and frequent issue of whether the district's proposed placement was appropriate. In the first case, *J.F. v. Byram Township Board of Education* (2020), the Third Circuit Court of Appeals addressed the so-called "equities" steps of whether the parents provided the requisite timely notice of their unilateral placement to the district and whether their conduct, in comparison to that of the district personnel, was reasonable and in good faith. Not long thereafter, in *Madison Board of Education v. S.V.* (2020), the federal district court in New Jersey re-visited these equities issues along with whether the parents' unilateral placement is limited, for tuition reimbursement purposes, to a private "school."	
In, *J.F*, the parents kept the child in the private placement in which he had been before moving to the district and, after moving, did not notify the district at the IEP meeting in July of their intent or provide written notice until late August. Moreover, at the July meeting, they refused to accept any alternative but the private school, did not cooperate with the invitation to visit the proposed in-district placement and meet the teachers, and failed to identify specific concerns with the district's proposed IEP.	The Third Circuit denied tuition reimbursement to the parents based on two express reasons: (a) the failure to meet the IDEA's specific timely notice provision, and (b) unreasonable conduct in "fail[ing] to participate in a collaborative process with the [district] from the time they relocated [there]." However, colored by its previous decision concerning comparable services and stay-put upon the parents' relocation to the district, the Third Circuit`s recitation of their conduct appears to be unduly repetitive, narrow, and harsh.

In the subsequent *Madison* case, the parents provided the district with the requisite formal notice in April, when they also informed the district that they wanted their independent expert to evaluate the proposed program.	The lower court found the Third Circuit's J.V. case to be clearly distinguishable. Here, the parents inarguably provided the requisite notice and their use of an expert for a second opinion was reasonable.
In *Madison*, the district's other argument was that the parents' unilateral placement of their preschool child with autism was at a private provider of in-home ABA services, not a "school," which is the term that the IDEA's tuition reimbursement provisions specify.	Citing an ample sample of court decisions before and after the IDEA 1997 codification of tuition reimbursement rulings, the *Madison* court cogently concluded that the statutory reference to "school" in no way excludes various alternatives, including tutoring, related services, and in-home arrangements.

Reinforced by the express language in the IDEA that a hearing officer or court "may' reduce or deny reimbursement based on various equitable grounds, these two cases illustrate the rather wide latitude for and variance among courts in exercising their discretion for this high stakes remedy. This broad range is bounded by the "letter" and the "spirit" of the law.

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COVID-19 Guidance and Case Law: Early Fall Update*

Special Supplement #5 - September 18, 2020

Perry A. Zirkel

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This update is the latest in a series of summaries of legal activity specific to COVID-19 issues, with the primary focus being on students with disabilities. The full set of these special supplements are on the home page of my website**, perryzirkel.com**, along with links to various referenced legal guidance and decisions.

Remaining as unsettled as the pandemic, the primary two-part question arising under the IDEA and Section 504 as a result of COVID-19 continues to be: (a) has the district denied FAPE to the eligible child and, if so, (b) what is the resulting relief, typically but not exclusively in the form of compensatory education? Additionally, an interim but significant issue has emerged—upon parental filing for a due process hearing on such pandemic-related issues, what is the "stay-put"?

Further Federal Guidance

The USDE guidance during the most recent month has dropped to a negligible level, with the latest issuance limited to ESSA assessments for students generally. Specifically, on September 3, Secretary DeVos sent a letter to chief state school officers warning not to expect waivers for ESSA summative assessments for the 2020–21 school year. She expressed receptivity to adjustment in the manner of administration but not in repeating this past year's waiver of these assessments.

State Administrative Decisions

State Complaints. Since my last special supplement, state complaints filings have increased, and at least three decisions have been issued.

A South Dakota state complaints decision on August 7 concluded in relevant part that the district's change from in-person to remote delivery in response to the state's closure of public schools did not constitute a unilateral change in placement and that the district—with a limited exception—did not materially fail to implement the student's IEP via distance learning. The exception was for the first day of ESY. The corrective action for this violation was compensatory education, which will be (a) via distance learning or in-person depending on the IEP team's determination, and (b) provided before the start of the school year unless the parents are not reasonably able to do so within that time limited time period.

An August 12 state complaints decision in Texas concluded that each of the three students at issue was not entitled to compensatory education, per the respective IEP team determinations. The reason was that the district made reasonable efforts that resulted in progress, thus not denying FAPE. The circumstances included the partial lack of parental cooperation in two of the three cases.

An August 21 state complaints decision in Indiana found various pandemic-related claims unsubstantiated with a limited exception, the provision of periodic progress reports. The corrective action for this violation was in-service training and a documenting system for these reports. Otherwise, the conclusions were that during the school closure and resulting distance learning, the district sufficiently implemented the student's IEP during the school closure and, per state law, provided the student with the variety of educational services and programs that the school made available to nondisabled students.

An August 24 state complaints decision in Virginia, which is on appeal, similarly found no violation for a systemic complaint against a large school district's use of voluntary distance learning plans as a result of the statewide closure of schools. More specifically, the conclusions included that (a) the district's "voluntary distance learning initiative was reasonably based on federal and state guidance providing flexibility to school [districts] during the extended closure period," and (b) these temporary learning plans did not constitute amendments to the students' IEPs, thus not requiring PWNs or parental consent.

Due Process Hearings. Although similarly increasing in filings, the due process hearing avenue thus far has yielded fewer decisions. The primary examples were two California hearing officer decisions, both issued on August 24.

In the Los Angeles Unified School District decision, the hearing officer concluded that the student's distance learning plan delivered, at most, a third of the 1570 minutes per week of services specified in the IEP, with the shortfall in community-based vocational services particularly affecting her progress, thus constituting a material failure of implementation. For the second and separate issue, however, the hearing officer found that the district formulation and delivery of transition services included a limited procedural violation that did not result in substantive loss to the student, thus not amounting to denial of FAPE. The remedy for the first issue was compensatory education, specifically for the district to "fund a total of 40 hours of postsecondary transition counseling by an appropriately-credentialed counselor of Parent's choice."

In the Pleasanton Unified School District decision, the hearing officer granted the parent's stay-put motion for essential related services at home based on "close as possible" approach, with the feasibility finding based on (a) the implementation of compensatory education related services at home during the pandemic pursuant to a separate state complaints decision related services, and (b) the lack of any prohibition for such in-person at-home services in state guidance.

Court Actions

Court lawsuits, and to a much more limited extent court decisions, have continued at a more active and publicly visible basis.

The lawsuits since those reported in supplement #4 are as follows:

- Aug. 7: *Wilkes v. Wash. State Bd. of Educ.* (Wash Super. Ct.) - challenge to governor's order providing for "continuous learning plans" for full funding, thus waiving full instruction for all, including but not limited to special education, students

- Aug. 21: *C.M. v. Jara* (D. Nev.) - class action FAPE (especially failure-to-implement) claim against Clark County School District, using "spaghetti" litigation strategy and including requested funding reallocation to parents

- Sept. 2 and 14: *J.T. v. de Blasio* (S.D.N.Y.) - successive, rather blistering show cause orders against the plaintiff law firm requiring expedited justification for fulfillment of jurisdiction, venue, and related procedural prerequisites

The court decisions since my August 12 supplement are as follows:

- Aug. 20: *M.G. v. N.Y.C. Dep't of Educ.* (S.D.N.Y.) - granted parent's motion to amend its pre-pandemic FAPE suit for alleged violation of hearing officer's order for 2019-20 school year and for delay in appointing a hearing officer for 2020-21 due process hearing complaint

- Aug. 21 and 26: *Wash. v. DeVos* (W.D. Wash.) and *Mich. v. DeVos* (N.D. Cal.) -granted preliminary injunction, based on Administrative Procedures Act, against interim rule for apportionment of CARES funding for private schools

- Aug. 24: *Fla. Educ. Ass'n v. De Santis* (Fla. Cir. Ct.) - granted preliminary injunction, based on state constitutional provision for safe schools, striking arbitrary and capricious provisions of governor's funding-based order for full in-person instruction – stay upon expedited appeal (Fla. Dist. Ct. App. Aug. 27)

- Sept. 1: *L.A. v. N.Y.C. Dep't of Educ.* (S.D.N.Y.): granted stay-put order for continued placement at private school (which closed during pandemic)

- Sept. 4: *NAACP v. DeVos* (D.D.C.) - granted permanent injunction, based on Administrative Procedures Act, against interim rule for apportionment of CARES funding for private schools

- Sept. 10: *Killoran v. Westhampton Beach Sch. Dist.* (E.D.N.Y.) - denied preliminary injunction based on stay-put and alternately on balance of equities for settlement agreement upon closure of library

Continuing Conclusion

Again, the state of the law, like that for the resumption of schools, continues to be a rather fluid and largely indefinite picture that warrants the continued resiliency and creative cooperation of both special educators and parents. While awaiting more definitive answers, the thrust of the legal activity to date specific to special education appears to be on stay-put and failure-to-implement claims.   The decisions to date range from adjusted to strict conceptions of FAPE, and the awards of compensatory education have been relatively limited.

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Buzz from the Hub

All articles below can be accessed through the following links:

https://www.parentcenterhub.org/buzz-august2020-issue2/

https://www.parentcenterhub.org/buzz-august2020-issue1/

https://www.parentcenterhub.org/buzz-july2020-issue1/

https://www.parentcenterhub.org/buzz-june2020-issue2/

Voter Resource Center

The American Association of People with Disabilities (AAPD)'s REV UP Campaign is designed to increase the voting power of the disability community while also engaging candidates and the media on disability issues. The resource center connects voters with disabilities and others with an amazing array of info and guides to support their participation in voting.

OSEP Policy Letter to Anonymous

Can a parent be required to sign a confidentiality agreement in order to participate in mediation under Part B of the IDEA?

OSEP *Fast Facts* | Race and Ethnicity

Two new Fast Facts from OSEP take a closer look at IDEA's 618 data for American Indian or Alaska Native children with disabilities and for Black or African American students with disabilities. The fast facts reported include data on child count, educational environments, discipline, and exiting.

Fighting the Big Virus Children's Book

(Also available in Spanish, simplified Chinese, Finnish, Portuguese, and Mandarin)
The National Child Traumatic Stress Network developed this children's book, to help young children and families talk about their experiences and feelings about COVID-19 and the need to shelter in place.

10 Kids' Books That Star Protagonists with Special Needs

These 10 books are just some of the many options that feature kids with special needs (and their siblings) fighting crime, solving mysteries, navigating school, loving each other, making friends, and just being awesome.

Transition Guide to Postsecondary Education and Employment for Students and Youth with Disabilities

This OSERS transition guide will help students and youth with disabilities and their families to better understand how state education agencies, local education agencies, and vocational rehabilitation agencies work together to facilitate improved outcomes for students and youth with disabilities.

100 Things Students Can Create To Demonstrate What They Know

Because variety is the spice of life!

6 Tips for Keeping Kids Motivated for Online Learning

This 2-minute video *(also available in **Spanish**)* gives helpful tips and techniques to encourage and motivate your kids during virtual lessons in what promises to be a very unusual school year.

Types of Strengths in Kids

Children have many different kinds of strengths. Recognizing and talking about these strengths can help your child thrive. This is especially true for kids who are struggling in school. Use this list to help identify your child's strengths.

Planning for Equity and Inclusion: A Guide to Reopening Schools

COVID-19 has changed public education in dramatic ways, and the 2020–2021 school year is posing even more challenges. This short guide shares specific ways school and district leaders can prioritize equity and inclusion as they rethink their approach to public education in the COVID-19 world.

