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NASET Special Educator e-Journal

Exceptional Teachers Teaching Exceptional Children

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Special Education Legal Alert

Perry A. Zirkel

This month's update identifies two recent court decisions that respectively illustrate the need prong for IDEA eligibility and the staffing shortage in special education. For previous monthly updates and related publications, see **perryzirkel.com**

On September 4, 2024, the Fourth Circuit Court of Appeals issued an officially published decision in *G.M. v. Barnes,* which focused on eligibility under the IDEA. In kindergarten, the child in this case experienced difficulties with paying attention and sitting still. In grade 1, in response to these continued difficulties, his teacher employed various strategies, including fidgets, a timer, and a daily behavior checklist. His academic performance met grade-level expectations, with math being on the higher side and both reading and writing on the lower side. In grade 2, his percentile scores on statewide achievement testing were noticeably lower than those in the previous year but still in the average range. His parents arranged for a private evaluation with a psychologist, who issued a diagnosis of dyslexia and dysgraphia. The parents shared the evaluation report with the school's multidisciplinary team, which recommended various general education interventions. The team concluded that the diagnosis was inconsistent with their school performance assessments, including his nearly perfect scores on his teacher's informal assessment of phonological awareness in the classroom. Subsequently, at his parents' insistence, the team acquiesced to a special education eligibility evaluation. The conclusions were that (1) he did not qualify under the classification of specific learning disability (SLD) based on the district's pattern of strengths and weaknesses (PSW) approach (as permitted under the state's law), and (2) although he qualified for other health impairment (OHI) based on ADHD, the adverse impact did not reach the level of the need for special education. For grade 3, the parents unilaterally placed him in a local private school that specializes in Orton-Gillingham instruction and filed for a due process hearing to seek reimbursement. The hearing officer issued a decision in favor of the school, and the federal district court affirmed. The parents appealed to the Fourth Circuit, which covers Maryland, West Virginia, Virginia, and the Carolinas.

The parents challenged the district's SLD determination based on PSW that the child did not exhibit a requisite weakness in reading or writing.	Although finding the evidence mixed, especially with regard to writing, the Fourth Circuit rejected this challenge based on traditional judicial deference to the school witnesses and the hearing officer for factual findings.
For the district's OHI determination that the child did not need special education, the parents' first claim was that Orton Gillingham qualifies as special education.	Contrary to the contrary conclusion of the hearing officer, the Fourth Circuit assumed that Orton Gillingham may possibly qualify as special

	education depending on the specific factual situation, which was not sufficiently clear here.
The parents' ultimate claim for the OHI-related need for special education was based on their child's struggling educational performance in grade 2.	The court sided with the school district, citing the child's "average achievement" and the circuitous logic that "'a student does not 'need' [special education] services if the student is already getting what would qualify as a [FAPE] *without* them.'"
In addition to judicial deference to school authorities and hearing officers, this appellate decision illustrates the critical legal significance, and yet inevitably fuzzy boundaries, of what is referred to as "need prong" in IDEA eligibility cases in relation to a general education program that in recent years increasingly includes diverse interventions for academic, social-emotional, and behavioral challenges.	

On January 1, 2024, a federal district court in Pennsylvania issued an unofficially published decision in *Hempfield School District v. S.C.*, a case reflecting the ongoing issue of staff shortages in special education. In kindergarten (school year 2020–2021), based on classifications of autism and speech/language impairment, the child in this case had an IEP that provided for 85% of the time in an autistic support classroom and 15% in general education. Due to being mostly nonverbal, easily distracted, and beset with self-stimulatory behaviors, the child had a difficult transition to a full school day. His autistic support classroom consisted of (a) 8 students who mostly were nonverbal, behaviorally problematic, and not toilet trained, and (b) a special education teacher with 4 aides, all trained in verbal behavior methodology. In October 2020, the special education teacher took maternity leave. The autism support coach, who rotated among the district's 6 autism support classrooms, notified the parents that she would assume the teacher's role until the district could find a long-term substitute. For the rest of the school year, the coach provided instruction in the classroom for 2–3 days per week, supplemented by a series of per diem substitutes without training in the verbal behavior method. Because of the child's complex needs, the substitutes rarely worked with him, and the aides were confused as to how to implement his IEP when the coach was not there. Due to the staffing problems, the students rarely left the classroom for lunch, recess, or specials. In February 2021, before the end of her maternity leave, the special education teacher resigned. At the end of the school year, the district found and hired a replacement. For grade 1 (2021–2022), the new teacher started with one less aide. In November 2021, the teacher expressed staffing concerns to the special education director, which included the speech therapist taking maternity leave. Frustrated with the unresolved situation, the two experienced aides left. Upon learning of the problems, the parents met with the special education director. She offered compensatory sessions for the 14-day delay before a new speech therapist started and informed them that she had not received any applications for the aide vacancies. After searching without success to find a suitable private placement within commuting distance, the parents were able to arrange for the child's enrollment in a nearby district's autism program on a tuition basis. After informing the special education director they planned their child's return after resolution of the staff shortage, they effectuated this unilateral placement in December 2021. The child remained there for the rest of grade 1, but the new district notified the parents that due to increased

enrollments and staffing issues, the placement could not continue for grade 2. The parents re-enrolled their child in their school district for 2022–2023 and filed for a due process hearing, seeking compensatory education for kindergarten and the first part of grade 1 and reimbursement for its second part. The hearing officer ruled that the district provided FAPE in kindergarten but not grade 1, awarding 65 hours of compensatory education (at 1 hour per day) for the first few months and reimbursement for the remaining period. Both sides appealed to the federal district court.	
For kindergarten and grade 1, the parents' FAPE claim was based on failure to implement (FTI) the IEP rather than on the procedural or substantive dimensions of FAPE.	Disagreeing with the hearing officer's exclusive reliance and unpersuasive assessment of the child's progress, the court concluded that, based on the Third Circuit's standard for FTI, the school district failed to implement substantial or significant provisions of the IEP for both years.
For compensatory education, both sides agreed that the hearing officer's award was arbitrary.	The court remanded to the hearing officer a more careful compensatory education award that accounted for both kindergarten and the first part of grade 1.
For reimbursement, the district argued that it was not available for a unilateral placement at another district.	Disagreeing, the court concluded that for reimbursement analysis, an appropriate unilateral placement is not limited to private, as compared to, public schools.
Perhaps the most significant general takeaway from this decision is that, like the recent COVID-19 pandemic, staff shortages in special education are not an excuse from fulfilling the FAPE obligation even if the district is not blameworthy.	

Buzz from the Hub

Assessment Aligned with Alternate Academic Achievement Standards
This memorandum from the U.S. Department of Education outlines the requirements for states seeking a waiver of the 1% cap on the number of students who can take alternate assessments aligned with alternate academic achievement standards (AA-AAAS) in the school year (SY) 2024-25 assessment.
https://www.ed.gov/media/document/memo-states-regarding-requirements-waiver-of-10-percent-cap-alternate-assessments

The Pyramid Model for Promoting Social-Emotional Competence in Infants and Young Children (Pyramid Model)
The Pyramid Model is a framework of evidence-based practices for promoting young children's healthy social and emotional development and it works in conjunction with a program's curriculum, but is not a curriculum itself. The Pyramid Model provides guidance for: early childhood special education personnel, early intervention personnel, early educators, and families.
https://challengingbehavior.org/pyramid-model/overview/basics/

Empowering Education Leaders: A Toolkit for Safe, Ethical, and Equitable AI Integration
On October 24, 2024, the U.S. Department of Education Office of Educational Technology (OET) released a 74-page toolkit designed to help K-12 leaders integrate artificial intelligence into their districts.
https://tech.ed.gov/files/2024/10/ED-OET-EdLeaders-AI-Toolkit-10.24.24.pdf

IDEAs That Work Now on sites.ed.gov/IDEA
The Department's Office of Special Education Programs (OSEP) has moved the IDEAs That Work website content. Information and resources can now be found on the Individuals with Disabilities Education Act (IDEA) website.
https://sites.ed.gov/idea/

Intersection of Mental Illness and Disability During Transition
Students with disabilities can also experience co-occurring mental health issues. This is particularly true of children with developmental disabilities with ranges from almost 34% to 59% prevalence. This RAISE guide covers strategies to support students with disabilities and co-occurring mental health issues as they transition into adulthood.

https://raisecenter.org/wp-content/uploads/2024/10/RAISE-guide-on-disability-mental-illness-and-transition-revised.docx.pdf

How to Weigh the Risks of Disclosing a Disability. A guide to help you decide — and find support.
Disclosing a challenging health condition at work can be risky. You may get the accommodations you need, but you may also be met with suspicion, resentment, and accusations of making it all up. In this article, the author discusses why disclosure is challenging, how to decide whether the risk is worth taking, and how a network can support you.
https://www.parentcenterhub.org/buzz-november2024/

5 Culturally Responsive Family Engagement Strategies
Educators can strengthen the relationship between home and school by making families feel welcome and included. In this article five ways to strengthen the partnership with families are summarized.
https://www.edutopia.org/article/5-culturally-responsive-family-engagement-strategies

National Clearinghouse for English Language Acquisition (NCELA): Family Toolkit
The English Learner Family Toolkit was created to help families choose education services that meet their child's needs. U.S. educators, elementary and secondary school teachers, principals, and other school staff can also share the toolkit as a resource for English learners and their families.
https://ncela.ed.gov/educator-support/toolkits/family-toolkit

State of Early Childhood Education in Big Ten States
The Big Ten Early Learning Alliance (BTELA) has just published an inaugural brief on the state of early childhood education in Big 10 states. It emphasizes the importance of early education, highlights disparities in funding and access, and notes the impacts of these on children's development. The report also suggests policy changes to improve outcomes, such as increased investment and equitable resource distribution.
https://btela.osu.edu/our-work/state-of-early-childhood-education-in-big-ten-states/

Equity in Data: Where to Start!
Are you looking to address disparities in early intervention and early childhood special education systems and promote more equitable practices and outcomes? Knowing where to start can be challenging, but taking one step forward and starting is critical. The **DaSy Center** developed a guide, *DaSy Data Inquiry Cycle*, to support Part C and Part B 619 program staff in addressing equity considerations at each stage of the data inquiry cycle.
https://dasycenter.org/data-inquiry-cycle/

A Summary of the Research on the Effects of K–12 Test Accommodations: 2022
Research on test accommodations provides valuable information that informs policy and practice. The National Center on Educational Outcomes (NCEO) recently published A Summary of the Research on the Effects of K-12 Test Accommodations: 2022. This report presents

research literature published in 2022 on testing accommodations for U.S. elementary and secondary students in kindergarten through 12th grade.
https://nceo.umn.edu/docs/OnlinePubs/NCEOReport444.pdf

Inclusive Occupations podcast
Episode: The Inclusive Education Roadmap- Part 1- Dr. Diane Ryndak
In this first part of the two-part series on the Inclusive Education Roadmap (IER) by the TIES Center, Dr. Diane Ryndak gives us a general overview of the work done for sustainable systemic change in inclusive education at the state, district, and school. After getting together a diverse Equitable Inclusive Leadership Team (EILT), the second step of the Inclusive Education Roadmap is called RISE (Reflecting on Inclusive Systems of Support). The school Leadership Team is led to deeply reflect and engage in critical discussions about their system's current use of inclusive educational practices for all students, including students with significant cognitive disabilities.
https://www.inclusiveoccupations.com/podcast/episode/1d9b4aca/the-inclusive-education-roadmap-part-1-dr-diane-ryndak

Groundbreaking Study: Anti-trans State Laws Increased Suicide Attempts By 72%
In a groundbreaking study published in Nature Human Behavior, researchers found that anti-trans bans lead to a 72% increase in suicide attempts among transgender individuals, compared to states without such legislation. The study is the first study of its kind and could have far-reaching international implications as more countries face pressure to implement similar restrictions on transgender people.
https://www.erininthemorning.com/p/groundbreaking-study-anti-trans-state