Building Engagement with Distance Learning

This resource is part of an ongoing series produced by the OSEP-funded **TIES Center**. It provides a framework for supporting all students, including those with significant cognitive disabilities. The series explores important considerations in providing distance learning, such as daily meetings, behavioral supports, individualizing supports for students, data collection, and embedding instruction at home.

A Guide to Equity in Remote Learning

This guide emerges from the ongoing webinar series *Advancing Equity in an Era of Crisis*, a collaborative effort of several professional organizations in California (e.g., California Association of African-American Superintendents and Administrators). The 63-page guide examines how California can equitably meet the needs of all students when it resumes instruction in the 2020-21 school year, whether in classrooms, remotely, or a hybrid of both. Much food for thought here, even if California isn't where you live.

Testing for COVID-19: What's Your State's Plan?

The Department of Health and Human Services has posted the COVID testing plans (July through

December) from all states, territories, and localities. The plans include details on responding to surges in cases and reaching vulnerable populations.

Talking to Very Young Children about Race

This 4-page resource is subtitled *"It's necessary now, more than ever."* Why? Because children see injustices on the news, at the store, on the playground, and in their classrooms. It is important for adults to explain to them what is going on in a way that makes sense based on their developmental level. These conversations need to become a pattern during the early childhood years and not a single event. Excellent, subtle suggestions are given. From the National Center for Pyramid Model Innovations.

Anti-Racism Resource Directory for Families: Resources for Multiple Grade Levels

Parents may not know where to start with discussions of race, racial justice, and anti-racism with their children. Or perhaps they've already had family conversations and are looking to continue the discussion or explore action. This *Learning Heroes* directory assists families as they navigate the many free resources that are available.

The Ultimate Parents' Guide to Summer Activity Resources

To give parents a sense of the summertime fun can be had, the *Washington Post* compiled resources in 10 categories: reading, education, travel, mental wellness, music, art, physical activity, theater and dance, languages, and entertainment.

Parent Advocacy Toolkit for Equity in Use of COVID-19 Funds

NCLD and 13 partner organizations released *recommendations* to guide how the use of funding can prioritize equity and ensure our most vulnerable students receive the greatest support. Based on these recommendations, NCLD also created a 12-page toolkit to help parents advocate for equity as school districts develop reopening plans for the 2020-2021 school year.

COVID-19 Planning Considerations: Guidance for School Re-entry

This guidance from the American Academy of Pediatrics supports education, public health, local leadership, and pediatricians collaborating with schools in creating policies for school re-entry that foster the overall health of children, adolescents, staff, and communities and are based on available evidence.

Special Report | How We Go Back to School

To reopen schools in the fall, K-12 leaders must balance three critical, often competing responsibilities: the health and safety of their people, the role their schools play in the larger community, and the effective teaching of their students. To help district and school leaders navigate these monumental decisions, *Education Week* lays out the big challenges ahead and some solutions in an 8-part series.

Spanish-Language Webinar on the Transition to Kindergarten Amid COVID-19

The transition into kindergarten marks a major milestone in a child's life. The ED-funded *Early Learning Network* presents this 33-minute webinar specifically designed for Spanish speaking families to help families prepare their child for a successful transition into kindergarten during the pandemic.

The National Responsible Fatherhood Clearinghouse

Funded by HHS, this clearinghouse disseminates current research and innovative strategies to encourage and strengthen fathers and families. Many resources are also available in ***Spanish***.

What's Important to Native Youth?

Do you know? Find out in the infographic and brief developed to summarize the findings of a survey of Native youth and what they had to say. It will certainly inform your outreach to and work with youth.

Reinforcing Resilience: How Parent Centers Can Support American Indian and Alaska Native Parents

Considering the traumas that indigenous peoples have survived all these years and the current challenges they face, resilience is an essential quality to have. Here's how Parent Centers can add value and vigor to an essence that has historically been integral in Native life.

Bouncing Back from Setbacks: A Message for American Indian and Alaska Native Youth

This brief is written *directly* to Native youth, as if it were a letter coming from the local Parent Center. It highlights 10 skills known to be builders of resilience in youth. Also available *online in HTML*.

We hope you enjoy the multicultural journey that all of the resources in ***Working with Native Children and Youth*** will take you on!

Will Your Schools Re-Open? What's the Plan, Stan?

Johns Hopkins University has launched a new tracker that analyzes school reopening plans across the country. The tool examines whether or not each state reopening plan addresses a dozen different issues. You can also download state plans directly from the tracker. How timely, eh?

2020 Determination Letters on State Implementation of IDEA

How well are the states and territories implementing IDEA? The 2020 determination letters will tell you. (Can you guess who received the "needs intervention" determination *for the **ninth** year in a row?!*)

Comparison Guide: Video Conferencing Tools for Your Nonprofit

As nonprofits continue to do their work remotely, the need for a solid video conferencing tool has never been greater. TechSoup created this at-a-glance guide to help nonprofits make informed decisions about choosing what's right for their organization.

Tech Soup Courses for Free!

TechSoup has also created a free track of courses to provide information and tools as nonprofits scale up the work they do remotely, including having necessary tech tools, how to boost collaboration, and how to ensure information security.

Camp Kinda

(In English and Spanish) | Here's a free, virtual summer camp experience designed to keep kids engaged, asking questions, and having fun even while they're stuck at home. "Open" each weekday starting June 1 to September 1. On any given day, kids may be exploring the art of graphic novels, unlocking the mysteries of history, or jumping into the world's craziest sports. ***Also available in Spanish***.

How to Support Your Unique, Quirky Child

(In English and Spanish) | When your child behaves differently from others, it's endearing—but is it OK? Read this Great Schools article to find ways to celebrate your child's unique nature. A version in Spanish is also available: ***Cómo apoyar las características únicas de tu hijo***.

Video | The CDC Guidance on Reopening Schools, Explained

CDC recently released *guidance on reopening schools*. Its recommendations, which are voluntary, give parents and teachers their first detailed glimpse of how schools might change their operations to contain COVID-19. How much these recommendations will influence schools' operations depends on the decisions of state and local leaders. Watch Education Week's 4-minute video for an explanation of several key points.

SAVE the DATE | Webinar on Monday, June 8th @ 3 pm EDT
Safeguarding Back to School: Principles to Guide a Healthy Opening to Classrooms During COVID-19

The transition back to school this year will be unlike any in history. How do we safely reopen? In this edWebinar, leaders of the American Federation of Teachers (AFT) and Brooklyn Laboratory Charter Schools will discuss key questions we must all consider as we begin the journey back to school–from the school bus ride to the dismissal bell. ***Register here***. If you'd like to receive an email with a link to the recording afterwards, add your name to the list at: https://forms.gle/V6mgSp8n8fqxjv318

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How Early Experiences in Cognitive Development Improve Working Memory and Processing Speed Skills of Children

Heather Dube, B.A.

Sarah Sarette, Ed.D.

Abstract

Providing the support that children need to build cognitive skills (i.e. working memory and processing speed) has come to the forefront for special educators today. This study investigated how fourth-grade students within an experimental classroom (N=14) and special education students within a small group setting (N=9) improved their working memory and processing speed through a self-designed board game. Board game activities were conducted for three months. Data were collected from 14 heterogeneously grouped students in an experimental classroom (N=22) and student within a small group setting in the special education classroom setting (N=9). The effects of working memory and processing speed interventions were administered through individual pre- and post- standardized measures. Descriptive statistics for post-test student assessments show no statistical significance in working memory and processing speed. The results of this study suggest that a short-term intervention to increase working memory and processing speed is not impactful. Longer interventions may prove to be more successful and should be examined.

Keywords: working memory, processing speed, special education

How Early Experiences in Cognitive Development Improve Working Memory and Processing Speed Skills of Children

Today's classrooms are identified as "diverse" (Volts, Sims, & Nelson, 2010, p.1). According to Volts, Simms, & Nelson (2010), "Nearly half of all students in U.S. public schools (42 percent) are students of color, approximately 20 percent of students speak a language other than English at home, and approximately 14 percent of students have an identified disability. Approximately half of the students who have an identified disability spend 80 percent of their school day in general education classrooms" (p.1). With such diversity and differences, students are expected to reach the same academic goals and standards within our classrooms today (Volts, Sims, & Nelson, 2010, p.1).

Now picture sitting in these diverse classrooms and having nothing make sense (Garner, 2007, p.1). Despite teachers utilizing research-based instructional practices and working hard to meet these diverse challenges, some students may not "get it" while others do (Garner, 2007, p.1). We try to reach the students who "do not get it" through after-school programs, remedial reading and mathematic programs, summer school, tutoring, and through small group/individual instruction in the special education setting (Garner, 2007, p.1). Many still struggle, leaving teachers and parents baffled.

Defining "student success" is one of the biggest challenges in education today. Most focus on quantifiable data such as grade point averages and standardized tests, but those only provide part of the picture, especially at the elementary level. According to Elementary Education- Current Trends (2018), "The rapid changes in cognitive, social, and moral growth of an elementary school student makes the elementary classroom an ideal setting for shaping individual attitudes and behaviors (p.2)." Numerous reforms (i.e. No Child Left Behind) have had lasting changes in elementary schooling, while others have gone away just as quickly as they came in. No matter the circumstance, elementary education is an exciting time for reform and changes, however, we continue to grapple with the necessary skills and knowledge needed for the twenty-first century.

The term "intelligence" has challenged educators and researchers for many years (Lynch & Laverne, 2012, p. 347). Many influential theorists, such as Piaget, Montessori, and Froebel, have provided theoretical underpinnings that suggest children learning best as a "result of environmental factors, "sensitive periods", and developmental stages (Lynch & Laverne, 2012, p. 347). Recent research now highlights that there are many facets of intelligence, to include a "combination of genetic factors, environmental influences, and life experiences that affect learning in unique ways" (Lynch & Laverne, 2012, p. 347).

A Functional Theory of Working Memory

For the purposes of this study, working memory refers to "a complex cognitive system that is responsible for the storage and processing of information in the short term" (Sarette, 2014, p. 23). It is the ability to temporarily store and manipulate information simultaneously and is considered an important predictor for academic performance in such areas as reading and mathematics (Van de Weijer-Bergsma, Kroesbergen, Jolani, & Van Luit, 2015, p. 756). Although there are several models of working memory, the most widely known and the one that has proved most robust in the face of research evidence is that of Baddeley and Hitch (Sarette, 2014, p. 25).

This study focuses on Verbal Working Memory (i.e. the Phonological Loop) from the Baddeley and Hitch model. It is "responsible for the temporary storage of verbal information: items are held within a phonological store of limited duration, and the items are maintained within the store via the process of articulation (inner vocalization)" (Swanson, Jerman & Zheng, 2008, p. 343). According to Montgomery, Magimairaj, & O'Malley (2008), findings from their research suggest that children between the ages of six and twelve years of age use working memory potential to process and comprehend familiar complex sentence structures (p. 349). Kanerva & Kalakoski (2016) found that sixty-eight adolescents working memory span tasks play a role in predicting academic achievement, particularly with less demanding tasks (p. 688). Karpiacke,

Blunt, & Smith (2016) research led to results that practicing retrieval of information can be an effective learning strategy for children with varying levels of reading comprehension and processing speed (p. 7). According to Schneider and Ornstein (2015), "brain growth increases in knowledge, strategy use, processing speed, and changes in the rate of memory trace decay, which in turn helps to contribute to developmental changes in working memory (p. 193).

A Functional Theory of Processing Speed

For the purposes of this study, processing speed is defined as "the time required to complete a cognitive, language, or motor process accurately" (Poll, Miller, Mainela-Arnold, Adams, Misra, & Park, 2013, p. 330). It is widely known that children with learning disabilities display difficulties with processing information, to include visual-spatial processing. Braaten & Willoughby (2014) state that there are three types of Processing Speed: Visual Processing, Verbal Processing (i.e. Listening), and Motor Speed (p. 12-13). One or more areas can often lead to a deficit in areas of functioning, to include academic processing (Braaten & Willoughby, 2014, p.13-14). This research practiced and assessed visual and motor processing speed types.