Youth Engagement Now (YEN)
Explore resources developed by youth with disabilities across the country to access tools to successfully engage and involve youth partners in projects to support impactful change. The site features tools focused on foundational principles, leadership development, and effective collaboration. Key areas include disability training, advocacy, community building, and event planning. It also offers a podcast, YEN Talks, for further insights.
https://yen.transitionta.org/

Resources from the National Research Center for Parents with Disabilities
Serving Parents with Disabilities: The National Research Center for Parents with Disabilities has a range of resources for parents with disabilities and those who support them covering a variety of topics such as child welfare law and its effects on parents with disabilities, firsthand narratives from disabled parents about how they raise their children, and advice for professionals working with specific populations of parents with disabilities.
https://heller.brandeis.edu/parents-with-disabilities/

Best Practices for Adhering to Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Requirements

The Center for Medicaid and CHIP Services (CMCS) released important guidance regarding the coverage requirements for eligible children and youth who are enrolled in Medicaid and the Children's Health Insurance Program (CHIP). The guidance, Best Practices for Adhering to Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Requirements, is in the form of a State Health Official letter. This guidance is designed to help states strengthen their implementation of EPSDT requirements to improve health outcomes.
https://www.medicaid.gov/federal-policy-guidance/downloads/sho24005.pdf

A Practical Guide for State Teams to Increase Inclusion in Early Childhood Programs

This comprehensive resource, A Practical Guide for State Teams to Increase Inclusion in Early Childhood Programs, is designed to help state leaders and advocates use data to promote more inclusive policies for young children in early care and education settings. The guide emphasizes the importance of inclusion from both human rights and equity perspectives, advocating for all children, especially those with disabilities, to have access to high-quality, inclusive early education.

https://nieer.org/sites/default/files/2024-08/nieer_research_report_template_inclusionguide_august2024_ad_1_1.pdf

StopBullying.gov

When adults respond quickly and consistently to bullying behavior they send the message that it is not acceptable. Research shows this can stop bullying behavior over time. StopBullying.gov provides information from various government agencies on what bullying is, what cyberbullying is, who is at risk, and how you can prevent and respond to bullying. Check out their tip sheet, Bullying and Children and Youth with Disabilities and Special Health Needs, specifically for how to support youth with disabilities and special health needs.
https://www.stopbullying.gov/sites/default/files/2017-09/bullyingtipsheet.pdf

Want to Learn More About Technology & Youth Mental Health?

The Child Mind Institute's Technology and Youth Mental Health webinar series brings together researchers, advocates, and tech thinkers to explore crucial questions, such as: What is the relationship between social media and mental health? How can we advance research on this relationship using real world data? Click here to watch the webinars and interviews in the series
https://childmind.org/science/public-health-epidemiology/technology-youth-mental-health-series/

My Life is Worth Living
My Life is Worth Living includes five powerful stories told over 20 episodes. In each episode, relatable teen characters wrestle with challenges that are all too familiar for many viewers and discover strategies to cope when it feels like their own thoughts are against them. Over the course of each character's journey, they realize that life is worth living. Watch the videos here.
https://mylifeisworthliving.org/

MCH (Maternal and Child Health) Bridges: The official podcast of the Association of Maternal and Child Health Programs (AMCHP)
Episode #15: Youth Perspectives on Mental Health: Supporting the Next Generation
Three members of The Adolescent Champion Teen Advisory Council (TAC TAC), Melanie Avila, Fanta Guindo, and Yeina Han, share what adolescent and young adult mental health looks like in their communities, what they have experienced, and what needs to change. This episode talks about important concepts like positive youth development, youth-friendly services, and culturally competent care. It also identifies strategies for addressing barriers to youth seeking and accessing mental health services. Listen to this podcast episode here.
https://mchbridges.buzzsprout.com/1837581/episodes/12824655-episode-15-youth-perspectives-on-mental-health-supporting-the-next-generation

Parents Under Pressure: The U.S. Surgeon General's Advisory on the Mental Health & Well-Being of Parents
The Surgeon General released an Advisory regarding the mental health of parents/caregivers. This Advisory recognizes the critical role of parents and caregivers in our society and the importance of both reducing their stress and protecting their mental health and well-being. It explores the unique stressors that parents and caregivers face; the impact of these stressors on the mental health and well-being of parents, caregivers, and children; and the policies, programs, and cultural shifts we need to make to allow parents and caregivers to flourish and thrive. Read the Advisory here.
https://www.parentcenterhub.org/buzz-mental-health-and-bullying-resources/

Help Wanted: Early Intervention and Early Childhood Special Education Workforce Needs Findings from a National Survey
The ED-funded Early Childhood Personnel Center collaborated with the National Institute for Early Education Research and recently released report findings from a national survey of the early intervention and early childhood special education workforce. The goal was to obtain a national picture of the EI/ECSE workforce's education, credentials, pre- and in-service training, and knowledge about EI and ECSE. This report summarizes the main findings from the survey. Read More

https://nieer.org/sites/default/files/2024-05/may_2024_early_intervention_and_early_childhood_special_education_workforce_needs_findings_from_a_national_survey_.pdf

IEPs vs Service Plans: Everything You Need to Know!
Are you considering sending your child with special needs to a private school? More and more families are considering this as an option. However, many differences exist when it comes to sending your child with special needs to private schools. While public schools are required to offer special education services, private schools aren't. Public schools can provide learners with special needs supports and services to best meet the students' educational needs in their IEPs, whereas private schools may offer learners Service Plans. But what is the difference between the two? Read More
https://www.thetechedvocate.org/ieps-vs-service-plans-everything-you-need-to-know/

Youth Employment: A Foundation for Mental Health and Well-Being
In May, the department launched a new webpage (www.dol.gov/youthmentalhealth) devoted to young people's mental health needs. Whether you're a young person, part of the workforce system, an employer, or a policymaker, everyone has a role supporting young people's well-being by helping more young people access the mental health resources they need and get into good jobs that they can build a healthy life around and thrive. The Department of Labor encourages everyone to explore the content and share with the department what they are doing in their community on this important topic by submitting their stories through their new webpage. Compiling these stories and sharing them helps spread the word about youth mental health. Contribute today (https://www.dol.gov/general/mental-health-at-work/youth#wufoo-mc4aghb05xz2v0), and your story may be shared on a department platform.

Involving Teens and Young Adults in Selecting Assistive Technology
This 4-page resource helps families involve teens and young adults in learning about and selecting assistive technology (AT). An important goal for older students is to understand the areas in which technology can support them in their educational and employment goals. The tip sheet encourages students to advocate for themselves, and to take an active role in selecting assistive technology to address their needs. Read More
https://www.parentcenterhub.org/involving-youth-in-selecting-assistive-tech/

Six Global Lessons on How Family, School, and Community Engagement Can Transform Education
Stronger family, school, and community partnerships help ensure that relational trust is at the foundation of schools, and that all the actors can work together toward a shared vision of education in their communities. This shared vision of education is critical to education systems transformation.This report is the result of the participation of hundreds of students, families, school educators, and researchers who dedicated their time and energy to investigating the critical role that families and communities play in ensuring students and schools can flourish. Read More
https://www.brookings.edu/wp-content/uploads/2024/05/Final-Six-Global-Lessons_EN_24June2024_web.pdf

Frequently Asked Questions: Social Security Administration, Supplemental Security Income, and Social Security Disability Insurance – Can I work if I receive social security benefits?
This FAQ provides people with disabilities and their families an overview on social security benefits and answers common questions about these benefits and employment.
https://leadcenter.org/resources/financial-toolkit-frequently-asked-questions/

Summer Learning Tips to Go! Text Messaging Service
The Summer Slide is real! While we are all looking forward to the long days relaxing and making the best memories with our children, we must remember to sprinkle in some fun learning throughout our summer adventures. We found the perfect resource for families to do just that and avoid the summer learning loss! Sign up for summer learning tips sent right to your phone, in English or Spanish, from Start with a Book.
https://www.startwithabook.org/reading-tips-text-messages

Cartoons Available with American Sign Language
The ED-funded Bridge Multimedia now has some of children's favorite
Public Broadcasting Service cartoons available in American Sign Language, thanks to ED's Office of Special Education Programs funding. Check out full episodes of "Alma's Way," "Daniel Tiger's Neighborhood," and more.
https://pbskids.org/videos/american-sign-language-full-episodes

Unstuck: The Special Education Podcast
Discussions between two professionals related to current trends and topics affecting the world of special education. They pull from a combined 40 years in the field to share stories, insight and potential solutions.
https://podcasts.apple.com/us/podcast/unstuck-the-special-education-podcast/id1604000975

Special Education Inner Circle
The Special Education Inner Circle podcast is hosted by Catherine Whitcher, M.Ed., founder of the Master IEP Coach® Mentorship + Network. Get your notebook ready as Catherine brings you real-world strategies for everyone at the IEP table. With her family's experience in the disability community and her journey from Special Education classroom teacher to IEP expert, Catherine knows what it takes to prepare students and families for the future. Get ready to be inspired and learn actionable steps you can take immediately to change your special education experience.
https://podcasts.apple.com/ca/podcast/special-education-inner-circle/id1484686234

Commemorating the 25th Anniversary of Olmstead

ICYMI: On June 20th The U.S. Department of Justice and the U.S. Department of Health and Human Services' Administration for Community Living and Office for Civil Rights celebrated the 25th anniversary of the landmark Olmstead v. L.C. Supreme Court decision, which ruled that unjustified segregation of people with disabilities is a form of unlawful discrimination under the Americans with Disabilities Act (ADA).
https://www.youtube.com/live/EYsDx5ogzLc?feature=shared

Examining Skills, Attitudes, and Institutional Support to Assess Teachers' Readiness to Implement Learning

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Abstract

This study investigated the level of teachers' readiness to implement the blended learning modality in District Learning Center I of Tacloban City Division. This looked three key factors that are perceived to have significant influence in the implementation of blended learning: level of teachers' digital skills, teachers' attitude towards blended learning implementation, and institutional support. This study is a descriptive-survey involving 145 teachers in the seven elementary schools within the district, from which 50 samples were selected via stratified random sampling to represent the total population. The schools served as the strata and the proportional number of teacher-participants from each school is chosen through fish bowl method. A researcher-made survey questionnaire, which was presented for evaluation and modification to ensure validity, was utilized to collect the data. This used a Likert scale of Strongly Agree (5), Agree (4), Neutral (3), Disagree (4), and Strongly Disagree (1 to obtain the participants' perception and assessment of the key factors. The data collected were statistically treated via mean, weighted mean and standard deviation and were analyzed and interpreted to arrive at a description of the characteristics and determine the level of readiness of the teachers to adopt blended learning. Results revealed that teachers are generally ready to implement the approach as they have considerable positive attitude on the implementation of BL and the evident institutional support. Data also revealed that teachers have moderate digital proficiency level, leading to a recommendation to prioritize the provision of professional development opportunities for skills enhancement to effectively adopt modern educational practices.

Key words: blended learning implementation, digital proficiency, institutional support

INTRODUCTION

The educational generations are constantly adapting to change, innovations, and teaching approaches aimed at meeting the diverse demands of the learners and keeping abreast with trends and practices. Among the different methods of learning delivery, blended learning has emerged as one of the common responses to the growing demand for modern education, although this has been applied decades ago (Zhonggen, 2015).

Blended learning is a method in teaching that combines in-person instruction with online and digital media, which allows the students to customize their educational experiences. This approach allows students to control their learning route and pace that results to a more comprehensive and richer learning experience (Panopto, 2019).

Suprabha and Subramonian (2020) define blended learning as the combination of traditional in-person instruction and online learning. This setup underscores the significant changes in teaching and learning environments that have evolved into blended learning.

The concept of distance learning has evolved due to increased reliance on technology in education that allows real-time communication between students and teachers as well as remote participation in lectures. Online learning emerged as a response to this shift, driven by the increasing use of smart gadgets, the internet, and the low cost of technology-related services in the 21st century (Rainie, 2010).

Blended learning, which merged the traditional in-person classes and distance or online learning, has significantly advanced due to its adaptability in instruction delivery, and the rapid adoption of information and communication technologies (ICTs) in education demonstrates the enormous potential of various teaching and learning methodologies (Jeffrey, Milne, Suddaby & Higgins, 2014). In the Philippines, ICT in education has revolutionized teaching and learning, leading to the adoption of blended learning, particularly in higher education (Alvarez, 2020).

The Department of Education (DepEd) has acknowledged blended learning as a valid and effective method for delivering education after the COVID-19 pandemic where learners are not required to come to school every day and can do their other tasks at home. Teachers in the classroom could also manage a fewer number of students while following the health and safety protocol (Mendoza, 2021). This proposal considers the advantages that blended learning offers.

Several studies have been carried out on this multi-modal approach to teaching and learning, highlighting that in higher education, blended learning is not a new educational approach, but was studied by only a niche before the first wave of COVID- 19. It was also noted that after global health crisis, many education frontliners acknowledged the effectiveness of blended learning over the traditional teaching patterns and this gave room for professional development, as most teachers realized blended learning as a combination of online and traditional classroom interaction. Since the advent of the new normal, most schools had adopted the blended learning modality (Finn & Bucceri, 2004; Garrison & Vaughan, 2008; Graham, 2013).

The study of Abbacan-Tuguic (2021) on the challenges of the new normal: students' attitude, readiness and adaptability to blended learning modality, revealed that students had positive attitudes and showed a moderate level of readiness to implement blended learning. Although, there is a negative correlation between the students' attitude and their readiness, schools had embraced the model of blended learning.

Sitzmann et al., (2006) also determined the effectiveness of blended learning than purely classroom instruction. Also, Zhao et al., (2005) revealed a significant positive impact of blended

learning largely because of the instructors' involvement in the combination of technology and face-to-face teaching that resulted to favorable outcomes.

These studies that were conducted underscored the effectiveness of BL in instructional delivery. While it is proven that the approach has been effective in different learning level and has provided better learning experiences to the learners in various settings, there is also a need to examine the teachers' readiness for the implementation.

As the implementation of learning delivery mode is encouraged within the spectrum of the Department of Education, the need to investigate the level of readiness in terms of the teachers' skills, attitude and institutional support arises. This is to ensure that the adoption of blended learning method will result to the optimum learners' growth and development. Several researches have delved into this topic. However, the results set limits to certain settings. Hence this investigation was conducted focusing on the attitude, skills and perceptions on the institutional support of the teachers in District Learning Center I of Tacloban City Division in order to determine their level of readiness to implement blended learning mode of instructional delivery.

Theoretical Framework

This study basically takes into account the Systems Theory introduced by an Austrian American theoretical biologist, L. Von. Bertalanffy, in 1932. Systems thinking is a method that focuses on understanding and addressing efficiently the complexity and dynamics of system. It emphasizes viewing problems as a system, examining them as a whole, and considering all its components, their interactions with the environment. This approach helps in achieving a comprehensive solution by considering the overall structure and dynamics of the system (Mwangeka, 2020). Also, an education production function is a relationship between school and student inputs, resulting in school outputs. To meet societal demands, education policy makers and managers must set clear objectives and select inputs and strategies for transformation into a better outcome. The process in blended learning integrates online and offline learning, which requires systems thinking for effective design, implementation, evaluation, and modifications. It involves varied groups of individuals like content experts, policy makers, technicians, teachers, and students, and diverse teaching and learning modes. The implementation necessitates learning support, communication, tracking, and personalized adjustments based on data analysis. Evaluation integrates online and offline classroom performance that mainly considers the development and personality of the students (John, 2010).

The educational communication theory is a system that accentuates the functions of educators, educational information, educational media, and learners. These components such as the educators and learners, educators and educational information, educators and educational media, learners and educational information, learners and educational media, and educational information and educational media are interrelated. Effective communication in education depends on the types of educators and learners, extent of providing educational information, and utilizing educational media effectively. Blended learning involves both face-to-face and distance communication modes, particularly internet-based ones. The design, implementation, evaluation, feedback, and improvement processes should adhere to all communication principles and elements (Nan & Li, 2005).

The theories aligned with the purpose of the study, which perceived the teachers as interconnected systems with interdependent aspects like their skills, attitudes, and institutional support. It helps identify inputs like policy support and training that improve their effectiveness in implementing blended learning. These emphasize efficient interactions between educators, educational media, and learners during planning, implementation, and assessment phases. The combination of the frameworks spur understanding of the nature of blended learning, thereby prepare teachers for its implementation in various educational environments.

Conceptual Framework

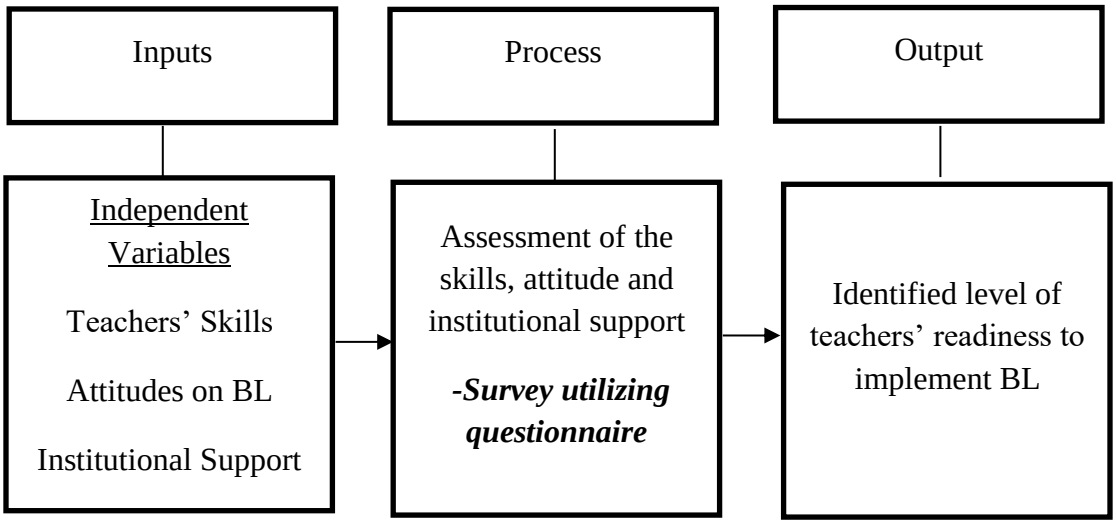

Figure 1

Paradigm of the Study

The figure shows the elements and process of the study. The framework is based on the three factors that are taken into account in determining the level of teachers' readiness to implement the blended learning approach. These factors are the independent variables, which are the teachers' skills that highlights their technical and pedagogical abilities necessary for the implementation of BL; the teachers' perception on the usefulness of the approach as well as the ease in the application, and the teachers' desire to adopt the learning delivery mode; and the institutional support that includes administrative and policy support, opportunities for professional development and the facilities and technological resources. The level of the teachers' readiness relative to the factors is determined through a survey that yielded the data which were treated.

Purpose of the Study

This aimed to identify the level of the teachers' readiness to implement the blended learning approach in the District Learning Center I of Tacloban City Division, in response to the proposed implementation of the learning delivery mode. This examined three factors that have strong influence on the success of the implementation, namely, teachers' digital skills, attitude towards

BL, and the external support provided by the institution. The results of the study were aimed at providing significant insights relative to the adoption of BL which considers the provision of professional development programs and the establishment of the external support mechanisms.

Research Questions

This study specifically sought answers to the following questions:

1. What is the digital proficiency level of the teachers relative to ease and use of multi-media resources and platforms?
2. How do teachers perceive the implementation of blended learning in the instructional delivery?
3. What is the level of support for professional development and resource acquisition and access provided by the institution for the implementation of blended learning?
4. What is the level of teachers' readiness to implement blended learning based on the collective levels of their digital proficiency, attitude towards blended learning, and institutional support?

Significance of the Study

This study offers significance to the educational policy makers, administrators, teachers, and community members, enabling them to design and implement professional development programs, establish an improved institutional support mechanism, come up with supportive and inclusive educational policies that address the needs and demands of the learners, guide and engage stakeholders to effectively respond to the challenges in blended learning. This will consequently contribute to the improvement of teaching practices and increase in student achievement, thereby create a resilient and adaptive learning environment.

Scope and Limitation

This study primarily examined the readiness of teachers to implement the blended learning method in terms of their digital proficiency, attitude towards the implementation of blended learning and the institutional support provided. This involved 140 teachers in the DLC 1 of Tacloban City Division and used 50 samples to that were randomly chosen to determine the teacher'' level of readiness. The survey method was used to gather data from the respondents. The limitation of this study includes the geographical aspect, factors affecting the level of readiness and the group of respondents. This study was conducted in one district only, which implies that results may not similar to other settings and will not represent the large group of educators. Also, there are other varying factors that affect the implementation. Hence, the influence of these factors on the readiness of the teachers may vary from the impact of other facets. Also, the data are only obtained from the group of teachers, which means the factors affecting the BL implementation may yield different results from the lens of other groups of educational stakeholders such as administrators.

LITERATURE REVIEW

The educational system deals with challenges in instructional delivery due to the impact of modernization that requires change in the educative process. The adoption of alternative learning

delivery modes, such as blended learning, have been proposed or applied in most of the institutions. Although this method has been used in other countries for years, its adoption in the Philippine institutions has not been intensified due to multiple factors that hinder the implementation. However, during and after the pandemic, many institutions used this strategy to maximize the use of modern technology in instruction and to sustain the continuity of providing education to the learners.

The prevalence of online courses paves the way for the incorporation of blended learning strategies in institutions, especially in higher education. Initially, this is intended to replace traditional in-person interactions. With the presence of efficient platforms, increased student mobility, and higher expectations for quality synchronous, in-person learning environments, more creative frameworks and strategies for learning delivery were consistently proposed (Gleason, 2018).

Researches on the integration of online learning with traditional classroom instruction has flourished. The concept of blended learning occupies a vast part in the influx of studies in the 21st century, extolling its advantages. From its simple form as combining in-person instruction with online technology-enhanced activities, it has evolved to include instruction, students, and teachers, and has been recognized for its facilitation of the learning process using both online and in-person technologies (Garrison, & Kanuka, 2004).

Blended Learning and Setup

Creating a scaffold for understanding of the blended learning context and connecting it to the real learning scenario requires exploration of its definition and process.

The concept of blended learning largely underscores the combination of online and classroom learning activities that are expected to improve student outcomes and address institutional issues. It involves the natural integration of face-to-face and online approaches utilizing technologies in order to let the learners learn at their own pace. Gardner (2004) defines blended learning as integrating online learning into an interactive scenario with the use of technology that allows live and face-to-face instruction. Gedik et al. (2012) support this idea, stating that blended learning environments (BLE) merge face-to-face (F2F) and online components. This approach enables personalized knowledge transmission, which promotes greater achievement in learning endeavors.

Holden & Westfall (2006) defined blended learning as the multi-media utilization in instruction that includes traditional classrooms and distance learning setup. This could be any combination of synchronous and asynchronous media that holistically support instruction.

According to Laster et al., (2005), blended learning is defined as courses that combine traditional in-person classroom activities with online learning in a way that is meant to be pedagogically effective, and where some in-person instruction is substituted by online instruction. It aims to integrate two distinct paradigms, which are the synchronous classroom and the asynchronous online learning environment.

The pragmatic perspective viewed blended learning (BL) as courses taught both in-person and virtually employing a variety of pedagogical strategies. These include merging of different pedagogical approaches, such as constructivism, behaviorism, and cognitive learning approaches to produce an optimal learning outcome. This also pertains to the use of CDs, films, and web-based instruction with in-person instructor-led programming and implementing a learning strategy that integrates multiple delivery modalities (both synchronous and asynchronous) in order to create the best learning experiences for the learners (Peters, 2009).

The aforementioned concepts may be succinctly summarized as the integration of various technological systems and products into the teaching-learning process while maintaining in-person instruction. Considering the idea of BL, there are undoubtedly benefits and drawbacks to the method of delivering education. The best way to use the strategy depends on certain factors. Therefore, it is essential that these will be examined to identify the areas that need to be prioritized so as to guarantee implementation readiness. It forms the basis of this most current study, which focuses on the aspects in the lens of teachers that affect the preparedness of the teachers to utilize the BL modality.