The rate at which students process information has been well researched. Cepeda, Blackwell, & Munakata (2013) found that processing speed "taps in to" executive control and can impact developmental change and individual differences (p. 269). Kail and Miller (2006) studied whether processing speed in the language domain developed at the same rate as global processing speed. Results suggested that children of the age of nine and fourteen showed nine-year old's to be faster on language tasks than on nonlanguage tasks and that a child's processing speed was moderately stable over a five-year span (p. 130-135). They also suggest that speed of processing increases rapidly in childhood, more slowly in early adolescence, and reaches mature levels in midadolescence (p. 130-135).

Weiler, Bernstein, Bellinger, and Waber (2002) studied children with ADHD-Inattentive Type who have "sluggish cognitive tempo's (p. 448). Results suggest that children with ADHD differed from those without ADHD on visual tasks but not auditory tasks (p. 448). Slow processing rates were not a function of inattention (Weiler, Bernstein, Bellinger, & Waber, 2002, p. 448). Results found by Mayes and Calhoun (2007) support Weiler, Bernstein, Bellinger, & Waber's research in that "children with ADHD and high-functioning autism have learning, attention, graphomotor, and processing speed weaknesses" (p.482). Research conducted by Wassenburg, Hendriksen, Hurks, Feron, Keulers, Vles, & Jolles (2008) found that with regard to processing speed, improvements were noted in grade six with gradual decreases over the grades (p. 204). In summary, results did not find a plateau in performance after grade four (Wassenburg et.al, 2008, p. 204).

The Role of Working Memory and Processing Speed in the Classroom

Research on how to teach so that students will remember what they are taught has been conducted for many years. Besides numerous research conducted on students' cognitive processes while learning from teaching, Winne, Marx, & Simon (1983) suggest that students can be trained to discriminate instructional stimuli and respond with pre-arranged cognitive strategies (p.244). For example, they suggest that students can learn from teaching as presently delivered in classrooms. In addition, a fundamental assumption of cognitive psychology is that learners actively construct mental representations of their environment, rather than passively react (p. 70-80).

Learning from teaching also suggests that there are two varieties of stimuli in instruction to which learners can respond cognitively (Winne, Marx, & Simon, 1983, p. 87-88). One such model, and used within this research, includes teachers/students (and other media for presenting curriculum material) cue learners to use particular cognitive strategies in order to accomplish learning. These are instructional stimuli. To profit from instructional stimuli, learners must accomplish three cognitive tasks (Winne, Marx, & Simon, 1983, p. 87-88):

1. To perceive instructional stimuli, (i.e. notice their occurrence and understand the cognitive operations or strategies intended to facilitate learning).
2. The student must carry out the cognitive activities to create or manipulate information that should be stored in memory as a representation to be learned.
3. They must encode this instruction/prepared content for later retrieval (i.e. on a test), with efficiency.

While teachers continue to develop professional skills in delivery of instruction to improve cognition and 21st century skills within the curriculum, other methods of cognitive interventions have been developed to improve students' ability to improve working memory and processing speed. A variety of studies have demonstrated gains in cognitive ability following cognitive training interventions through other methods. One such study with students in school, explored whether a computer school-based Cogmed Working Memory Training (CWMT) program would "improve both academic

and psychological aspects of school performance" (Hitchcock & Westwell, 2017, p. 147). Primary school children with the mean age of 12 (N= 148) were clustered into three groups, to include active participation, a nonadaptive version of CWMT, or no training. Results from this research identified gains on trained tasks but not on working memory or attention capacity (Hitchcock & Westwell, 2017, p. 147).

Methodology

The study investigated a heterogeneously group of fourth grade students (N=14) and small heterogeneously group special education students (N=9) improve their cognitive ability through direct training and practice in working memory and processing speed through a self-design board game. The study was based on the premise that short intervention skills and supports, monitored at a minimum of twice a week, would lead to increased working memory and processing speed potential.

Research Question: Utilizing a self-design board game for intervention purposes, students will show an increase in:

1. Working memory with respect to their ability to attend, retain needed information, retrieve facts on demand, manipulate information mentally, and recall processes or concepts.
2. Processing speed with respect to their ability to fluently and automatically perform cognitive tasks, especially when under pressure to maintain focus, attention, and concentration.

Setting
The school district where this study was conducted is located in Central New Hampshire. According to the 2010 US Census Bureau, the city's population was 15, 951, with a projected 2017 population of 16,464 (U.S Census, 2010). This study took place in one of the three elementary schools that services students Kindergarten through grade 5. The current enrollment for the school is 302 students (as well as 26 part time pre-school students) with an average teacher to student ratio of 20 to 1. Of the 302 full time students, 47 percent are male and 53 percent female. 92 percent of students are White, 1 percent Black, 5 percent Latino, and 2 percent identify themselves as multi-racial. The number of students who receive free and reduced lunch at this elementary school is 50 percent.

Participants
The fourth-grade classroom teacher within this environment is a female with six years of teaching experience. She holds a Bachelor of Science Degree in Communication Sciences and Disorders. She also holds a Master of Education Degree in Elementary Education and Special Education. Two special education teachers participated in this research project with small group instruction. One special education teacher, with six years of teaching experience, has a Bachelor of Arts in Special Education with General Special Education Certification Kindergarten through grade 8 (K-8). The

second special education teacher, with five years of teaching experience, has a Bachelor of Arts in Studio Arts with General Special Education Certification (K-8). The intent to conduct research in this fourth-grade classroom was due to expressed interest by a special education teacher and school psychologist to collaborate with regular education in providing interventions within a regular classroom setting and special education setting to improve cognitive skills.

Students who participated in this study include a fourth-grade heterogeneously grouped classroom, as well as a handful of other students who receive special education services from various grade levels. Of the participants in the regular education classroom included in the study (N=22), fourteen students (ages 9-11) participated with parent consent. Ten students (53 percent) were male and nine students (47 percent) were female. Three students were identified for special education services within this classroom. Six remaining students were in small groups within the special education setting. Three students were in a small group of instruction from the fourth grade, three students from the third grade, and two students from the first grade. Of the special education students who participated, three students are identified with a Specific Learning Disability, one student with an Other Health Impairment, two students with an Intellectual Disability, one student with Autism, and one with a Developmental Delay. Of these special education students, one student is medically diagnosed with Cerebral Palsy, another with a Hearing Impairment, and a third with Attention Deficit Hyperactivity Disorder (ADHD).

Consent
The Principal and building Special Education Administration of the research site interviewed the researcher(s). Once initial permission was granted, the researchers proceeded to the Superintendent, Assistant Superintendent, and the School Board. Once permission was formally granted, the study was conducted from March to May 2018.

Participation was voluntary. Proceeding School Board approval, parental consent was obtained January-February 2018 through a parent letter. Within the regular classroom setting, three parents did not give consent for their child to participate in the study. Within the special education setting, six parents did not give consent for their child to participate in the study. Therefore, it was explained to those parents that no data would be collected however their child would still learn the strategies and skills taught as part of the game board instruction.

Independent Variable
The researchers began role-modeling game board directions/instructions at the end of February 2018. Within the experimental classroom twice a week, the intervention was to be played in small groups of two to four within the intervention time allotted (e.g. fifteen minutes)
For this study, the researchers developed a board game titled "Zip Zap Zoinks". Multiple game plays were discussed and created, though only one was used for the purpose of this study. The spaces were

labeled "Zip", "Zap", or "Zoinks" with a few spaces labeled "Move Ahead 1 Space" or "Move Back 2 Spaces". The final space before the finish was labeled "Zoinks". The spaces labeled "Zip", "Zap" and "Zoinks" correlated with a skill card for either working memory or processing speed. The participant would begin on the first space, choosing the card that matched the space he/she was on. Once the task was completed accurately, the participant would roll two dice. He/She would move the number of spaces indicated on the dice and on his/her next turn, the participant would choose the card correlating to the new space.

"Zip" cards initiated a visual motor processing speed task. Each card had a series of images, letters, or numbers on the page. These items were placed in neat rows on some cards or scattered randomly with various sizes and fonts. Directions were given to put a slash through a particular item on the card (i.e.: "Put a slash through as many animals as quickly as you can." or "Put a slash through as many numbers as quickly as you can.") Participants were given 30 seconds to complete the task. As the research continued, 30 seconds appeared to be too much time and was modified to 15 seconds.

 "Zap" cards initiated a verbal working memory task. A card may have a series of words or numbers ranging from a set of three to seven. The goal of the task is to repeat back the series of words or numbers in the order they were given. The cards were split into decks depending on how many items were on the card, so that the appropriate level could be chosen for the individual participants.

"Zoinks" cards also initiated verbal working memory tasks, however these cards required multi-step actions. Cards included items such as completing 4 step directions, listening to a short story and answering questions, and recalling a specific word (i.e.: the third word) in a list of six or seven words. In order to win the game, a participant had to complete a "Zoinks" task successfully.

The teacher continued the intervention throughout the remainder of the school weeks to provide generalization of skills. The research concluded the last week of May 2018.

Dependent Variables

Dependent variables were administered by a certified school psychologist and a researcher for this study. She has over 20 years of teaching experience (PreK to college level) and seven years as a school psychologist. The Wechsler Intelligence Scale for Children–Fifth Edition (WISC–V; Wechsler, 2014) is the latest version of one of the most widely used intelligence tests for children ages 6 to 16 (Watkins & Beaujean, 2013, p. 52). The WISC–V reflects current conceptualizations of intellectual measurement articulated by Carroll, Cattell, and Horn (Canivez, Watkins, & Dombrowski, 2015, p. 975-977). Two working memory and one processing speed subtest were utilized from the WISC-V for this research. Reliability and validity for measures administered are sound.

Working Memory Assessments

Letter-Number Sequencing- Letter-Number Sequencing measures attention span, short-term auditory recall, processing speed and sequencing abilities. The task involves listening to and

remembering a string of digits and letters read aloud at a speed of one per second, then recalling the information by repeating the numbers in chronological order, followed by the letters in alphabetical order. Letter- Number Sequencing is an untimed core Working Memory subtest.

Arithmetic- Arithmetic measures numerical accuracy, reasoning and mental arithmetic ability. Arithmetic is a supplemental Working Memory subtest.

Processing Speed Assessments

Cancellation- Cancellation measures visual vigilance/neglect, selective attention, and speed in processing visual information. Cancellation is a timed supplemental Processing Speed subtest.

Data Analysis

Wechsler Intelligence Scale for Children- Fifth Edition (WISC-V) measures (Letter-Number Sequencing, Arithmetic, Cancellation) were converted from a raw score to a scaled score. A scaled score on the WISC-V indicates a mean of 10 and standard deviation of 3 for the subtest. A higher scaled score shows that a participant has a stronger cognitive (e.g. working memory or processing speed) ability. Scores of 8 to 12 are considered in the average range.

<div align="center">

Results

</div>

Grade 4 Regular Education Classroom (N=14)

For this study, it was hypothesized that cognitive interventions would improve working memory and processing speed skills in participants. The mean and standard deviation obtained from the individual participants are based on pre- and post-testing. Table 1 reports the means and standard deviations for the three subtests administered using Excel and Statistic Suites.

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Table 1 Differences in Means and Standard Deviations for Pre and Post-Test Subtests

_____

	Pre-Test (N=14)		Post-Test (N=14)	
Measurement	M	SD	M	SD
Cancellation	9.64	2.95	9.35	2.85

Letter-Number Sequencing	9.21	2.72	10.71	3.40
Arithmetic	9.14	1.74	11.07	2.21

Note. Mean Scores are displayed as scaled scores. Standard Deviation scores are displayed as percentages.