Advantages of Implementing BL

Singh (2003) emphasized that BL provides advantageous over using any single delivery medium alone. In the higher education context, BL is regarded as an evolutionary transformation (Garrison & Vaughan, 2008). With the availability of information technology systems, the different modes of distant learning and mixed online and face-to-face learning are made possible, which created a change in the traditional teaching-learning process. BL is one of these approaches that recently projects valuable attributes. This facilitates more interaction with students in large classes and ensure a more flexible learning environments in terms of economic and administrative considerations (Dempsey & Van Eck, 2007). This is just one of the areas where BL has earned significant consideration. Gedik et al. (2012) mentioned further in their study the point of McCray (2000) that the additional advantage of BLEs is their ability to support different learning styles. Also, other authors accentuated that by blending a F2F environment with an online environment, BLEs also support the community building process (Brown, 2009; Garrison & Vaughan, 2008).

BL also entails a switch from passive learning to active learning where there are shifts from a presentational format to one of active learning. This involves putting learners in situations which compel them to read, speak, listen and think, allowing them to learn and access material in a variety of modes. Based on research, blended learning increases students' chances of meeting course outcomes compared with fully online and even fully face-to-face courses. This decreases dropout rates, increases test scores and motivation on the part of students. This also improves individualization, personalization and relevance. It helps the instructor modify and adjust the learning content to suit the unique needs of different learners. This also fosters flexibility and accessibility without neglecting face-to-face contact with the students. Hancock and Wong (2012) asserted that a blended learning approach is an effective and low-risk strategy aimed at meeting the challenge of the transformational changes that technological developments bring to higher education.

The advantages of BL have been accentuated, which serve as impetus for the implementation of this approach in public school setting. However, there is also a need to take into account the challenges and drawbacks in engaging with this approach in learning.

Issues on BL Implementation

Gedik et al. (2012) cited in their study that there are challenges that impeding the utility of blending two learning environments. Studies have indicated that the main challenges of BL for students are time management, workload, course design barriers, and personal barriers that include familial and career pressures (Futch, 2005; Lupshenyuk, 2008; Tanner, 2007)

The study of Alebaikan & Troudi (2010), mentioned in the literature that one major challenge to be considered in the implementation of blended learning in Saudi universities is the adaptation of this approach in the traditional university culture where issues on the extent of comfort levels in the use of technology in education, the level of students' self-discipline, organizational and managerial support (Graham, Allen, & Ure, 2005).

Moreover, unlike the traditional approach, blended learning requires a high level of student discipline and responsiveness. A study that was conducted on freshman students argued that some students did not take online instruction seriously as it was not used by other instructors and students at the college (Al-Jarf, 2005). Certainly, taking online instruction seriously also requires students to have an adequate level of self-discipline. Also, some students might need appropriate skills training to achieve success in blended courses.

Furthermore, Alebaikan & Troudi (2010) also asserted that the course instructor may have difficulty in adopting the new learning strategy, which may be addressed by providing orientation and training programs for faculty members.

In addition, Sait et al. (2003) reported that instructors with limited skills in Internet usage were hesitant in using any technology in their teaching. In order to address this issue, extensive tutorials, support services, and a helpdesk are a sought for both students and instructors.

Also, Kaur (2013) specified various challenges from different aspects that blended learning bears. First is the technical challenge, which is not just about getting technology to work on networks, but it is on ensuring the success of the program by utilizing and supporting appropriate technologies. Technical challenges pertain to making sure that participants can successfully use the technology and resisting the urge to use technology simply because it is available (Hofmann, 2011). Another challenge is on organizational management that often considers blended learning as the correct direction for training initiatives, but it fails to understand that this is a complex process that needs thought beyond an individual program. Hence, organizational challenges include overcoming the idea that blended learning is not as effective as traditional classroom training, redefining the role of the facilitator and managing and monitoring participants' progress (Hofmann, 2011). Next is the instructional design challenges. Hoffmann (2011) accentuated that when learning technologies are introduced, attention is often paid to the technology implementation, while the design of the actual appropriate content is left with too little time and budget to create a successful program. Instructional design challenges include looking at how to teach, not just what to teach, matching the best delivery medium to the performance objectives,

keeping online offerings interactive rather than just "talking at" participants, ensuring participant commitment and follow-through with "non-live" elements and ensuring all the elements of the blend are coordinated.

Moreover, Alvarez (2020) also emphasized five roadblocks in blended-based approach which are the technological roadblock; instructional roadblock, teacher-student ratio roadblock, technical support roadblock, and collaboration roadblock. Generally, the findings suggest different layers of problems and challenges encountered in the areas of design and development, implementation, and assessment and evaluation of blended learning activities.

Szadziewska & Kujawsk (2017) also presented generally six issues gathered in three groups of their respondents highlighting the practical realization of the idea of providing materials via the ITC platform. It was revealed that the students strongly oppose the lack of the teacher's solutions to the tasks and the tests provided via the platform. Learners also disapprove insufficient quantity of the teaching and learning materials contained within the content of the courses. The second group of concern is linked to the technical problems with logging in and with downloading. Another setback in on the application used which is user-unfriendly, which may constitute a problem, like in the world of one-finger accessible mobile devices that have changed our attitudes towards what really is user-friendly or not. The third aspect manifests in the students' acceptance of the non-existence of a physical contact with other participants of the teaching-learning process that also lowers the learners' motivation to learn and their creativity in searching for knowledge.

Finally, the study of De Guzman (2015) on student perceptions on the impact of blended learning on their expository writing skills relates that survey results revealed the negative perceptions of the students on the impact of blended instruction on their writing skills development. Other respondents indicated uncertainty if they produced better writing outputs if these were done online while there are students knew it did not. Overall, respondents had either negative or uncertain responses about the impact of blended instruction, specifically online activities, on their writing skills. Perhaps this is related to how their teacher blended online activities and face-to-face classroom activities. This implies that teachers should be equipped with the needed skills in facilitating blended learning.

These are just few of the challenges that come along with the adoption of blended learning. While these instances are noted in other countries, there is a strong possibility that similar issues are experienced in the Philippine educational setting. Hence, this study specifically looked into the factors that influence the implementation of the BE in public schools, focusing on the teachers' viewpoints. This paper provides additional inputs on the perceptions, development and support needs of the teachers that will contribute to total preparedness for the implementation of blended learning.

Teachers' Readiness to Implement BL

The level of teacher readiness to adopt blended learning is influenced by their perceptions and skills. Studies suggested that determining the readiness of teachers is crucial for the successful implementation of learning modalities that integrate technology (Balajadia, 2015; DiBella et al.,

2015; Markle, 2016; Al-Awidi & Aldhafeeri, 2017; Barde, 2017; Maimun et al., 2017; Christensen & Knezek, 2017; Cuhadar, 2018; Norizan et al., 2018; Ifinedo et al., 2019).

Research indicates that school technology transitions are influenced by various interdependent factors, including individual teachers' readiness. Petko et al. (2018) confirmed that teacher readiness depends on their views and skills, and determining teacher readiness is crucial for the success of different technology integration modalities.

Teachers' readiness for technology integration is influenced by contextual factors. Studies highlight the interplay between readiness and various factors. For instance, the lack of confidence, competence, and resource accessibility affect the outcome of the blended learning approach (Bingimlas, 2009).

Buabeng-Andoh (2012), Goktas et al. (2013), Singh and Chan (2014), & Maimun et al. (2017) underscored that more specific factors like teacher confidence, workload, quality technical support, school infrastructure, budget allocation, teacher skills, access to technology, teacher practices, the structure of education systems, curriculum, and peer support system also affect the readiness of the implementation of online learning, which is has significant connection with BL.

The preparedness of the teacher has a vital role in the in the successful integration of digital technologies in classroom (Singh & Chan, 2014). Considering the fact that blended learning is proposed as new approach for education in the post-COVID-19 time, the study of Cahapay (2020) proved that it is crucial to determine the preparedness of instructors for it. Schools are moving toward adoption of blended learning as alternative technique in the era where changes brought by crisis altered the normal educational setup.

It is through this context that this study is conducted. Although previous researches assessed the teachers' readiness for blended learning transition, the researcher believes that the results may not represent the cases of teachers in other setting, division, or region. Hence, this present study aimed to determine the level of teachers' readiness relative to their digital skills, attitude towards BL implementation, and institutional support to adopt the blended learning approach as encouraged by the DepEd. The results of this study contribute to the body of knowledge underscoring the teachers' needs for an effective implementation of the BL approach.

METHODOLOGY

This section presents the research process and procedure to arrive at responses to the research problem. This includes the research design, locale of the study, sampling method, the instrument, validation of the instrument, data gathering procedure, and data analysis.

Research Design

This study used a descriptive-survey method. Descriptive research may be defined as a purposive process of gathering, analyzing, classifying and tabulating data about prevailing conditions, practices, beliefs, processes, trends and cause-effect relationships and then making adequate and accurate interpretation about such data with or without the aid of statistical methods (Calderon,

2006). Through the survey method, information are collected from the sample of individuals to describe characteristics (Check & Schutt, 2011).

In this study the researcher aimed to describe the level of readiness of the teachers based on their assessment of their digital skills, their attitude towards blended learning implementation, and their evaluation of the institutional support provided. The quantitative data collected through survey were statistically treated via mean and standard deviation

Locale of the Study

The investigation was conducted within the District Learning Center (DLC) 1 of Tacloban City Division involving the teachers from Lucio Vivero Central School, Sta. Elena Elementary School, Old Kawayan Elementary School, Tagpuro Elementary School, North Hill Arbours Integrated School, Sto. Niño Elementary School, and New Hope Elementary School. These schools have minimum technology equipment though teachers also provide their own technological tools when needed in instruction. Teachers in these schools have access to internet (at minimal interruptions), which they utilize in sourcing out instructional materials including multi-media tools. Similar to other districts and divisions, teachers are encouraged to participate in trainings and seminars for professional development and to keep themselves abreast with the educational trends. These schools also implement programs and projects in consonance to the directives of the Department of Education, aimed at meeting the learning needs of the students and providing them with meaningful learning experiences.

Sampling Method

Population and Sample

In this study, the total population is 145 teachers namely, Lucio Vivero Central School, Sta. Elena Elementary School, Old Kawayan Elementary School, Tagpuro Elementary School, North Hill Arbours Integrated School, Sto. Niño Elementary School, and New Hope Elementary School from the seven schools within the District Learning Center I. To represent the characteristics of the entire population, a sample size of 50 teachers was used, from whom data on the level of teachers' digital skills, attitudes towards blended learning implementation, and perceived institutional support were collected. From the information shared by the participants, the level of teachers' readiness to adopt the BL approach was identified.

Sampling Technique

This study used the stratified random sampling method. This is a probability sampling technique used in sample surveys, where the components of target population are divided into distinct strata based on significantly similar attributes in order to have a more adequate representation of each group for the total population (Parsons, 2017).

In this study, the strata were the seven schools. The sample of 50 teachers was decided upon and determined through proportional calculation based on the number of teachers in each school. After identifying the number of sample from each group, the researcher randomly select the required number of teachers in each school using fish bowl method.

The required number of sample, calculated based on the total number of population from each school is shown below.

Table 1

Distribution of Sample

School	Number of Sample
Lucio Vivero Central School	9
Sat. Elena Elementary School	7
Old Kawayan Elementary School	7
Tagpuro Elementary School	5
North Hill Arbours Integrated School	7
Sto. Niño Elementary School	9
New Hope Elementary School	7

Instrument

The instrument used in this study is a researcher-made survey questionnaire which was divided into 3 parts. Part 1 examines the level of teachers' technological skills and preference with a 5-point Likert scale of *Strongly Agree (5), Agree (4), Neutral (3), Disagree (4), and Strongly Disagree (1)*.

The second part of the questionnaire, elicit responses regarding the teachers' attitude and perception on the implementation of blended learning approach. Similarly, this used the 5-point Likert scale of *Strongly Agree (5), Agree (4), Neutral (3), Disagree (4), and Strongly Disagree (1)*.