The data in Table 1 show that the means for the Letter-Number Sequencing and Arithmetic post-tests are higher than the pre-test mean.

The Cancellation t-value was 0.24 (13) with a p-value of 0.81. The difference between the pre- and post-test is not significant at the .05 level. The results of the test are in Table 2.

The Letter-Number Sequencing t-value was -1.30 (13) with a p-value of 0.21. The difference between the pre- and post-test is not significant at the .05 level. The results of the test are in Table 2.

The Arithmetic t-value was -3.20 (13) with a p-value of 0.01. The difference between the pre- and post-test is significant at the .05 level. The results of the test are in Table 2.

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Table 2

Independent Small-Sample Hypothesis Tests for Cognitive Testing

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Subtest	t value	df	p value*
Cancellation	0.24	13	.81
Letter-Number Sequencing	-1.30	13	.21
Arithmetic	-3.20	13	.01

Note. Scores are displayed as percentages. *$p < 0.05$, two-tailed.

Special Education Students (N=9)

For this study, it was hypothesized that cognitive interventions would improve working memory and processing speed skills in participants. The mean and standard deviation obtained from the individual participants are based on pre- and post-testing. Table 1 reports the means and standard deviations for the three subtests administered using Excel and Statistic Suites.

_____

Table 1

Differences in Means and Standard Deviations for Pre and Post-Test Subtests

_____

	Pre-Test (N=9)		Post-Test (N=9)	
	_____		_____	
Measurement	M	SD	M	SD
Cancellation	9.90	2.49	9.00	1.73
Letter-Number Sequencing	5.44	2.19	4.33	1.95
Arithmetic	5.11	1.23	6.33	1.74

Note. Mean Scores are displayed as scaled scores. Standard Deviation scores are displayed as percentages.

The data in Table 1 show that the means for the Arithmetic post-tests are higher than the pre-test mean.

The Cancellation t-value was .66 (8) with a p-value of 0.52. The difference between the pre- and post-test is not significant at the .05 level. The results of the test are in Table 2.

The Letter-Number Sequencing t-value was -0.87 (8) with a p-value of 0.40. The difference between the pre- and post-test is not significant at the .05 level. The results of the test are in Table 2.

The Arithmetic t-value was -1.40 (8) with a p-value of 0.18. The difference between the pre- and post-test is not significant at the .05 level. The results of the test are in Table 2.

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Table 2

Independent Small-Sample Hypothesis Tests for Cognitive Testing

_____

Subtest	t value	df	p value*
Cancellation	0.66	8	.52
Letter-Number Sequencing	-0.87	8	.40

Arithmetic	-1.40	8	.10

Note. Scores are displayed as percentages. *p <0.05, two-tailed.

Discussion

While we work on 21st Century skills within the classroom setting, educators must have an understanding of the constructs of attention, memory, and executive function, "all of which is critical to our understanding of human cognition and learning" (Lyon & Krasnegor, 1996, p. 1). Learning is dependent on the ability to pay attention to the environment; retain and retrieve information; and select, deploy, monitor, and control cognitive strategies to learn, remember, and think (Lyon, 1996, p. 3). Without these skills, "We cannot plan, solve problems, or use language" (Lyon, 1996, p.3) On top of this, we expect, in our culture, to do things quickly. Children who may not process information as quickly may have challenges in their thinking, appearing less intelligent in classrooms. For this study, it was hypothesized that a working memory and processing speed intervention would positively affect assessed cognitive skills.

Post-test Performance Working Memory. The number of research articles accessed through regular search engines such as ERIC and Psych Info was low when comparing results. Most research has been conducted with earlier versions of the Wechsler Intelligence Scales for Children Third and Fourth Editions. What is available for cognitive results and the utilization of the WISC-V focuses on specifics of cultural and linguistic needs, such simplicity of administration, few verbal demand, and broad cross-cultural applicability. Results were positive for culturally diverse populations.

When interventions used to improve working memory were game oriented, computerized model interventions were dominant in the search engines. Van de Weijer-Bergsma, Kroesbergen, Jolani, & Van Luit (2015) research saw improvements in working memory through their online computerized and self-reliant assessment of verbal working memory in primary school children, particularly older primary children vs. younger primary children (p. 767). Results from this study are not consistent with earlier research. However, when each task was analyzed separately, participants abilities within the regular education classroom increased in their ability to hold and manipulate information to mathematically problem solve. This is consistent with research conducted by Swanson, Jerman & Zheng (2008) in improvements in primary aged students' problem-solving ability. Their ability to repeat rote information remained consistent. Special Education participants working memory results remained consistent.

Post-test Performance Processing Speed. The number of research articles accessed through regular search engines such as ERIC and Psych Info was low when comparing results of game interventions. Results from this study are consistent with Wassenberg et al. (2008) in that processing speed continues to develop in the elementary school years (p. 206). The current study found that game interventions resulted in consistent pre/post test scores between all participants.

Discussion of Methodological Limitations

This study has multiple limitations. First, the sample size was large enough to produce results and run the proposed analysis, but it was too small to make strong statements on the effectiveness of the interventions. The sample was also from a single grade in a school district in central New Hampshire. Although this grade was chosen specifically because of the developmental level of children ages of nine to eleven, it does not provide a wide scope of ages or developmental stages.

In designing this study, the researchers selected only one classroom due to ease of gaining permission and implementation. Due to the specific demographics of the school and the classroom, the findings can most likely be generalized to children only in the same environment. The researchers also did not consider all grade levels in the special education setting. Due to the ease of implementation, the special education setting results can most likely be generalized to children in the specific grade, setting, and disability(s).

Additionally, this study did not control for students' initial reading levels for the working memory cards. Thus, it is not clear to what extent reading and comprehension skills contributed to the present findings. The same could be said for attention or impulsivity, or emotional issues. The inability to control for these individual differences that were unrelated to the purpose of the current study may have confounded the results in several ways.

When conducting the dependent variables, the same, consistent, quiet, and safe location was not utilized for all participants. This could have resulted in some variation and inconsistencies between pre and post test scores among all participants. When administering cognitive testing such as the WISC-V, guidelines state that subtests can only be administered once a year. This is to reduce the practice effect. The WISC-V was given twice within the research period. It, therefore, has to be questioned to what extent these data can be considered admissible, despite the strong reliability and validity of the WISC-V.

Several factors could have contributed to the inconsistency or lack of cognitive growth in working memory and processing speed scores as assessed. The intervention was determined to be conducted twice a week within the regular and/or special education setting. The study was conducted during the winter season. Besides a school vacation week interfering, snow days were called (minimum of five) during the research period, resulting in no school. If the snow day was called on the intervention day (i.e. game day), a make-up session may not have been conducted. No direct instruction on strategies (e.g. mental images, repetition of numbers/letters) was employed throughout the research, which could indicate no improvement in scores for working memory and processing speed. The classroom teacher and researchers only met once during the intervention period to discuss progress, although some positives and negatives were discussed, and addition of new and more challenging cards were

administered based on this one discussion. Collaboration between regular education, special education, and the researchers were warranted and could have resulted in minimal growth noted on dependent measures.

The intervention (i.e. board game) within the regular classroom took place in small groups scattered throughout the classroom. Such a potentially noisy context might have been problematic for participants to participate fully.

This study does have a strength worth noting. Creating a board game for educators to use as an intervention through a warm-up session before direct instruction, an intervention period held during the Response to Intervention time, or through center time in a classroom, was highly regarded by special educators during a professional development session. Thoughts on improvements for the board game were sought by this group as well as the students in the regular education setting who participated in the study. This created a buy-in atmosphere to improve participation. This process helped the researchers scaffold skills in the game cards to meet developmental needs.

Implications

Elementary classrooms and small group special education settings, as described in this research, shows that interventions in cognition is important to improve learning. Future research that examines children's cognition and learning as potential mediators between the ability to pay attention to the environment; retain and retrieve information; and select, deploy, monitor, and control cognitive strategies are needed to learn, remember, and think. Further research with this age group and data collecting on academic achievement while collecting cognitive data would help inform educators of academic and behavioral gains, particularly if conducted over an academic year and possibly monitored over the course of subsequent years. The intent of the researchers is to continue this research topic and board game in the same school with another heterogeneously grouped grade four classroom in the fall of 2018 to late spring 2019.

The findings speak to the importance of teacher preparation in ways that promote working memory and processing skills while teaching. Most teacher preparation programs and professional development for certified educators offer classroom techniques that are not always tailored to children's cognitive needs or development. The present findings suggest that while teachers deliver daily instruction, they can infuse strategies and skills at an early age to at least maintain current abilities. Repetition and practice help students to make sense, meaning, and generalization of skills across the school environment(s). Re-teaching, review, and modeling of strategies is needed. This will require a commitment from teachers, students, and administrators who determine the amount of instructional time for subject areas.

Conclusion

All students need time to learn. Learning consists of reinforcing the connections in the brain called neurons. Educators can "supercharge" material to be learned by relating it to students' senses and experiences. These connections then in turn intensify their memory. The ability to complete tasks in a timely manner is highly related to a child's success in school. Students needs to learn strategies to not only improve academics, but to grow and develop socially, emotionally, and behaviorally. They need to understand how and when to implement cognitive strategies within the context of the school environment so that they experience positive development during a crucial time in their childhood. Increasing cognitive skills in children's development has shown to enhance adaptation, adjustment, and achievement throughout the life span (Lyon & Krasnegor, 1996, p. 392). The results of this study translate to effectively continuing to develop and maintain cognitive skills through the possibility of long-term intervention skills in working memory and processing speed skills among elementary students, improving the development of learning as early as possible.

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To top

Critically Thinking about Disability: Portrait of an Introductory Special Education Course

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Abstract

Perspectives on the meaning and nature of disability are multifaceted. This study focused on the development of undergraduate students' critical thinking skills. The aim was to impact their ability to articulate a nuanced and personally relevant conceptualization of disability and apply this knowledge within the educational field. In this practitioner inquiry, pre– and post– assessments of student writings from an introductory course in special education were taken over three academic years. Evidence indicated enhanced critical thinking skills through pedagogical course activities that are shared in this paper. Critical engagement and reflection are essential skills not only for the foundational years of undergraduate study, but also for teacher training, and practices as future teachers. Through careful examinations of teaching and learning in higher education classrooms, the instructor self-reflects on the power of instruction and its potential to impact work with students with special learning needs.

Keywords: critical thinking, disability and identity, introductory special education coursework

Critically Thinking about Disability: Portrait of an Introductory Special Education Course

A clear definition of disability is useful to provide a boundary for understanding policy, scope of legislation, and eligibility for services. Yet disability is a complex concept, and there are historical, social, legal, and philosophical influences on its interpretation. One example of this complexity from the field of education is the shift away from individually-targeted practices of *special education* to focus on *inclusive education* (Oyler, 2011). Since the 1980s, emphasis has been placed on the

multifaceted systems and processes that ensure every student thrives across a diverse array of learning environments.

Undergraduate, introductory, special education courses do not consistently match these contemporary shifts in complexity. Typically designed as survey courses, objectives in introductory coursework focus on defining various disability labels, and reviewing them with attention to etiology, programming, and curriculum modifications aligned with state and federal legislation. This style of instruction has been critiqued for perpetuating deficit assumptions of disability by primarily concentrating on assessments and eligibility for services (Freedman, Applebaum, Woodfield, & Ashby, 2019). Students taking introductory special education courses are asked to form judgments about the meaning of disability and its educational implications before they have a comprehensive appreciation of what it truly means. Flexibility is needed to expand beyond this narrow way of thinking (Sharp & Goode, 2019). "Many pre-service teachers in special education courses are neither critical of underlying messages with which [disability] labels are inscribed, nor are they conscious of the nuanced ways in which those labels function to create regimes of fitness among students in schools" (Mutua & Smith, 2006, p. 125). The complexity, elasticity, and diversity of disability will likely not have been fully considered by students early on in an undergraduate's program of study and requires time for critical reflection before students move on to teacher certification programs.