To assess the level of institutional support as perceived by the teachers, Part 3 of the questionnaire delved into this matter that still used the 5-point Likert scale of *Strongly Agree (5), Agree (4), Neutral (3), Disagree (4), and Strongly Disagree (1)*.

From these responses, the composite readiness score was identified using the mean scores in each category to determine the level of teachers' readiness to implement the blended learning approach.

Validation of the Instrument

The validation of the instrument is necessary to ensure that this measures what it intends to assess, researcher-made survey questionnaire was presented to the master teachers, school administrators, and other research experts within the district for evaluation and refinement.

Upon validation, it is suggested that the responses will be calculated via mean and standard deviation. Each indicator was also evaluated and modified that guarantee that this will elicit information that the study aimed to collect.

Data Gathering Procedure

Prior to the conduct of the study, the researcher sought needed permission to conduct the survey from the different concerned offices. The researcher convened with the focal persons in the schools within the district and discuss the purpose of the study. Teacher-participants were also oriented regarding the context of the study. Then, the questionnaire was submitted for checking, validation, and improvement.

After the schedule of the survey was set, the researcher conducted the survey. The questionnaire was distributed to the participants and gave them time to accomplish the task. The completed survey questionnaires were then retrieved.

After the retrieval of the questionnaires, the simple random sampling process via fish bowl method was done. Then, the data were tallied, treated, analyzed and interpreted.

Data Analysis

The data collected through the survey were statistically treated using mean, weighted and standard deviation. This was used to describe the level of the teachers' digital skills, their attitudes and perceptions and preferences relative to the implementation of blended learning approach, and the perceived level of the institutional support. The level of teachers' readiness was identified through the computed composite mean scores derived from the weighted means in the three categories of investigation.

To determine the minimum and maximum length of the scale, the range is calculated by (5-1=4) then the difference is divided by four (5) as the greatest value of the scale (4÷5= 8). Number one (1) which is the least value of the scale was added. The length of the scale, scoring, description and interpretation guide is shown below.

Table 2

Part 1. Skills Assessment Guide

Scale	Mean Range	Description Rating	Interpretation
5	4.21 – 5.00	Strongly Agree	Highly Skilled
4	3.41 – 4.20	Agree	Skilled
3	2.61 – 3.40	Neutral	Moderately Skilled
2	1.81 – 2.60	Disagree	Limited Skills
1	1.0 – 1.80	Strongly Disagree	Unskilled

Table 3

Part II. Attitude Assessment Guide

Scale	Mean Range	Description Rating	Interpretation

5	4.21 – 5.00	Strongly Agree	Very Positive
4	3.41 – 4.20	Agree	Positive
3	2.61 – 3.40	Neutral	Neutral
2	1.81 – 2.60	Disagree	Negative
1	1.0 – 1.80	Strongly Disagree	Very Negative

Table 4

Part III. Institutional Support Assessment Guide

Scale	Mean Range	Description Rating	Interpretation
5	4.21 – 5.00	Strongly Agree	Highly Supported
4	3.41 – 4.20	Agree	Supported
3	2.61 – 3.40	Neutral	Moderately Supported
2	1.81 – 2.60	Disagree	Minimally Supported
1	1.0 – 1.80	Strongly Disagree	Not Supported

Table 5

Readiness Assessment Based on Composite Mean Score

Scale	Mean Range	Interpretation
5	4.21 – 5.00	Highly Ready
4	3.41 – 4.20	Ready
3	2.61 – 3.40	Moderately Ready
2	1.81 – 2.60	Minimally Ready
1	1.0 – 1.80	Not Ready

RESULTS AND DISCUSSIONS

This section presents the data and provides interpretation and analysis of the statistically treated data.

Teachers' Digital Proficiency and Technological Skills

The level of teacher-participants' skills, specifically in digital or technological aspect was assessed. The table that follows shows the data that aided the description of the characteristics.

Table 6
Level of Teachers' Digital Skills

Indicators		*Mean*	*SD*	*Description*	*Interpretation*
1. I have an advanced level of skills in utilizing multi-media and digital tools in teaching.		3.14	0.88	*Neutral*	*Moderately Skilled*
2. I find using online platforms such as Zoom and Google Meet in teaching comfortable and helpful.		3.04	1.21	*Neutral*	*Moderately Skilled*
3. I can effectively integrate videos, interactive simulations and other multi-media resources in giving instructions.		3.38	1.1	*Neutral*	*Moderately Skilled*

4. I frequently use zoom and google meet and other online medium of collaboration and teaching.		2.38	0.94	*Disagree*	*Limited Skills*
5. I have undergone sufficient trainings and workshops on the use of digital tools in instruction.		3.12	0.98	*Neutral*	*Moderately Skilled*
6. I can handle issues and do troubleshooting during online classes.		3.28	0.94	*Neutral*	*Moderately Skilled*
7. I regularly utilize digital tools that are useful in my teaching.		3.58	0.97	*Agree*	*Skilled*
8. I am updated on the current educational technologies and digital teaching method.		3.78	0.97	*Agree*	*Skilled*
9. I found integrating technology into instruction very encouraging.		3.94	0.71	*Agree*	*Skilled*
10. Trainings have enhanced our skills in the application of digital tools to effectively implement blended learning.		4.12	0.77	*Agree*	*Skilled*
Overall		***3.38***	***0.95***	*Neutral*	*Moderately Skilled*

***4.21-5.00**- Strongly Agree/ Highly Skilled; **3.41-4.20**- Agree/ Skilled; **2.61-3.40**- Neutral/Moderately Skilled; **1.81-2.60**-Disagree/Limited Skills; **1.0-1.80**- Strongly Disagree/Unskilled*

The data revealed that teachers have a generally average level in terms of digital applications as shown by the overall mean of 3.38 and standard deviation od 0.95 described as “neutral” and interpreted as “moderately skilled”.

The lowest mean, which is 2.38 and a standard deviation of 0.94, described as “disagree” and interpreted as” limited skills” reflect that the teachers seldom use the online platforms like zoom and google meat and other online medium of collaboration and teaching. This may be indicative of training needs and discomfort in using the online platforms due to their limited skills in utilizing the medium.

The highest mean of 4.12 with a standard deviation of 0.77, described as “agree” and interpreted as “skilled” reflect that the teachers found trainings significant in enhancing their digital skills to prepare them for the implementation of blended learning. Also, this suggests that with the development opportunities they have acquired, they were able to upgrade themselves in term of technological tools manipulation.

On the other hand, indicators 1,2,3 earned a mean ranging from 3.04 to 3.38 described as “neutral” indicating that the teachers are “moderately skilled” in the aspects of utilization of digital and multi-media resources in teaching, ease in utilizing online platforms in teaching, and integrating videos and interactive simulations in the lessons.

The need for further trainings is evinced by the computed mean for indicator 5, which reveals that the response is "neutral” and interpreted as “moderately skilled”. This implies that the extent of the teachers’ exposure to trainings and workshop affect their technological skills enhancement and that they to participate more in related workshops.

Indicators 7,8, and 9, bearing a mean that ranges from 3.58 to 3.94 reflects that the teachers have notable strength in using digital tools and keeping themselves updated with the trends.

The standard deviation for this set that ranges from 0.71 to 1.21 indicates a moderate to higher level of difference in the responses of the teachers in line with their perceptions on digital skills.

The lowest mean of 2.38, interpreted as "limited skills" in using online platforms like Zoom and Google Meet, highlights a considerable significant gap in the technological capabilities of the teachers. This is consistent with the argument of Sait et al. (2003) and Alebaikan & Troudi (2010), who mentioned that instructors with scarce level of acquisition of technological skills are hesitant to use technology. This is suggestive of targeted training and support to improve these skills among teachers.

Teachers' Attitude Towards Blended Learning Implementation

The perception and attitude of teachers towards blended learning approach is considered as one of the factors that will affect the implementation of the learning modality. Hence, in order to determine the level of readiness of the teachers in line with this aspect, their attitude and perspectives on BL was examined.

The table that follows show the responses of the teacher-participants that highlight their level of acknowledgement of the value of BL as well as the areas to be focused for improvement.

Table 7

Teachers Attitude and Perceptions on the Implementation of Blended Learning

Indicators	Mean	SD	Description	Interpretation
1. Blended learning is an effective and appropriate teaching approach across grade levels.	*2.86*	*1.03*	*Neutral*	*Neutral*
2. I perceive the implementation of blended learning as instrumental in improving learners' engagement and achievement	*3.5*	*0.86*	*Agree*	*Positive*
3. Utilizing blended learning approach will probably offer diverse advantages for my class.	*3.7*	*0.76*	*Agree*	*Positive*
4. I perceive blended learning implementation challenging.	*3.96*	*0.81*	*Agree*	*Positive*
5. Blended learning can promote effective interaction between and among students with the teachers.	*3.78*	*0.86*	*Agree*	*Positive*
6. I am willing to adopt blended learning approach in teaching my students.	*3.66*	*1.04*	*Agree*	*Positive*
7. Key factors like technological resources, teachers and learners' skills, instructional support, time constraints, and school readiness affect the implementation of blended learning approach.	*4.18*	*0.77*	*Agree*	*Positive*
8. There is a need for intensive training of teachers and other staff before implementing blended learning.	*4.28*	*0.7*	*Strongly Agree*	*Very Positive*
9. Blended learning approach could increase the workload of teachers.	*3.8*	*0.78*	*Agree*	*Positive*
10. The implementation of blended learning approach will only be successful if there is enough support and resources.	*4.32*	*0.65*	*Strongly Agree*	*Very Positive*
Overall	***3.80***	***0.83***	*Agree*	*Positive*

4.21-5.00*- Strongly Agree/ Very Positive;* ***3.41-4.20****- Agree/ Positive;* ***2.61-3.40****- Neutral/Neutral;* ***1.81-2.60****-Disagree/Negative;* ***1.0-1.80****- Strongly Disagree/Very Negative*

It is reflected in the table that the overall mean is 3.80 with a standard deviation of 0.83, described as 'Agree" and interpreted as "Positive". This implies that the teachers generally have positive attitude towards the implementation of blended learning. Although the standard deviation suggests some sort of variability in the responses, it indicates consistent perceptions among the participants.

Having the lowest mean of 2.86, described as "neutral" and interpreted as "neutral", indicator 1 suggests that teachers have expressed uncertainty on the universal effectiveness of BL and that they neutrally considered it as an effective approach in teaching across grade levels.

On the other hand, indicators 2,3,4,5,6,7, and 9, having means ranging from 3.5 to 4.18 described as "agree" and interpreted as "positive", manifest that teachers perceive BL as instrumental to the enhancement of the achievement and engagement of the learners and could yield positive learning outcomes. In addition, the means display optimism among the teachers on the potential of BL to foster interaction, collaboration, and communication among students and teachers, thus they are open and ready for the implementation of the approach.

However, the data show that teachers are likewise aware of the challenges that will come along with the implementation as they agree to indicator 4. This is supported by their perception that this will add workload as accentuated by the mean for indicator 9, which is 3.8 described as "agree" and "interpreted as "positive". This reflects that the teachers are more concerned about the additional effort and time that they have to invest in implementing the approach.

Indicators 8 and 10, with means of 4.28 and 4.32, respectively, reveal high agreement among respondents and bear a very positive expectation of the provision of professional development opportunities, which they deemed necessary for a successful implementation of the BL. The responses also suggest that the participants believe on the importance of adequate support and resources and intensive training to effectively adopt or apply BL.

The openness of the teachers for the implementation of BL aligns with the view of Gleason (2018) that underscores the significance of creative structure and framework of instruction modalities to maximize the modern technology. The teachers' positive perception on the implementation of BL depicts the necessity for innovative educational strategies.

Also, Garrison and Kanuka (2004) emphasized the advantages of BL in delivering instruction. The teachers' perspective accentuating the advantages that BL offers in improving learners' engagement and achievement as well its potential to foster interaction and collaboration is in accord to the authors' views.