Fostering students' complex conceptualization of disability is challenging to achieve, especially for those students who are unsure how to move beyond a deficit-based understanding of disability (Ashby, 2012). Ferri (2006) noted that curricular restrictions are often imposed by accreditation for teacher certification programs. Relatedly, researchers noted that the Teacher Performance Assessment (edTPA) used as part of teacher certification in some States requires teacher candidates to use deficit-focused discourse and language to demonstrate proficiency within the assessment (Bacon & Blachman, 2017). Additionally, few education textbooks critically examine perspectives of disability. Models for how to effectively integrate complex considerations of disability within entrenched curriculums are scarce, and oftentimes there are few allied colleagues to ask for support. Despite the challenges, a need exists to develop "critical special education" (Ware, 2005, p. 104). Development of undergraduates' critical thinking skills may be relevant in this pursuit.

Critical thinking

"Critical thinking is the art of analyzing and evaluating thinking with a view to improvement…It is not problem-solving, but asking good questions (Paul & Elder, 2006b, p. 76). Considered "good thinking and thinking well" (Pithers & Soden, 2000, p. 237), a well-cultivated capacity to critically think often includes: the ability to raise and articulate vital questions, gather and assess relevant information, think open-mindedly about assumptions, implications, and alternatives, and communicate solutions to complex problems (Paul & Elder, 2006b). Critical thinking is considered an important life skill and general societal asset by policymakers, employers, and pertinent to this paper, university educators. Over 99% of university faculty state that critical thinking is an essential

aspect of their teaching and that universities are responsible to encourage the critical thinking skills of their students (Huber & Kuncel, 2016).

There is a growing argument that teacher education coursework should prepare pre-service teachers, or teacher candidates, to understand, critique, and adapt to changes that occur over the course of their careers (Mariano & Figliano, 2019). All of these attributes require critical thinking skills. When learned during teacher training, critical thinking skills have been found to transfer into critically interpreted instruction and development of skills within the classroom (Yang, 2012). Little is known, however, about the impacts of critical thinking on teacher training programs, and their potential application to the field of special and/or inclusive education. Past studies have focused on critical thinking as an essential part of the rigorous mentorship of teacher candidates (Zascavage et al., 2007), though this study was conducted outside of the US. One tangentially related study conducted within the US found that self-evaluation of instructional design enabled the development of critical thinking skills and that this process improved the quality of preservice teachers' instruction (Etscheidt et al., 2012).

Students can have well-developed critical thinking skills, yet still be unable to directly apply those skills to think about wider issues of inequity and injustice from a systemic perspective (Sensoy & DiAngelo, 2017). A long history exists of calling teachers' attention to crossing cultural boundaries (e.g., Pugach & Seidl, 1998). A teacher's critical awareness of diverse cultural identities can determine the success of their students in school. Critical thinking skills may therefore be applied to establish the intersections between disability, identity, and diversity. Pre-service teachers should develop critical thinking skills to advance their ability to understand varying views of normalcy, disability, and to recognize and eliminate conceptions that result in inequalities for some and privilege for others (Danforth & Naraian, 2015).

The study depicted in this paper investigates the development of critical thinking skills of pre-service special education teachers to promote nuanced and personally relevant conceptualization of disability. Grappling with the challenges and contradictions of disability, labeling, and identity early on in students' teacher training may lay important foundations for self-reflection. Students can use critical thinking as a foundational skill to increase their engagement in other complex issues. Introductory coursework on special education may be one of the few opportunities to consider these complex issues related to disability before teacher training coursework begins on specific content and pedagogical knowledge. Important insights are offered into the cultivation of critical thinking for undergraduate students who plan to work with school students with or without disabilities.

Portrait of a Course

The practitioner inquiry presented in this paper focused on a deep investigation of one course taught over three academic years. The introductory special education course was required for all students who declared a major or minor in education. The course was considered a gateway towards

application into all education professional programs. Only courses taught by the author of this paper were the focus of the study. The rationale for this decision was to closely examine the introductory course, and for the instructor to use the method of practitioner inquiry to reflect and improve on pedagogical critical thinking activities that will be presented as portraits in this section of the paper.

The course instructor and author was awarded a critical thinking fellowship, which facilitated skills in critical thinking content and the ability to embed the development of such skills within the introductory course. The instructor operated from an open-ended definition of disability informed from multiple perspectives (i.e., medical, social, cultural, capability). It is worth noting that tensions exist within the field of special education, which has traditionally operated from a more clinical perspective that remediates at the individual-level. With a move towards more inclusive education, a social perspective has been applied to focus attention on disability rights, activism, and social change in education. The instructor was committed to foster critical connections about the role that teachers can play to address these tensions, with applications to important educational aspects such as misidentification of students with disabilities and overrepresentation of certain cultural backgrounds within special education.

A close examination of the course and pedagogical activities that made an impact on fostering students' critical thinking skills are now presented. This section is used to provide reflections and descriptions of the texts, classroom activities, and assignments that enabled the development of students' critical thinking. Of note, one of the simplest, yet most effective way to promote critical thinking skills was to make it an overt class priority. This was achieved in a few ways. On the first day of class, students were introduced to both course objectives as well as the preliminary understandings of critical thinking. An addendum to the course syllabus was distributed that described the purpose of critical thinking and allocated regularly scheduled opportunities for activities and critical reflection. These adjustments provided a clear delineation between time for content delivery, and then critical engagement with the delivered content. After learning about teaching strategies for students with hearing impairments, for example, the class reexamined and extended their knowledge through the consideration of underlying assumptions and values in Deaf-culture. Namely, the devaluation of sign language as a fully effective means of communication due to an overemphasis on the spoken word.

After time and space were allocated within the course, another foundational priority was to co-create the class's working definition of critical thinking. A range of different definitions were presented and this enabled students to see the variety, elasticity, and applicability to a wider range of academic fields. The definition settled on was "reasonable, reflective thinking focused on deciding what to believe or do" (Paul & Elder, 2006b, p. 17). This definition is directly related to the special education field as it represented the active role of educators within collaborative teams (e.g., Individualized Education Program planning, Planning and Placement Team evaluations). This definition also

highlighted the critical connections between what a teacher believes, including what has informed that way of thinking, and their actions taken in the field.

A critical thinking rubric was introduced to the class (see Association of American Colleges and Universities, 1996, *Critical Thinking VALUE Rubric*). This rubric was used as the assessment tool for students and the instructor to track critical thinking skill development. As part of the course, each discrete rubric criterion was individually taught and rehearsed. The critical thinking rubric formed the spine of critical thinking activities throughout the class. Aligned with the rubric criteria, students developed abilities to: (a) apply theory to practice (conceptual model activity); (b) assess and analyze others' perspectives (writing assessment activity); (c) develop and evaluate personal understandings (debate and children book creation). Each pedagogical activity is described in more detail.

In the conceptual model activity, five approaches to define disability were introduced: medical, social, cultural, normative, and economic. Students were grouped into one of the five models with support materials provided to deepen their understanding of their assigned topic. Collaboratively, each group used their assigned model of disability as a lens to define disability. Within their particular lens, they were asked to assign a referent label and include an example linked to media or popular culture. For example, students related the normative model of disability to a bell curve. They defined disability within this label as individuals falling within or outside a normal range with varying severity. The term *exceptionality*, commonly used as a replacement term for disability, was noted for continuing to differentiate others as existing outside of the norm. Examples spoke to contemporary popular television shows that inflate the exceptionality of disability when central characters have, for example, beyond average scientific, artistic, or medical abilities.

In the writing assessment activity, students developed their analytic skills to distinguish, examine, contract, and deduce (Anderson & Krathwohl, 2001). As students increased their familiarity with the critical thinking rubric, they assessed writing samples provided by the instructor. The writing samples were directly related to the course content topic at the time. For example, on the topic of autism, students assessed an opinion piece written by the president of the Autism Science Foundation on non-verbal and Alternative and Augmentative Communication. Later in the semester, the same rubric was used to conduct peer and self-assessments of different pieces of writing. Importantly, students first had the opportunity to develop their rubric assessment skills using anonymous and less-personal pieces of writing, before they assessed others in the class or themselves.

Two activities were noteworthy for their development of higher-order critical thinking abilities to evaluate, judge, decide, debate, create, invent, compose, design, and formulate. The debate activity is more accurately described as a constructive academic controversy (Johnson et al., 2014). A topic was selected, for example, over-diagnosis of Attention Deficit Hyperactivity Disorder (ADHD). Teams of four were established, with two teammates for (or agreeing, ADHD is over-diagnosed) and the other two teammates against (or disagreeing, ADHD is not over-diagnosed). Teams were given time to

establish their position. Then, each team presented their position without interruption to the opposing half of their group. The key distinction of a constructive academic controversy is the end goal, which is to establish a common ground and look for similarities within arguments that could form the basis for collaboration and next steps. The activity enabled students to creatively apply critical thinking skills towards collaborative problem-solving.

Finally, the children's storybook creation activity facilitated students' personalization of their content knowledge. Students used their reading and class notes on a topic, for example, Emotional Behavioral Disabilities (EBD). They selected one negative stereotype and one positive attribute commonly associated with this disability label then created a fictional character and plot to illustrate. The plot demonstrated how positive attributes of EBD could supersede negative stereotypes. In writing for the audience of children, undergraduate students could see this and other special education topics in new ways. For example, one student wrote,

> Between 30 - 50% of youth in correctional facilities are individuals with disabilities. Of that group, 42% have EBD (IDEA, 2004, cited in the textbook, p. 233). Some might assume that people in prison are tough and mean. However, internalizing behaviors associated with EBD (for example, depression, being teased, fears) demonstrate personal sensitivity, insecurity, and vulnerability. Internalizing behaviors associated with EBD challenge the idea that all students with EBD demonstrate criminal behaviors that are tough and mean.

Pages from two students' children's books are provided (with permission) as exemplars (see Figure). Each example illustrates the student's ability to acknowledge their assumptions and consider alternative or expanded ways of thinking. Examination of the effectiveness of these activities and the impacts they had on students is described in the Findings section. Before this, data collection methods of this practitioner inquiry are first described.

Method

The research question guiding this study assessed the impacts and effectiveness of developing the critical thinking skills of pre-service special education teachers to demonstrate nuanced and personally relevant conceptualizations of disability. Systematic evaluation occurred through the stages of practitioner inquiry (Hulme, Lewin, & Lowden, 2011). Data were gathered at the start and end of each of three academic semesters in two ways. First, pre- and post- testing through a written prompt enabled students and the instructor to compare progress over time. Second, student course evaluations served as evidence of students' perspectives on the effectiveness of critical thinking within the course.

Setting and participants

The private University in Northeastern, US where this study occurred has approximately 5000 undergraduate students. The study received exempt institutional review permission. Student data

was anonymized then taken from three semesters of coursework across three academic years, with between 20 to 25 students per course section for a total of 63 students included in the study. To ensure from any potential risks of confidentiality, demographic data (e.g., age, gender, race/ethnicity, possible disability diagnosis) was not collected. Anecdotally, many of the students originated from States in the Northeast and were predominantly female (e.g., two male students in a class of 20 was common). Most students in the introductory special education course subsequently applied to professional education programs (i.e., Special Education, Elementary, Early Childhood, Music, and/or Secondary Education). However, students were not tracked after course completion, so data was not directly collected on enrollments.