Alvarez (2020) pointed out the different factors that will hamper the effective implementation of BL. One of which is the instructional and technological challenges. The responses of teachers that manifest their awareness on the need for intensive training and support echoed the viewpoint of Alvarez (2020). These are the factors, that if not adequately given, the implementation of BL will not be successful.

Assessment of the Institutional as Support Perceived by the Teachers

Institutional support and assistance from the administrators and other stakeholders is one of the facets that influence a sound implementation of the BL approach. Hence, it is imperative to examine this aspect. The proceeding table show the data reflecting the perception and assessment of the teachers on the level of support that they observed.

Table 8
Level of Institutional Support as Perceived by the Teachers

Indicators	Mean	SD	Description	Interpretation
1. The trainings provided in preparation for the implementation of blended learning is sufficient.	*2.92*	*1.04*	*Neutral*	*Moderately Supported*
2. The needed technological resources like computers and internet are accessible.	*3.42*	*1.05*	*Agree*	*Supported*
3. A strong support from my school for the implementation of blended learning is evident.	*3.9*	*0.88*	*Agree*	*Supported*
4. The developmental sessions relative to the application of blended learning approach are effective.	*3.16*	*1.03*	*Neutral*	*Moderately Supported*
5. The school is ready to provide adequate technical support to the teachers.	*3.58*	*0.92*	*Agree*	*Supported*
6. The school needs more time to prepare for the implementation of the blended learning approach.	*4.06*	*0.79*	*Agree*	*Supported*
Overall	***3.51***	***0.95***	*Agree*	*Supported*

4.21-5.00- *Strongly Agree/ Highly Supported;* ***3.41-4.20-*** *Agree/ Supported;* ***2.61-3.40-*** *Neutral/Moderately Supported;* ***1.81-2.60-*** *Disagree/Minimally Supported;* ***1.0-1.80-*** *Strongly Disagree/Not Supported*

The results reveal that the teachers generally feel the support that the institution demonstrates relative to the implementation of BL. The overall mean of 3.51, described as "agree" and interpreted as "supported" show that the teachers perceive adequate external support, although some aspects need to be focused on. The standard deviation of 0.95 generally suggests moderate level of differences in the perceptions of the teachers and that their experience significantly vary, although there is a general agreement on the adequacy of the support provided.

The lowest mean for indicator 1, which is 2.92, described as "neutral" and interpreted as "moderately supported" indicate the need for intensive training opportunities and that the professional development of the teachers must be prioritized. This goes in accord to the viewpoint of Alvarez (2020), underscoring the need for an enhanced technological skills development among teachers. The standard deviation of 1.04 indicates a wide variability in responses, reflecting that the teachers' perception on the sufficiency of trainings provided significantly vary.

The highest mean of 4.06 for indicator 6, bearing a description of "agree" and interpreted as "supported" depicts a strong agreement of the teachers on the need for ample time to prepare for the implementation. Although considerable support is observed, an intensive preparation for the implementation is needed. The generally low standard deviation suggests a strong consensus among the teachers regarding the time requirement for the adoption of the BL approach. This also implies that the teachers are aware of the complexities that come along with the utilization of the learning modality.

The means for indicators 2,3, and 5 show agreement that the institutions are ready to provide technological support in line with the adoption of BL, such as the provision of access to technological tools. This result supports the argument of Gedik et al. (2012) that addressing technical or technological issues and concerns is critical in the implementation of BL. Also, the data is indicative of the positive institutional culture and administrative backup that provides a strong framework for the adoption of BL. This coincides with the perspective of Garrison & Vaughan (2008) that supportive environment fosters an effective implementation of BL.

Indicator 4, with a mean of 3.16 and 1.03 standard deviation, displays that the teachers are uncertain of the effectiveness of the developmental sessions provided. This aligns to the viewpoint of Kaur (2013) that while some seminars, trainings or workshops are beneficial, there is a need to look into the areas that calls for improvement to effectively meet the teachers' needs.

Teachers' Readiness to Implement BL

From the results of the investigation, the level of readiness among teachers to implement the blended learning modality was identified and shown in the following table.

Table 9

Level of Teachers' Readiness to Implement Blended Learning

Areas Assessed	Weighted Mean	Composite Mean Readiness Score	Interpretation
Teachers' Digital Skills	***3.38***	***3.56***	***Ready***
Attitude Towards Blended Learning	***3.80***		
Institutional Support	***3.51***		

4.21-5.00*-Highly Ready;* ***3.41-4.20****-Ready;* ***2.61-3.40****-Moderately Ready;* ***1.81-2.60****-Minimally Ready;* ***1.0-1.80****- Not Ready*

The data reveal the teachers' preparedness to implement blended learning based on the three key areas, which are the digital skills, attitude towards blended learning and institutional support. These indicate that the teachers are generally ready to implement the blended learning modality. The composite score of 3.56 suggests a combined adequacy in the key factors.

The weighted mean for the teachers' digital skills aspect, which is 3.38, implies a moderate competence. Although their readiness is evinced, there is still a need for further trainings and professional development. This result is in accord to the argument of Buabeng-Andoh (2012) and Bingimlas (2009) that teachers need to be equipped with adequate digital skills for successful technology integration in instructional delivery.

In addition, the high mean of 3.80 for teachers' attitude towards blended learning highlights a positive and supportive disposition on the implementation of blended learning. Christensen & Knezek (2017) emphasized that a positive attitude is essential for a successful implementation and integration of technology in instruction. This encourages motivation to adapt new methodologies in learning delivery.

The 3.51 mean for institutional support aspect indicates a good level of back up from the schools. This implies that there is an adequate support system that will facilitate the implementation of BL. This therefore concords to the idea of Garrison & Vaughan (2008) and Alvarez (2020) that strong institutional support is substantial in overcoming the challenges in BL implementation.

Generally, the results reveal that teachers are typically prepared for blended learning with strong institutional support. However, ongoing development in digital skills is needed to ensure that all teachers can fully participate and deliver blended learning efficiently in order to have a more effective and prepared implementation.

CONCLUSION

Based on the analysis and interpretation of the data, the following conclusions are drawn:

1. Teachers need more developmental trainings to enhance their skills on the application or utilization of digital tools and resources to effectively implement blended learning modality.
2. Teachers have positive attitude towards the implementation of blended learning.
3. There is a generally positive institutional support for blended learning. The need for resources and trainings are addressed.
4. Teachers are generally ready to implement blended learning, but there is a need to enhance their digital skills and strengthen institutional support.

RECOMMENDATION

From the conclusions drawn it is recommended that the institutions have to prioritize the provision of professional development opportunities to enhance the skill of the teachers, which is instrumental to the effective implementation of BL. Also, institutions must ensure access and availability of adequate technological resources and technical assistance to facilitate a smooth flow of blended learning implementation. Regular feedbacking and support must be done to foster positive attitude towards blended learning among teachers.

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Benefits and Obstacles Students Undergo with Online Learning: A Review of Literature

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Abstract

This literature review investigates the advantages and disadvantages students experience with virtual learning. Although technology is not relatively new, educators no longer use materials like overhead projectors, videotapes, photocopiers, or concrete manipulatives since technology has transformed how teachers teach and learners learn. The research helped define multiple benefits for students to attend an online course. Additionally, details determined how technology impacts student learning and others involved in their lives, and an immediate change was based on a unique disease called COVID-19, which affects globally and affects students' academics after returning to normality. The findings showed that further improvements are necessary. Students and educators should use technology skillfully online. Furthermore, this literature review pointed out that virtual learning can be beneficial in any circumstance, yet technology can have drawbacks based on age range, disabilities, and easy access to technology.
Keywords: virtual learning, COVID-19, Universal Design for Learning, benefits, obstacles, technology, assessments

Introduction

The learning environment is evolving from the regular "typical" classroom to e-learning thanks to technology rapidly advancing in the world, benefiting students and educators, which has been a matter of interest in the research world for many years. This rapid education shift may lead to more academic opportunities for students. This study further analyzes how technology benefits students but encounters challenging moments for learners with disabilities during a worldwide pandemic of COVID-19 and introduces the possible solutions educators can consider when teaching online. This research aims to expand knowledge regarding virtual learning and how other parties can impact student online learning in the United States. Based on the literature, there is a lack of understanding of how technology works in the area of educators based on the research and studies conducted. Further research should explore this topic and seek to validate future research on how virtual learning impacts long-term teachers and the development of fully online learning offered for students or evaluate the different technology resources proposed from fall 2020 to fall 2024.

Review of Literature

Benefits of virtual learning on students

Online learning is familiar; it has been available and used for many years but keeps increasing due to a broader range of student educational opportunities. The authors DiFrancesca and Spencer (2022) state that during 2017- 2018, United States schools offered online courses, of which 21% were public schools and 13% were private schools, which keeps growing despite needing a complete statistic on grades K through 12. The opportunities students obtain by learning online are that they become more motivated to participate in the multimedia tools available and have access to synchronous or asynchronous overcoming some of their fears, such as face-to-face collaboration in typical classrooms (Li & Irby, 2008). According to research, students can take advantage of online courses such as Advanced Placement, foreign language, and STEM courses due to the limited choices schools may offer based on budget or limited staff (Conan, 2020). Regarding online benefits, Conan (2020) further describes how hospitalized or home-bound students can continue their education and have enough flexibility for students who are athletes or work at their own pace during the COVID-19 pandemic. Online learning can be practical for learners, providing options for those who cannot attend a usual classroom setting.

Obstacles students with disabilities encounter

Although there is abundant research on how great technology can be in education and how students benefit from it, the population of students with special needs may need help with various hindrances. He et al. (2022) describe educators lacking accessibility when presenting their lessons online, such as tools such as screen readers, screen magnifiers, speech-to-text software, closed captioning, or cluttered page layouts. Additional findings by He et al. (2022) also state that the demand for Universal Design for Learning (UDL) comprehending teachers present during online learning needs to meet the diverse students' learning necessities. However, Greer et al. (2014) highlight that although the online course is designed with features like visuals and audio to assist the learner, the tool is still not intended to correspond to the needs and challenges associated with the disability the student encounters. According to the same study, research mentioned by the Center on Online Learning and Students with Disabilities made that online teachers of students with disabilities struggle with recognizing, designing, and providing appropriate accommodations to sustain the diverse learning needs of students during blended and virtual settings (Greer et al., 2014).

A pandemic worldwide closing school doors

According to the article, the Public Health Department declared a state of emergency on January 30, 2020; lockdowns were placed on school grounds, impacting 172 countries and about 98.5% of the world's population, and China was no exception (Dong et al., 2020). A sudden educational shift during the COVID-19 pandemic conveyed shocking concerns for parents, educators, and students. For instance, about 19 million Americans lack access to the Internet, and one-fourth of Americans living in rural regions do not have Internet access (Conan, 2020). Additional factors COVID-19 created barriers for students who were online learning where some parents working from home, not being able to oversee their children, or if they needed to go back to work, the lack of technology use, or families undergoing other trauma influencing the student's ability to focus on schoolwork (Conan, 2020). A study by Klosky et al. (2022) analyzes the consequences of online learning during COVID-19 in Georgia. It determines that younger students have diminished academic performance due to a lack of wifi, technology, and digital literacy. Another resource exemplifies that during the school year of 2020-2021, 34% of the students acquired

unsatisfactory grades, and these signs were evident when the standardized test scores reported lower scores in subjects like reading and math compared to pre-pandemic (Fisher et al., 2022).

Further improvements for online learning

To overcome these challenges students encounter during online learning, educators will need to develop time to prepare students how to use the technology when it comes to online learning by providing instructions for students or parents, the type of format they will use, explaining how the technology works, and what are the student's expectations while taking online courses modeling is the key (DiFrancescam & Spencer, 2022). Another article by Li and Irby (2008) suggests that teachers can assess workshops to gather information to improve their teaching. The same study mentions that creating a type of communication with the student from the start of the course can increase student participation, assign reading activities that involve discussion and summarizing, and create a cyber-cafe forum. DiFrancescam and Spencer (2022) describe online learning as needing to enhance a feeling of community and connectedness to feel safe and learn partially having the same view as the previous article and lastly, creating activities where students are engaged and interested in learning by implementing the Universal Design for Learning (UDL) model and the 5E model (DiFrancescam&Spencer, 2022).