Data collection

Critical thinking was intended to enable students to examine varying theoretical views on a range of exceptionalities, and to interrelate all aspects of the course (e.g., readings, lectures, online/in-class discussions, clinical fieldwork experiences) to inform their perspectives. These objectives were itemized in the course syllabus. They were assessed through two written assignments (pre- and post-testing), at the start and end of the semester, which followed the same writing prompt, "*When I hear the term disability I think…*"

A critical thinking rubric (described in the portraits of a course section) was the structured assessment tool used by the instructor and students to assess these pieces of writing. The five rubric criteria included: explanation of issues, evidence, context / assumptions, student perspective / hypothesis, and conclusions (Association of American Colleges and Universities, 1996). Rating criteria were listed for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. There were four numeric assessment rankings possible - Capstone (4), Milestone (3 & 2), and Benchmark (1). The critical thinking rubric was created by national teams of faculty, and its transdisciplinary usability and transferability across assignments was validated (Finley, 2011).

As part of the final exam for the introductory special education course, students self-assessed both of their critical thinking paper assignments from the start and end of the semester. Before seeing student self-assessments, the instructor also assessed student's writings. Student writings were submitted via learning management software. A feature was enabled that made all student identities anonymous during the process of ratings. The instructor's critical thinking assessment was not shared with the student. Simultaneous with rubric rankings, excerpt narratives were collected by the instructor to illustrate student writing at each of the four rubric assessment ranking levels.

Student input was also collected via course evaluations. Quantitative feedback was solicited by asking students to rate their response to the prompt, "critical thinking was an important part of the course." Responders over the three years rated 4.3 out of 5 in agreement. Qualitative feedback was requested via the open-ended prompt, "What are your thoughts or suggestions about the critical thinking parts of this class?"

Data Analysis

Content analysis (Neuendorf, 2016) guided analytic procedures. Parameters were set to analyze mixed quantitative and qualitative data. The first unit of analysis was the scores that were quantified across performance levels on the critical thinking rubric. As indicated in the Table, scores were aggregated into percentages for the class and were compared across the instructor and students. Trends were interpreted by the instructor to determine patterns where students exceeded or were challenged within specific rubric categories.

Another unit of analysis was the students' written assignments. Exemplar quotations that illustrated critical thinking at each rubric performance ranking level were used to set each category-level. Further analysis was conducted on the course evaluations. Student narrative evaluation feedback was coded to group similarly themed feedback. Together, the patterns and development of undergraduate students' critical thinking skills were understood.

Findings

The most apparent result from the quantitative assessment ratings was a noticeable improvement in whole class performance in critical thinking from first to second writing assignments (see Table). Critical engagement in pedagogical activities, such as the ones described in the course portrait, enabled students to deepen their understanding and articulate practical applications. Qualitative data both confirmed and provided exemplar illustrations of those developments.

In initial student writings (paper #1), definitions of disability were most often at a benchmark or emerging level. Students oftentimes reflected a deficit focus, such as, "When I think about the word disability I think about anything that hinders a person's day or life. Disabilities can be major or minor, but they can also be a temporary or permanent issue" (student reflection assignment #1). Writings also provided a simplistic or narrowly focused argument, for example, "When I think of disability, I think of those students who are just the same as everyone else" (student reflection assignment #1).

Student papers at an intermediate performance level commonly offered an aspirational tone to their writing, but their ideas for implementation were not fully formed. For example,

> When I hear the term disability I think about …how society has seemingly made it impossible … to lead an uninterrupted or unjudged life. Disabilities are a reality and as a society, we need to become more tolerant and accepting, something I hope to emphasize in my classroom as a special education teacher (student reflection assignment #2).

Some student writing remained at this emergent-level while other students demonstrated more sophisticated and critically examined ideas in their writing.

Assignments written at the mastery or capstone level were most commonly found in the second assignment (paper #2). After completing the course, students' ability to critically examine a nuanced understanding of disability was evident even in initial assignment titles. Paper titles included, for example, "Different Abilities" and "(Dis)Abilities." Other narrative examples demonstrated a diverse understanding of disability. Student's writings featured flexibility, a breaking of a rigid binary between ability and disability. Student narratives at the mastery and capstone level also offered implementation suggestions and actions for change. For instance,

> If we continuously differentiate between disabled and non-disabled we cheat people out of the opportunity of leading a life they want to live. … By integrating classrooms and offering inclusive education to all students we remove stigmas and make the students in each classroom feel a part of a community (student reflection assignment #2).

Returning to the first paper assignment, a closer examination of rubric rating criteria revealed that students mostly struggled with providing sufficient evidence to support their examination of disability and related concepts. When evidence was provided, it was typically without comprehensive analysis, evaluation, and interpretation. In the second paper assignment, however, no specific rubric criterion stood out as substantially different or challenging for the class as a whole.

One unexpected finding was the alignment between student and instructor rubric assessments in the second paper assignment that was not present in the first. This occurred within all three waves of data collection. One suggestion for this occurrence might be the shared understanding of critical thinking that developed between the instructor and students over the semester. Thinking at this critical level may be a collaborative and deeply interpersonal process. A further unexpected finding is demonstrated through the following student evaluation feedback, "I loved critical thinking! It helped me learn the material better than just reading the textbook and writing down notes." As this student noted, it might be that critical thinking not assists in the development of complex thinking, but also the ability to grasp course concepts.

Discussion

Critical thinking is considered a vital foundational skill for undergraduate learning (Huber & Kuncel, 2016). Ability to critically think and analyze remains essential to students' shifts roles into teacher training (Yang, 2012), and more specifically, special education teacher training (Zascavage et al., 2007). This study found that teaching critical thinking skills in introductory special education coursework can expand undergraduate students' understanding of disability and application to special education-related practice. The pedagogical portraits of critical thinking were effective in facilitating students' considerations of the complexity, elasticity, and diversity of disability (Brune & Wilson, 2013).

Students' ability to think critically enables them to break with rigid binaries often associated with disability, such as normal and abnormal, medical and social models, even simply, ability and disability. Students' narrative papers illustrated expanded, more fluid thinking (Danforth & Naraian, 2015). That is 'problems' and 'impairments' can stem as much, if not more so, from beliefs, biases, and people's ability to be open-minded and accepting.

One unanticipated finding was the similarity in critical thinking rubric assessment data between instructor and students in the written assignment at the end of the course that was not apparent at the start of the course. Critically engaging in thinking and conversations surrounding disability may have enabled the thinking of the students and instructor to align. Partnerships in learning appear to have been formed, though future research may examine this phenomenon more closely.

Another unanticipated finding that was not within the scope of this study was students' ability to retain course knowledge due to enhanced critical thinking skills. Future research may examine changes in course test scores, for example, to note any shifts as critical thinking skills develop. It is also pertinent to pay more attention to undergraduate students' backgrounds. It may be that some students have more experience than others with both disability and critical thinking. Additionally, the extent to which students apply these critical thinking skills in their future coursework and professional practice could also be examined. Suggested future applications might include critical engagement in undergraduate and teacher education coursework, and most importantly, when working in schools. Collaborative work and professional associations may also be positively impacted.

Limitations

Some limitations of this study should be noted. First, the sample of participating students came from one university in Northeastern United States. Student demographic data was not collected. While no information is known about students' race and socioeconomic status, for instance, students in these introductory special education courses were predominantly female, nearly 95% of the class or more. However, this was representative of education courses at the university.

Data were collected across three academic years, however, not every section of the introductory special education course was surveyed. Therefore, no other courses were used to form a basis for comparison. Only courses taught by the author and instructor were invited to take part in the study. The rationale for this decision was to closely examine the introductory course, and for the instructor to use the method of practitioner inquiry to reflect and improve on pedagogical critical thinking activities such as the ones presented as portraits in this paper.

Conclusion

This study investigated the critical thinking development of pre-service special education teachers early in their undergraduate education. Portraits of pedagogical activities were shared to illustrate

ways that students grappled with disability, labeling, and identity, and in the process enabled them to refine their perspectives. A nuanced understanding of disability was applied to collaborative discussions with classmates, course content, and field experiences.

Student evaluations of critical thinking course components stated, "I thought that [critical thinking] was helpful for application and adding to my own thoughts. It also taught me the differences in the way everyone thinks. It helped to see the other points of view." In teacher education programs a critically examined understanding of disability can serve as an important foundation to build program-specific knowledge. Critical thinking in initial special education coursework "... provides discursive tools for making sense of disability and engaging in the critical conversations necessary to re-envision education for all" (Ashby, 2012, p. 98).

Developing students' appreciation of the complexity of disability enables students to broaden their view as future teachers. Disability seen through a critical lens enables diversity, flexibility, and relationality to all become part of one's complex identity. These complex identities impact the way we teach, learn, and communicate. In these introductory special education courses, undergraduate students were able to seed foundational groundwork to examine, embrace, and possibly even lead, inclusive changes in schools and communities through their critical engagement with topics related to disability.

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Although Marcus' classmates were mean to him, he was still positive and was able to make a friend that accepted him for who he was. They became friends forever!

I like you for who you are
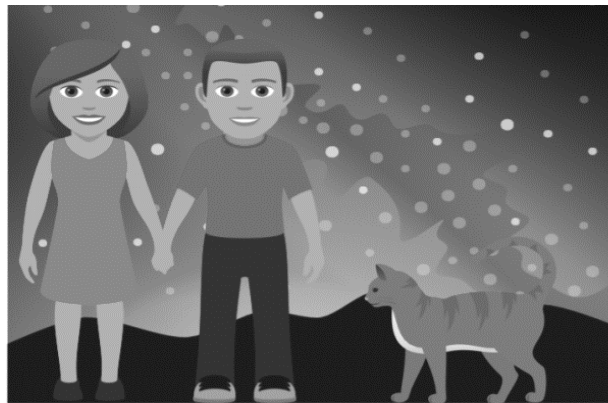
The family learned that sometime, it is frightening to some people at first to meet someone new, because everyone is different and it is important to always be accepting. Just because the kitten was sad, doesn't mean it couldn't be a great pet!

Figure. Two exemplar pages of children's books created by students.

Table.
Critical Thinking Assessment Data (Fall semesters 2019, 2018, 2017)

	Capstone (4)	Milestones (3 & 2)		Benchmark (1)
Wave 3 – 21 students				
Paper #1				
Student	21%	79%		0%
		62%	17%	
Instructor	0%	55.5%		44.5%
		21%	34.5%	
Paper #2				
Student	71%	29%		0%
		29%	0%	
Instructor	55%	45%		0%
		29%	16%	
Wave 2 – 20 students				
	Capstone (4)	Milestones (3 & 2)		Benchmark (1)
		3	2	
Paper #1				
Student	30%	67%		3%
		44%	23%	
Instructor	2%	60%		38%
		30%	30%	
Paper #2				
Student	50%	50%		
		44%	6%	0
Instructor	40%	61%		4%
		40%	21%	
Wave 1 – 22 students				
	Capstone (4)	Milestones (3 & 2)		Benchmark (1)
		3	2	
Paper #1				
Student	52%	38%		10%
		26%	12%	
Instructor	26%	59%		15%
		30%	29%	
Paper #2				
Student	73%	26%		
		13%	13%	1%
Instructor	73%	24%		3%
		6%	18%	

Book Review: Hacking Leadership: 10 Ways Great Leaders Inspire Learning That Teachers, Students, and Parents Love

By Carol Krigger

The authors of *Hacking Leadership*, Joe Sanfelippo and Tony Sinanis, were school administrators who did not limit themselves due to some of the arbitrary rules and restraints of the school districts when addressing the needs of their students and teachers. These administrators were intent on finding ways to inspire all the people they had the opportunity to lead, such as the teachers, students, and community members. This book highlights some of the practices that have become normalized in school settings across the country and provided strategies to assist in making positive changes. It mentioned the impact that a school's culture and climate may have on its occupants and overall community.