Conclusion

The findings reviewed that online learning illustrates two sides depending on the circumstances and age range, highlighting both sides as a success and failure for students to attend online learning. Educators must have a more profound knowledge of what online courses consist of and what strategies to use to confound challenges, fulfill student needs, and acknowledge areas that need further advancement, primarily since online learning and the usage of technology during and after COVID-19 indeed continue to be a notable interest area in the area of education.

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Empowering Amira: A UDL Journey Through Joey Pigza's World

By Dr. Sadia Warsi, Dr. Karen Fitzgerald, and Dr. Donna Wakefield

Abstract

This article presents an innovative approach to teaching Jack Gantos's novel "Joey Pigza Swallowed the Key" using Universal Design for Learning (UDL) principles. Through the lens of Amira, a fictional student with complex learning challenges, we explore how educators can create an inclusive and engaging learning environment that addresses diverse needs. By interweaving theoretical frameworks, practical strategies, and vivid classroom scenarios, this paper demonstrates how literature can be a powerful tool for promoting empathy, critical thinking, and self-reflection among students with learning differences.

Introduction: Meeting Amira and Exploring UDL

As the bell rings, signaling the start of English class, Amira slouches in her seat, her eyes darting nervously around the room. The teacher, Dr. Azra, announces they'll be starting a new novel: "Joey Pigza Swallowed the Key." Amira's heart sinks. Reading is always a struggle, and she's already feeling overwhelmed. But Dr. Azra has a plan – one that will transform not just Amira's experience, but the entire class's journey through Joey Pigza's world.

Amira represents countless students in our classrooms who grapple with a complex web of learning challenges. As a 4th grader, she struggles with reading, writing, and math. Organization is a constant battle, and processing information feels like trying to catch water with a sieve. Amira's language disorder makes expressing herself a frustrating ordeal, while her perceptual issues cause the world around her to sometimes feel like a confusing blur. Add to this her difficulties with memory, motor skills, attention, and impulse control, and the classroom can become a daunting landscape.

But Amira is more than a list of challenges. She's a bright, creative girl with a keen sense of humor and a deep well of empathy. The question is: How can we unlock her potential and help her engage with complex literature like "Joey Pigza Swallowed the Key"?

This is where Universal Design for Learning (UDL) comes into play. UDL is not just an educational framework; it's a philosophy that recognizes the unique variability of every learner (Meyer, Rose, & Gordon, 2014). By providing multiple means of engagement, representation, and action and expression, UDL creates a learning environment that's not just accessible, but genuinely inclusive.

Universal Design for Learning is grounded in the science of how people learn, recognizing that there is no such thing as an "average" learner (Rose, 2016). This aligns perfectly with the concept of neurodiversity, which posits that neurological differences like ADHD, autism, and

learning disabilities are natural variations of the human genome, not deficits to be cured (Armstrong, 2012).

For students like Amira, this perspective is revolutionary. Instead of seeing her challenges as flaws, we recognize them as unique aspects of her cognitive style. This shift in mindset is the first step in creating a truly inclusive classroom.

UDL operates on three core principles:

1. Multiple Means of Engagement: Providing diverse ways to motivate learners and sustain their interest.

2. Multiple Means of Representation: Presenting information and content in various formats to accommodate different learning styles.

3. Multiple Means of Action and Expression: Offering multiple pathways for students to demonstrate their understanding and knowledge.

These principles form the backbone of our approach to teaching "Joey Pigza Swallowed the Key" to Amira and her classmates.

Implementing UDL: A Journey Through "Joey Pigza Swallowed the Key"

As Dr. Azra introduces the novel, she employs a multi-sensory approach to pique interest and build background knowledge. She plays a short audio clip filled with chaotic sounds to simulate Joey's ADHD experience, then unveils a large, colorful mind map centered on the symbol of a key. Students contribute their ideas about what keys mean to them, creating a rich tapestry of personal connections to the central metaphor of the novel.

This introduction serves multiple UDL principles. For Amira, who struggles with auditory processing, pairing the concept of ADHD with a sensory experience helps make it more concrete. The mind map activity addresses multiple learning styles, allowing Amira to draw her response when writing proves challenging. By starting with students' personal connections, Dr. Azra is activating their background knowledge and increasing engagement – key strategies for supporting students with learning differences (Tomlinson, 2017).

As the class dives into the first chapter, Dr. Azra prepares a multi-sensory exploration, dividing the class into small groups at different sensory stations:

1. Auditory Center: Students listen to a professional narration of the chapter.

2. Visual Center: A graphic novel adaptation of the chapter is provided.

3. Tactile Center: Objects mentioned in the chapter are available for hands-on exploration.

4. Kinesthetic Center: Students act out key scenes from the chapter.

This approach is grounded in research showing that engaging multiple senses enhances learning for all students, but especially those with learning differences (Shams & Seitz, 2008). For Amira, it transforms the daunting task of reading into an immersive, engaging experience.

As the class progresses through the novel, Dr. Azra introduces a digital mind-mapping tool to help students track and analyze Joey's character development. This user-friendly software allows for multimedia inputs – perfect for Amira and other students who might struggle with traditional written character analyses. For Amira, this digital approach is a game-changer. Her difficulties with writing and organization have often made character analysis a frustrating experience. But with this tool, she can express her understanding in ways that play to her strengths, adding images, audio clips, and short text notes to the collaborative character map.

This activity exemplifies UDL's principle of multiple means of action and expression. It allows Amira to demonstrate her comprehension and analytical skills without being limited by her writing challenges. Moreover, the visual nature of the mind map supports her organizational difficulties, helping her see the connections between different aspects of Joey's character.

To help students personally connect with Joey's experiences, Dr. Azra sets up a series of stations designed to simulate aspects of ADHD:

1. Distraction Station: Students complete a puzzle while background noises play.

2. Impulse Control Challenge: Students resist eating from a bowl of candy.

3. Time Management Maze: Students navigate a maze with unexpected obstacles.

4. Emotional Rollercoaster: Students act out Joey's emotional reactions to different scenarios.

For Amira, this exercise is transformative. The hands-on nature of the tasks appeals to her, while the experiences help her develop a deeper empathy for Joey's challenges. She realizes that her own struggles with impulse control are similar to Joey's, fostering a sense of connection to the character.

As a culminating project, Dr. Azra asks students to reimagine a scene from the book from a different perspective. This open-ended project offers multiple means of engagement, representation, and expression, allowing students to choose their scene, perspective character, and mode of presentation. For Amira, Dr. Azra provides a range of supports, including a story structure graphic organizer, a word bank of descriptive terms and emotions, the option to create a comic strip instead of a traditional written story, speech-to-text software, and the choice to work individually or in pairs.

Amira decides to reimagine Joey's return to school from the perspective of his desk, creating a comic strip that insightfully conveys Joey's internal struggle. This project showcases the power of UDL to unlock student potential, allowing Amira to demonstrate her deep understanding of the text and her capacity for creative thinking in a format that suits her learning style.

The class's journey through "Joey Pigza Swallowed the Key" culminates in a classroom "Joey Pigza Fair." Students work in small groups to create interactive exhibits based on themes from the book. Amira's group focuses on the challenges and strengths associated with ADHD, creating a "focus challenge" game, a display of famous people with ADHD, and a sensory board representing Joey's experience of the world. This event allows students to showcase their learning and engage the wider school community in understanding ADHD and neurodiversity.

For Amira, it's an opportunity to shine, demonstrating her deep understanding of the novel and its themes in a hands-on, interactive format.

Fostering Independence: Empowering Amira with AI-Enhanced Learning

As the "Joey Pigza Fair" comes to a close, Dr. Azra reflects on Amira's remarkable progress and decides to introduce her to carefully selected AI-powered tools that can support her unique learning needs and foster greater independence.

Dr. Azra introduces Amira to an AI-powered reading assistant app that can scan text and offer real-time support, including text-to-speech functionality with adjustable reading speeds, an integrated dictionary for instant definitions, and sentence structure simplification. To address Amira's writing challenges, Dr. Azra introduces an AI writing assistant tool that offers grammar and spelling suggestions, sentence structure recommendations, and vocabulary enhancement suggestions.

An AI-powered organization app helps support Amira's executive functioning skills with task breakdown using natural language processing, personalized scheduling suggestions, and smart, adaptive reminders. To nurture Amira's metacognitive skills, Dr. Azra introduces an AI-powered journaling app that provides personalized reflection prompts, sentiment analysis to identify emotional patterns, and visualizations of progress over time.

As Dr. Azra introduces these AI tools, she incorporates discussions about digital literacy and the ethical use of AI, covering topics such as privacy and data security, limitations of AI and the importance of critical thinking, and potential biases in AI systems and how to mitigate them.

By thoughtfully incorporating AI tools into Amira's learning process, Dr. Azra is providing her with a bridge to greater independence. These tools address many of Amira's specific learning challenges while helping her develop digital literacy, critical thinking, and self-advocacy skills. This approach exemplifies a new frontier in Universal Design for Learning, where AI becomes a powerful tool for personalization and support. For students like Amira, it offers a path to greater autonomy and self-directed learning, opening up new possibilities for engagement with literature and learning as a whole.

Resources for AI-Enhanced Learning

To support educators in implementing AI-enhanced learning strategies similar to those used with Amira, we've compiled a list of free AI language and literacy tools that can be particularly beneficial for students with disabilities:

1. Natural Readers (https://www.naturalreaders.com/): A text-to-speech tool with natural-sounding voices, supporting multiple languages.

2. Grammarly (https://www.grammarly.com/): An AI-powered writing assistant that checks grammar, spelling, and punctuation.

3. Hemingway Editor (https://hemingwayapp.com/): Analyzes text for readability and suggests simplifications for complex sentences.

4. Rewordify (https://rewordify.com/): Simplifies complex text and provides definitions for difficult words.

5. Microsoft Immersive Reader (https://education.microsoft.com/en-us/resource/9b010288): Offers text-to-speech, syllable breaking, and parts of speech identification.

6. Read&Write for Google Chrome (https://chrome.google.com/webstore/detail/readwrite-for-google-chro/inoeonmfapjbbkmdafoankkfajkcphgd): Provides text-to-speech, word prediction, and vocabulary tools.

7. Speechify (https://speechify.com/): An advanced text-to-speech app that converts text from various sources to audio.

8. Wordtune (https://www.wordtune.com/): An AI-powered writing companion that suggests alternative phrasings and vocabulary.

9. Quillbot (https://quillbot.com/): A paraphrasing tool and grammar checker that helps with sentence structure.

10. Voice Notebook (https://voicenotebook.com/): A speech-to-text tool that transcribes spoken words into text.

11. Dyslexia Friendly (https://chrome.google.com/webstore/detail/dyslexia-friendly/miepjgfkkommhllbbjaedffcpkncboeo): A Chrome extension that modifies web pages to make text more readable for individuals with dyslexia.

12. Claro ReadAloud (https://chrome.google.com/webstore/detail/claro-readaloud/lgbheiabnimhappbnhknpchnbnoohpbg): A text-to-speech Chrome extension that reads aloud web pages and Google Docs.

13. LanguageTool (https://languagetool.org/): A multilingual grammar and spell checker that offers style suggestions.

14. Ginger Software (https://www.gingersoftware.com/): A grammar checker and writing assistant that includes a text reader and translator.

15. Cboard (https://app.cboard.io/): An Augmentative and Alternative Communication (AAC) web app that uses symbols to create meaningful sentences.

These tools can be invaluable in creating a UDL-friendly classroom environment, supporting students with various learning challenges in their engagement with literature and language arts. However, it's crucial to remember that technology should supplement, not replace, thoughtful pedagogy. Educators should carefully consider how to integrate these tools into their teaching strategies to best support each student's unique learning needs.

Conclusion

The journey through "Joey Pigza Swallowed the Key" has been transformative for Amira and her classmates. By applying UDL principles and leveraging innovative technologies, Dr. Azra has

created an inclusive learning environment that addresses diverse needs and fosters deep engagement with literature.