The purpose of the book was to discuss the importance of not being afraid of change as an administrator and being resistant to conforming to the school's existing climate, especially in leadership. The focus was to establish a positive school culture. The seemingly new practices mentioned in the book were referred to as "hacks". These practices or hacks were innovating, encouraging, and collaborative and support the development of a cohesive and positive school culture.

Hacking Leadership incorporated the availability of modern technology and how it can be utilized as a means of educating, both students and adults alike. "We must begin to make changes to school initiatives, testing, and allow teachers and staff the opportunity to be creative (Sanfelippo & Sinanis, 2016)." Leaders motivate their teams and try to develop their own, new, school climate and culture that extends to stakeholders and is centered on engagement, effective communication and collaboration, building relationships, positivity, creativity, and so on.

School leaders must be ready to inspire all those around them and develop an environment where, as leaders, they are trusted. They must be ready to empower teachers, staff members, students, parents, and community stakeholders. Good and effective leaders must welcome change and move away from the traditional methods of doing things. Sanfelippo & Sinanis (2016) stated, "Hacking school leadership considers what schools could be tomorrow and making that a reality today."

Main Themes

Hacking Leadership established a clear theme that relates to how imperative it is to create a positive school culture as a school leader through being present, relationships, collaborations, and growth mindset. This can start when administrators no longer see themselves as simply the boss. Sanfelippo & Sinanis (2016) throughout the book reiterated the idea that "administrators who focus primarily

on being the boss are not present enough to be truly effective." This means that the focus should be on creating teams. All are involved in the development of a successful school.

Schools thrive when they have leaders that are ready and willing to establish meaningful work relationships and interactions and establish community. These relationships can be developed when there is open communication and trust. Leaders should ask questions that will help them to gain insight of the current climate and culture of the school. How do the students feel? What do the teachers think? Leaders ought to listen carefully to the ideas and concerns of the teachers, children, supervisors, and so on. Leaders must attempt to act in response to the questions and concerns that are mentioned the most, in a timely manner, which will assist in the formation of trust. It would be beneficial for teachers, students, and community stakeholders to be included in the decision-making process. A positive school culture constructed on communication and trust is the core of having a successful school and being an effective leader.

Another idea mentioned in *Hacking Leadership* that related to the development of a positive school culture is ensuring that principals are aware of the importance of being seen in and around the school. The principal cannot be separate from the school or community. Sanfelippo & Sinanis (2016) mentioned that principals were once described as managers and are not seen as being a part of the school. Managers typically oversee other employees are not always fully involved with the ins and outs of an establishment. Managers are often detached. However, effective leaders should be present in classrooms, engage with teachers and students, and establish themselves as being part of the community.

Additionally, the use of technology had been mentioned consistently in this book. The implementation of social media platforms such as Twitter and Facebook could be used as a method of teaching the students, families, and community on the various updates and changes in education and in the school. This can also help in the development of a positive school culture. Applying these technologies as practice in schools may help in keeping the families, community members, and students' knowledgeable regarding the functionality of the school while providing a platform for all parties associated with the school an opportunity to voice their opinions, concerns, and to ask questions. Technology and social media can be great tools that can be used to share a school's culture and educate the community on its mission or goal (Sanfelippe & Sinanis, 2016).

Administrators and other school leaders should focus on the long-term outcomes that investing in positive school culture will bring for everyone involved. A clear goal and vision must be established. Everyone in the school building, as well as community stakeholders, should be thoroughly educated as to what the vision is and how it will be carried out. This way, there is clear communication and there would be less misconceptions about what should be done and what is expected in the school and classroom.

In the hope of creating a positive school culture, schools need to gear practices, activities, and strategies towards the needs of the children. Sanfelippe & Sinanis (2016) wrote that the goal for every community should be to become student-centered learning community that functions as a safe haven for children. When leaders aim to shift the focus from the adults and towards the students, students may start to develop trust in their teachers and administrators. It is important that students feel that they are valued and have a voice. When this happens, students may be more inclined to and have more of a desire to learn. "Positive culture impacts test scores. When students and teachers feel genuine joy, the results will be transformational (Sanfelippe & Sinanis, 2016)."

The theme of positive school culture seems to require the willingness to change. This change starts from school leader and the time they spend developing trust and building meaningful relationships with those they work with. Leaders must show appreciation to every component of their school, especially the teachers who often feel less valued. In summary, positive school culture is dependent on deliberate practices that incorporates students, teachers, families, and community members along with the strategic use of resources, such as technology, to create lasting relationships in the school and community.

Key Quotes

"In excellent schools, all participants feel valued and contribute."- Sanfelippe & Sinanis -This quote sets the tone for the overall theme of this book. In order to have a successful school establishment, everyone in and around the school should be a part of the inner workings of it. Their opinions and ideas must be deemed significant and no one to feel inferior. Sanfelippe & Sinanis mention several strategies "hacks" in this book that they have found to work in addressing escaping from the norm and creating a healthy and edifying environment for all educators, families, and students.

"Today's leaders must move away from the title of the administrator and become lead learners who are guided by doing what is in the best interest of the children."- Sanfelippe & Sinanis – The ability to continually learn is the duty of an educator. Sanfelippe & Sinanis shared the idea that principals need to set the example for their teachers and students as to the significance of having a growth mindset. Moreover, the moral purpose of all educators is to do what is best for the students. The needs of the students should always take precedence.

"Breathe life into your school by keeping the culture and by seeking improvement."- Sanfelippe & Sinanis- This quote addressed the idea of building on the current school culture. The authors discussed getting much needed feedback on the existing culture from both educators and students. It is important to keep abreast as to what has been said, felt, and perceived. Upon taking note of these perceptions, leaders must find ways to improve what is not working in their school culture. School leaders cannot do this alone and should work side-by-side with students and educators.

"Create culture that incorporates all members of the community including students, families, and educators. Everyone in the community should have access to the learning occurring in school and that begins by knocking down walls and stepping over boundaries to transform from fortress to partnership."- Sanfelippe & Sinanis- This quote supports the authors' stance on not being resistant to change. Sanfelippe & Sinanis wrote about stepping away from the traditional way of reaching out to students and families such as newsletters and emails. A school was mentioned that used technology to get information out since students are far more likely to read a post on Twitter or Facebook rather than a newsletter. They used social media to highlight the events and activities about what is happening in the school and will showcase its school culture. The use of these technologies will reach far more people in and around the school community which will lead to more overall involvement in the school. The book goes into detail with in-depth ideas related to how the various social media platforms can be used to further improve a school.

"Any leader that wants to nurture and spread a positive school culture must build relationships that are rooted in trust and respect. These relationships are the impetus for effective communication which is critical to school culture." - Sanfelippe & Sinanis – Trust and respect appeared to be common themes when discussing the establishment of positive school culture. They are deeply rooted in the building healthy relationships and communication.

Strengths and Weaknesses

Hacking Leadership addressed the significance of creating a positive school culture within the school and community. Sanfelippe and Sinanis' focused on the role of the leader being the individual who has the dynamic role of directing, through strategic practices, the expectations of the desired goal in the development of school culture. These authors stressed the importance of administrators setting the tone for what happens in the school. Administrators have the role of ensuring that everyone in the school is feeling valued and that they matter, as well as, making sure that everyone believes in the goal and contributes positively to the culture of the school.

The authors truly hone in on the elements needed in creating a school culture. The idea that school culture is built upon the role of leadership and their response to teachers, students, and the community is consistently tackled in this book. When strategies or hacks are mentioned, the leader's role in the implementation of the strategy is talked about, along with the roles of other individuals in the school and community.

Sanfelippe & Sinanis' speak on how imperative teacher voices are in the school. Teachers tend to have information and ideas that can be vital to the building up of the school. Principals should try to encourage creative thinking and provide professional development opportunities to fully tap into the full potential of each teacher. The book mentions that principals should encourage team building among teachers and staff and ask for and listen to their feedback.

Community and family outreach and student and family feedback through the utilization of technology and various social media platforms are discussed heavily in the book. While there were some innovating ideas shared as to how social media platforms can be used to provide information to students and their families, there was little time spent addressing how some family cultures may feel about this concept. Not all students can freely access social media because of the stigmas that their culture may associate with it. This may not work for the diverse families in each school or community. One should consider that some families may not have access to social media or need to be educated on how to use it, others may not be able to afford internet, and there may even be a language barrier present. Such families may rely on written paper-based or verbal communication with translation when necessary. There are a variety of formats in which administrators and teachers can use to reach out to families and the community in the hope of establishing a positive culture; however the *Hacking Leadership*, seemed to focus, in detail, on the social media aspect of involving students and families which may not appeal to or be a possibility for some families.

Comparison to Fullan's, *Leading in a Culture of Change*

Both Michael Fullan's *Leading in a Culture of Change* and Joe Sanfelippe and Tony Sinanis' *Hacking Leadership* were about the tremendous roles that leaders play in their schools. The books outlined developing culture as being paramount for the success of any school. Culture is created when all participants in the school setting and community have a sense of trust, respect, and value. The books touched on effective communication and creating environments that foster healthy relationships throughout the school.

Fullan's book spoke of both leadership in business and education and charted the similarities of the two and the idea of leading with a moral purpose. "Moral purpose means acting with the intention of making a positive difference in the lives of employees, customers, and society as a whole (Fullan, 2001)." In both capacities, there should be a willingness to change when necessary for the betterment of all individuals, especially when the current climate is not beneficial to everyone. The books both geared towards the leader being the person whose responsibility it should be to stay involved with their students, teachers and community and to ensure that their needs were being addressed.

In Fullan's book, like *Hacking Leadership*, it explained steps that should be taken in order to become an effective leader and establish positive culture. These steps included empowering teachers, being present for students, being a good listener, communication clearly, modeling what is desired, consistent learning for teachers and administrators, understanding what change truly entails, developing relationships, and so on. Both *Hacking Leadership* and *Leading in a Culture of Change* have their own unique approach as to how they address these steps and the resources that are used for their implementation, but the desired goal of effective leadership and positive school cultures remained the same.

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Book Review: Exploring Citizenship Leadership

By Fany Ferrufino

Biography

Sue Barraclough wrote the book "Leadership (Exploring Citizenship). The book contains 32 pages. It costs $8.29. Publisher: Heinemann; revised ed. Edition (November 1, 2016). She is the author of books for children. She is Senior System Analyst at Yorkshire Building Society Group. She is from Bradford, West Yorkshire, United Kingdom.

Introduction

What makes a good leader? Why is honesty important? How do leaders communicate well? Read "Leadership" to learn about why people need leaders. Find out how leaders are chosen, what makes a good role model, and why everyone should try to be a leader sometimes.

Sue Barraclough is a senior system analyst at West Yorkshire, United Kingdom that wrote this book to provide precise definitions about leader, citizen, leadership, honesty for children.

Purpose of Thesis

Sue Barraclough wrote this book to explain definitions related to leadership for children to understand. She wants readers to have awareness of how important is to make good leaders with honesty and good communication skills to be a role model. She believes people need good leaders. Also, she thinks everyone should be a good leader.

Summary

This is a non-fiction book. In this book, the author defines the following concepts: citizenship, leader, leadership, honesty, fairness, good communication, respect, role model, speaking out. She also provides some tips to have good communication, to help a group do well, and to be a good leader. She asks some questions to encourage and motivate the reader to be a good leader. This book contains some photographs that reflect good leadership. These photographs are accompanied by captions.

Trace the Arguments: Weak and Strong Points

The author argues about how important is to have good leaders. She has strong points from the book that agree with. She believes that good leaders are everywhere: at home, in the school, in the city, in the country etc. she encourages reader to become leaders and to understand how hard is sometimes to be a leader. However, she thinks that leaders have a tremendous job to guide people and take good

decisions for the benefit of the group. The author argues about the necessity of having good leaders to help everybody choose what to do or where to go. In this book, the author gives advice to respect our leaders that can be parents, teachers, and presidents. She argues and supports her thesis of believing in good leaders with values such as honesty and fairness. In my opinion, I believe that the author thesis is very positive and I have observed many strong points such as values and good attitudes a leader should have. I think that principals and administrators in schools should adopt these and more values nowadays to lead in the right way. I didn't find any weak points in this book.

Compare and Contrast

In comparison with Michael Fullan in the book "Leading in a Culture of Change", he mentioned some characteristics of good leadership similar to the book "Exploring Citizenship Leadership" by Sue Barraclough. However, Michael Fullan explains more complex contexts such as cultural of change, knowledge building, coherence making etc. In the contrary, Sue Barraclough explains easy definitions such as leadership, honesty, respect etc. Learning to lead is an important part of growing up (Sue Barraclough page 31). The content of this book was very good and easy to understand. Moreover, leaders who combine a commitment to moral purpose with a healthy respect for the complexities of the change process not only will be more successful but also will unearth deeper moral purpose (Michael Fullan page 5)

Key Quotes/Sayings from the Author

I didn't find any quote on this book, but I found some sayings by Sue Barraclough in some sources: "The road is safety when we are careful", "I know someone with dyslexia, so let's understand health issues", "When recycling, we make the difference", "A soft, wool sweater will make you feel warm on cold mornings", "Be a little angel".

I found a quote from Leading in a Culture of Change from Michael Fullan: "Gaius Petronius nailed this problem almost two thousand year ago: We trained hard...but it seemed every time we were beginning to form up into teams we were reorganized. It was to learn later in life that we tend to meet any situation by reorganizing, and what a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency, and demoralization."

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Barraclough, S. (2016). *Leadership-Exploring Citizenship*. West Yorkshire, United Kingdom: Heinemann.

Fullan, M. (2001). *Leading in a Culture of Change*. San Francisco, CA: Jossey-Bass.

Book Review: Lead Like a PIRATE: Make School Amazing for Your Students and Staff

By Elizabeth A. Moore

Burgess, Shelley and Houf, Beth. *Lead Like a PIRATE: Make School Amazing for Your Students and Staff*. San Diego, California: Dave Burgess Consulting, Inc., 2017. 210pp. $17.99.

A great leader creates a school "where students and staff are knocking down the doors to get in rather than out" (p. xviii). In the book *Lead Like a PIRATE: Make School Amazing for Your Students and Staff*, educational leaders Shelly Burgess and Beth Houf help readers navigate the waters of leadership to transform their schools into irresistible places.

Burgess began her educational leadership journey as an enthusiastic and creative teacher and rose to higher leadership positions at the school and district level. Her husband, Dave Burgess, is well-known for writing the popular book among teachers, *Teach like a Pirate*. Both Shelly and Dave Burgess currently work full time as partners in their publishing and educational learning network, Dave Burgess Consulting, Inc., motivating others to teach and/or lead like pirates. Beth Houf also began her career as a teacher, moving into a leadership position as a principal. Houf experienced a period of burn-out as a principal and was considering leaving the profession when she attended a "Teach Like a Pirate" conference. Completely inspired by the ideas, her passion towards education was reignited. She decided that although *Teach Like a Pirate* was amazing, it was ultimately designed for teachers, not administrators. From there, Houf and Burgess teamed up to write a book that taught educational leaders how to lead like a PIRATE and make school amazing for students, staff, parents, and communities. Together, they explain how an education leader can transform their school culture by leading like a PIRATE and empowering staff.

Lead Like a PIRATE: Make School Amazing for Your Students and Staff is divided into four sections. In the first section, Houf and Burgess explore a major theme of the book, the characteristics of a PIRATE leader. PIRATE leaders "inspire and influence other to follow them, even in the face of great risks. They lead their crew on a journey to seek great riches and rewards" (p. xvii). One must be **passionate** about and **immerse** themselves in their work. They must build **rapport** with others, **ask** good questions, and **analyze** what's going on in order to create a trusting environment. They also must have the courage and desire for **transformation**, as well as daily **enthusiasm**. "As the leader, you are the emotional guide for others in your school" (p. 70). Displays of passion, courage, and enthusiasm will rub off on staff and students to help create positive learning community.

In the second section, Houf and Burgess explain how PIRATE leaders can find treasure (success) by staying true to their moral purpose while working towards their mission. Houf and Burgess stress the importance of ensuring all staff are understanding and supportive of how proposed changes align with the school's mission, because if there is no commitment to the cause, there will be limited success. "If you want to set sail with your crew and chart a new course for your school or district, then everyone needs to have the same map and a compass that points them in the same direction—otherwise your ship will simply sink" (p. 76). Another theme in this section is that a great leader can bring out the magic in their staff to guide them towards success. Although leaders cannot always choose the staff they work with, they still have the ability to empower and motivate them towards transformation. Instead of getting upset with the current staff, Houf and Burgess suggest that a PIRATE leader asks themselves: "How can I lead my school to greatness using the team I have" (p. 83)? They encourage leaders to "be relentless in seeking out and nurturing each person's greatness" (p. 83).

Furthermore, the second section also discusses the value of a leader's time. Houf and Burgess believe that "if something is truly a priority, you have to make time for it (p. 104). They propose ways for leaders to reorganize their time so they can spend it on what matters most. One way of doing is this by activating both staff and student teams to complete tasks.

The third section of the book elaborates on empowering and building relationships with staff by having ANCHOR conversations: appreciation, notice the impact, collaborative conversations or captain-directed conversations, honor voice and choice, offer support, and reflection. Houf and Burgess focus on the power of words, and stress that "changing culture requires changing the conversations" (p. 143). Using one or all of these ANCHOR components in a conversation with staff ensures that they feel valued, learn something of value, and feel inspired to put newly learned knowledge to practice. A leader's job is to bring staff up, not push them down.

In the last section, Houf and Burgess remind leaders that it is important to devote time to themselves. The book concludes with a call to action, emphasizing the obligation educational leaders have to actively support their teachers so that each student gets the amazing learning experiences they deserve. "There are no excuses when striving to meet goals, no matter the roadblocks (p. 203). Progress takes time, but it is certainly possible.

Critical Evaluation

Houf and Burgess include personal anecdotes throughout the book of their experiences as teachers and principals. While it is evident that both of these ladies are true PIRATE leaders, their passion and enthusiasm seem to be unrealistic at times. For example, in an effort to increase parent

participation at parent-teacher conference night, Houf made a promise that if the school had 90% of parent attendance, she would spend the night in the trophy case in the school hallway. This was incredibly motivating to students, so the school did meet their goal and Houf admits that "Yes, I spent the night in the trophy case" (p. 58). Not all leaders are able to make promises as extravagant as this and this level of commitment can seem intimidating to leaders who have responsibilities outside of their career. In an attempt to demonstrate how a little absurdity can make a large impact, Houf may have unconsciously made leaders reading the book question their greatness, simply because they could never spend a night in a trophy case.

However, Houf and Burgess do keep their opinions realistic because they admit that being a leader is not always rainbows and sunshine. They include a list of things they dislike about their careers then explain that "while we all have things about our work that we don't love to do, what we are passionate about is handling these things in the most effective and efficient way possible" (p. 8). By admitting that they do not love every aspect of their job, Houf and Burgess humanize themselves to the reader, making their suggestions in the book less intimidating.

In addition, PIRATE leaders Houf and Burgess make it known that they value the magic in their people over an educational program. While it is true that "programs don't teach kids; teachers do" (p. 94), an evidence-based intervention program can lead to tremendous results. Burgess recounted that during her first year as principal, she threw out pieces of programs that she did not find valuable (p. 96). By doing so, she made those programs impossible to implement with fidelity. Her advice in this section is not sound, and many programs must be complete with all of the pieces so that they can be effectively implemented with fidelity. An alternative could be to have a professional development opportunity for staff so that they can build their understanding of the program and their confidence of implementing the program with fidelity. Burgess shared that when she observed one teacher in the classroom implementing a reading program, the teacher was confused and said to her students, "I'm sorry, I don't know what it means; but we still have to try to do something" (p. 95). This clearly shows that the staff were not educated on the program and therefore making success impossible.

One of the strongest points in the book is the importance of having ANCHOR conversations to build relationships with staff and coach them to be better (there is always room for improvement). As previously mentioned, ANCHOR conversations are productive and empowering for both the leader and the staff member. Houf and Burgess primarily discuss having ANCHOR conversations after a couple minutes of observation in the classroom. Among other things, these conversations can help staff make connections between their actions and their students' learning and notice the impact of their actions. "Making [a teacher] cognizant of their choices and then pointing out how those decisions made a positive impact helps ensure that good practices happen as the result of deliberate planning rather than by chance" (p. 156). ANCHOR conversations are not evaluative or judgmental.

By teaching readers how to have ANCHOR conversations, Houf and Burgess have empowered them to immediately start coaching their staff.

Comparison to Fullan

Lead Like a PIRATE: Make School Amazing for Your Students and Staff by Houf and Burgess aligns with many of the ideas presented in *Leading in a Culture of Change* by Fullan. Fullan believes that there are five components of leadership that create a commitment from staff and result in positive changes: moral purpose, understanding change, relationship building, knowledge creation and sharing, and coherence making. The first component, moral purpose, is evident in Houf and Burgess' book as they consistently remind the reader that leaders have the responsibility to do what is best for their staff and students and that they have the power to make a real difference. They discuss using your moral purpose to create a long-term vision (p. 76). Fullan agrees that "leadership, if it is to be effective, has to have an explicit 'making-a-difference' sense of purpose" (p. 20).

Another component of a great leader, according to Fullan, is relationship building. This is a recurring theme throughout *Lead Like a PIRATE: Make School Amazing for Your Students and Staff*. Houf and Burgess discuss the importance of having events such as staff retreats and socials to build relationships and learn more about each other's lives, passions, and interests (p. 38). Fullan believes that good leaders have high emotional intelligence, with correlates with the character traits that Houf and Burgess describe of a PIRATE leader.

The remaining components of a great leader are also referenced throughout *Lead Like a PIRATE: Make School Amazing for Your Students and Staff*. Obviously, there are a plethora of similarities between Fullan's and Houf and Burgess' books. However, there some differences among them. Fullan stresses the importance of leaders, especially principals, learning in context. Some specific in-context learning practices include monthly principal support groups and principal peer coaching (p.127). Throughout Houf and Burgess' book, there is little mention of collaborating with other principals to increase a leader's knowledge. Rather, most of the focus of the book was on how a leader could improve his/her staff.

For a more informative understanding of leadership, Fullan's book is an appropriate choice, as it explicitly explains several theories. The audience for Fullan's book includes both businessmen and educators. For a more inspirational read specifically about educational leadership, Houf and Burgess' book is a good selection.

Conclusion

Overall, *Lead Like a PIRATE: Make School Amazing for Your Students and Staff* is a valuable guide for both experienced and new educational leaders. It truly does reignite the passion inside of the

reader because it is filled with many practical ideas that can be put to practice immediately. Throughout the book, Houf and Burgess pose self-reflective questions and present real-life challenges to complete as practice for each newly learned skill. They incorporate technology by including links to websites and resources they have made, to serve as a guide and as an inspiration to readers. The authors' writing flowed smoothly and accounted for an easy and inspirational read. Any educational leader should have this book on their shelf.

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