For Amira, this experience has been about more than just understanding a novel. It's been a journey of self-discovery, empathy development, and growing independence. The multi-sensory activities, technology-enhanced learning, and AI-powered tools have provided her with new ways to access, engage with, and express her understanding of complex ideas.

This case study demonstrates the power of UDL to transform the learning experience for students with diverse needs. By providing multiple means of engagement, representation, and action and expression, educators can create classrooms where all students can thrive. The integration of AI tools further extends these possibilities, offering personalized support that can bridge the gap between challenge and independence.

As we look to the future of inclusive education, the lessons from Amira's journey remind us of the importance of flexibility, creativity, and embracing diverse ways of learning and expressing knowledge. By doing so, we can create classrooms where every student, regardless of their learning profile, can find their voice and develop a love for literature and learning.

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Understanding Trauma Responses: Supporting War-Affected Refugee Students

By Dr. Sadia Warsi

Abstract

The experience of chronic trauma profoundly impacts a child's social, emotional, and academic functioning, particularly for those growing up in war-affected regions. Refugee students entering U.S. schools often present with a complex trauma history that shapes their ability to learn, form trusting relationships, and regulate emotions. However, these trauma responses are frequently misinterpreted as behavioral or learning disabilities, leading to ineffective and even punitive interventions. This article argues for shifting to a trauma-informed approach that contextualizes student challenges as understandable adaptations to adverse experiences. The included Complex Trauma Checklist for Educators serves as a roadmap for identifying needs across multiple domains and planning targeted supports. Grounded in the work of Dr. Arielle Schwartz, the article equips school staff with a compassionate framework for understanding and responding to the unique challenges of trauma-affected refugee students. By embodying a healing-centered approach, educators can help these vulnerable students move from merely surviving to truly thriving in their new school community.

Keywords: refugee students, trauma-informed education, complex trauma, social-emotional learning, resilience, attachment, educational accommodations

Introduction

Childhood trauma, especially for those growing up in war zones, can have profound effects on development and functioning. The chronic exposure to violence, loss, and instability can lead to complex trauma responses that impact physical, psychological, social, and academic well-being (Betancourt et al., 2012). These trauma responses are often misinterpreted as disabilities or "problem behaviors" in school, leading to misdiagnosis and ineffective interventions (Brunzell et al., 2015).

This article presents the case study of Bilal, a teenage refugee from Syria, who recently entered an American public school after escaping civil war. By applying a trauma-informed lens to understand his presentation and needs, educators can shift from a disability framework to a resilience-building approach that promotes healing and growth. The included complex trauma checklist offers a tool for assessing a student's history, attachment style, trauma symptoms, and educational impact to develop an appropriately tailored support plan.

Bilal's Story

Bilal, a 15-year-old Syrian boy, enrolled in a U.S. public school after seeking refuge with his mother and younger sister. Records indicate that Bilal spent most of his childhood in a war zone,

experiencing constant violence, destruction, and deaths of family members. His family escaped to safety, but the journey compounded the chronic stress Bilal had already endured.

To understand Bilal's needs, school personnel should start by gathering a thorough trauma history. The background checklist includes reviewing known experiences of abuse, neglect, or trauma, assessing the consistency and quality of early caregiving, determining if basic emotional and physical needs were met, and understanding the level of chaos, unpredictability, and fear in the home environment (Schwartz, 2016). This information helps create a context for making sense of Bilal's academic and social-emotional functioning.

Upon starting school, Bilal presented as quiet, withdrawn, and easily startled. He struggled to focus in class and had difficulty forming friendships. At times, he appeared disconnected, especially during triggering activities. Certain noises made him visibly shake. Rather than assuming an innate disability, teachers should recognize potential trauma reactions related to his adverse experiences (Schwartz, 2021).

The Importance of Attachment

Attachment theory provides a critical framework for understanding how early relational experiences shape development and stress responses. Secure attachment, formed through consistent and nurturing caregiving, allows children to confidently explore, learn, and form healthy relationships. However, when caregiving is disrupted by violence or absence, children adopt insecure attachment patterns characterized by anxiety, avoidance, or disorganization (Hesse & Main, 2000).

The attachment checklist guides educators to look for indicators of Bilal's attachment style that may be impacting his school functioning (Schwartz, 2016). Signs of insecure ambivalent attachment could include clinginess, fear of abandonment, or difficulty separating. Insecure avoidant attachment may manifest as excessive independence, emotional dismissiveness, or resistance to closeness. Disorganized attachment can appear as alternating anxious and withdrawn behaviors, aggression, or relational reenactments.

Teachers should respond to Bilal's attachment-related challenges by focusing on building safety and trust within the educational setting. This means providing consistency, predictability, and nurturing interactions that allow Bilal to experience an emotionally corrective relationship (Schwartz, 2021). Rather than punishing his resistance, they can approach his behavior with empathy and model healthy ways of connecting.

Trauma's Effect on Learning

In addition to relational difficulties, complex trauma impacts cognitive development and academic performance. Chronic stress and fear impair memory, attention, and executive functions essential for learning (Perfect et al., 2016). Trauma reactions like intrusive thoughts, hypervigilance, or dissociation commonly interfere with educational demands.

To determine how Bilal's trauma is impacting his learning, teachers can use the educational checklist. This includes evaluating if attachment issues are interfering with his ability to process information, complete tasks, feel successful, or engage with peers and play. They should assess for any regression, slow progress, or skill gaps that could be mistaken for learning disabilities.

Considering the role of behavior problems and emotional overwhelm is also essential (Schwartz, 2017).

By understanding trauma's effect on school functioning, educators can implement appropriate accommodations. For Bilal, this may involve providing extra time and support for assignments, chunking tasks into manageable steps, offering frequent check-ins, and using multiple modes of instruction. Incorporating movement, expressive arts, and choice into activities can help regulate his nervous system to take in new information. His teachers should also proactively identify potential triggers and either minimize them or help Bilal develop coping strategies.

Reframing Behaviors as Adaptations

Faced with behavioral or learning challenges, the instinct is often to identify the problem and implement corrective interventions. However, a trauma-informed view reframes these behaviors as adaptations that once served a protective function, even if no longer helpful in the current context (Blaustein, 2013). Fight-flight-freeze responses like aggression, withdrawal, or dissociation are seen as normal reactions to abnormal circumstances.

To support Bilal, his educators must shift from asking "What's wrong with him?" to "What happened to him?". His fearful reactions aren't overreactions, but understandable responses to perceived threat. The "spacing out" that appears like inattention may actually be dissociation that once helped him escape overwhelming emotions. While adaptive in surviving war, these responses now hinder his ability to learn and connect.

Applying this lens allows Bilal's team to create accommodations targeting root causes rather than surface behaviors. Instead of punishing his need for control, they can offer choices to build his sense of empowerment. Knowing that his learning challenges are stress responses more than processing deficits, they can prioritize emotional safety over academic content. By working from a framework of compassion and context, they are more equipped to help Bilal feel understood and supported.

Building Strengths and Resilience

Beyond addressing needs, trauma-informed education must actively nurture strengths and resilience factors (Brunzell et al., 2015). Supportive relationships, opportunities for competence-building, and social-emotional development are all protective elements that promote thriving for even the most traumatized youth (Masten, 2014).

Educators working with Bilal should use the resilience checklist to identify existing supports and positive attributes. This could include looking for signs of secure attachment, naming his unique talents and interests, and understanding his capacity for self-reflection and engaging in reparative experiences. Evaluating his access to therapeutic supports is also key (Schwartz, 2021).

With this insight, Bilal's school team can amplify his strengths throughout his educational plan. Highlighting his resilience in surviving war and escape acknowledges his profound capacities. Having him share his artistic gifts taps into his abilities and connects him to the community. Surrounding him with consistent, nurturing adults builds on his relational potential. Offering leadership roles or mentoring opportunities allows him to develop agency and a positive self-

concept. By creating repeated experiences of success and connection, the school helps Bilal construct a new narrative beyond his trauma.

Most importantly, his team can prioritize being a source of felt safety and support amidst so much change. Attuning to Bilal's needs with flexibility and care communicates acceptance of all of him, wounds and strengths alike. Over time, this secure base empowers him to take emotional risks, build new skills, and discover untapped potential (Schwartz, 2021).

Conclusion

The complex trauma checklist offers a roadmap for identifying and responding to the unique needs of students like Bilal, whose social-emotional and learning difficulties are tied to adverse experiences. By understanding trauma's impact on attachment, cognition, and behavior, schools can reframe problems as adaptations requiring sensitive support. This shift from disability to resilience-building opens up possibilities for promoting felt safety, emotional regulation, healthy connections, and academic engagement.

With a comprehensive approach that combines trauma-informed instruction, targeted skill development, esteem-building, and strong partnerships, schools have immense power to help these vulnerable students find healing and hope. In seeing the strength and promise behind each student's struggles, educators light a path from a traumatic past to a thriving future.

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Appendix: Complex Trauma Checklist for Educators

Student Background:

[ ] Review student's history for any known experiences of abuse, neglect, or repeated trauma during childhood.

[ ] Gather information about the consistency and quality of early caregiving relationships.

[ ] Assess if the student felt safe, protected, and nurtured growing up or if home life was unpredictable, chaotic, or fear-inducing.

[ ] Determine if the student's emotional and physical needs were regularly met or if they were dismissed or ignored.

Attachment Style Indicators:

[ ] Look for signs of insecure ambivalent attachment, such as clinginess, fear of abandonment, or difficulty separating from caregivers.

[ ] Observe any indications of insecure avoidant attachment, including excessive independence, dismissiveness of emotions, or resistance to closeness.

[ ] Watch for markers of disorganized attachment, such as alternating between highly anxious and withdrawn behaviors, aggressive or controlling tendencies, or reenactment of abusive dynamics.

[ ] Note any combinations or fluctuations between attachment styles

Emotional and Behavioral Manifestations:

[ ] Assess if the student struggles with shame, low self-worth, anxiety, or depression

[ ] Determine if the student has a sense of helplessness or feels like they don't belong

[ ] Observe any emotional dysregulation, such as angry outbursts, crying spells, or dissociation

[ ] Look for signs of hypervigilance, exaggerated startle responses, or mistrust of others

[ ] Note any difficulties with focus, memory, or language related to expressing experiences

Educational Impact:

[ ] Evaluate if attachment issues are interfering with the student's ability to learn, process information, or complete tasks

[ ] Determine if the student struggles to feel successful, creative, or curious in the classroom due to trauma-related blocks

[ ] Assess social relationships and if the student has trouble making friends, trusting peers, or engaging in age-appropriate play

[ ] Look for any regression, slow progress, or gaps in academic skills related to early attachment challenges

[ ] Consider if behavioral disruptions or emotional overwhelm are impeding educational growth

Resilience Factors and Resources:

[ ] Identify any nurturing relationships, either at home or school, that provide the student with acceptance, understanding, and support

[ ] Note the student's positive attributes, talents, or areas of relative strength

[ ] Assess for "earned security" - ways the student has adapted or developed more secure attachments over time

[ ] Determine the student's capacity for self-awareness, growth, and engaging in reparative experiences

[ ] Evaluate access to and willingness to participate in therapeutic supports

IEP Accommodations and Interventions:

[ ] Create a learning environment that promotes felt safety, consistency, and predictability

[ ] Offer opportunities for choice and control to counteract feelings of powerlessness

[ ] Provide emotional coaching to help label and regulate difficult feelings that arise

[ ] Practice cooperative and nurturing interactions to allow for attachment repair experiences

[ ] Implement trauma-sensitive discipline focused on connection and skill-building rather than punishment

[ ] Include counseling and social-emotional skill development services in the IEP

[ ] Collaborate with mental health providers to ensure coordinated trauma-informed care

[ ] Involve the student in educational planning and incorporate their voice and preferences

[ ] Design instruction and supports to both accommodate lagging skills and build on strengths

[ ] Maintain regular communication with caregivers and connect them to community resources as needed

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