



February 2025

NASET Special Educator e-Journal

Exceptional Teachers Teaching Exceptional Children



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Special Education Legal Alert

Perry A. Zirkel

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This month's update identifies two recent court decisions that respectively revisit (a) the IDEA's oft-overlooked state complaint process and (b) Section 504/ADA in relation to a child with misophonia. For previous monthly updates and related publications, see perryzirkel.com

On November 4, 2024, the Minnesota Court of Appeals issued an unofficially published decision in *Complaint Decision File 23-043C*, which concerned a school district challenge to an IDEA state complaint decision. After an investigation in response to the complaint of a parent of a child with disabilities, the Minnesota Department of Education issued a report finding that the local school district violated the IDEA in its announcement about an upcoming parent-teacher conference day that would provide for asynchronous remote instruction to the students. More specifically, the announcement notified all middle-school parents at the start of the 2022–23 school year that October 8 would be an asynchronous instruction e-learning day to facilitate the parent-teacher conferences. The identified violation was the failure to include, as appropriate, in these children's IEPs a provision describing how the special education and related services would be delivered during the planned distance learning. The corrective action would be to specify in the notice to parents their right to meet with their child's IEP team to discuss the planned online instruction for their child. Inasmuch as Minnesota is one of the minority of states that allow for judicial appeals of IDEA state complaint decisions, the district brought this appeal.

First, the district argued that the Department's decision was without basis in the IDEA and corollary state law.

Roundly rejecting this argument, the court concluded that the district's notice violated two IDEA regulations.

Second, the district argued that even if the notice violated relevant regulation, it was a technical violation w/o loss to the child.

Disagreeing, the court concluded that because the district violated the parents' rights, the violation was not a harmless technical violation.

Third, the district alternatively contended that the Department's investigation was fundamentally flawed by not extending to interviews of the other parents and their IEP implementers.

Also rejecting this challenge, the court concluded that the blanket nature of the announcement and the lack of factual dispute about its impact made such interviews unnecessary in this case.

This case serves as a reminder of the differences between the adjudicative process, which is the usual focus of attention to IDEA legal developments, and the state complaint process, which is, for example, (a) investigative, (b) not appealable to court in the most

states, (c) not necessarily limited to parent complainants or the individual child, and (d) stricter about procedural compliance.

On December 13, 2024, a federal district court in Tennessee issued an unofficially published decision in *Doe v. Knox County Board of Education*, which was on remand from a Sixth Circuit Court of Appeals decision summarized in my [February 2023 monthly update](#). The student in this case had a diagnosis of misophonia, which for her was a hypersensitivity to the everyday sounds of eating food and chewing gum that caused fear and anxiety, resulting in escape/avoidance actions and recurring migraines. She attended a STEM magnet high school, which left the issue of eating food and chewing gum to the discretion of each teacher on a class-by-class basis. The reasons were (a) the school's college-like culture, which emphasizes individualized teaching methods, (b) its particular facility, which does not have a cafeteria; and (c) the school's wide 9-county service area, which includes students who have long days due to transportation time. The school provided her with a 504 plan, which included preferential seating, use of noise-cancelling headphones, testing in isolation, and a "break" system. Although the teachers in about 6 of her 8 classes informally banned food and gum, she still missed a significant amount of instruction due to her condition. She and her parents sought a formal ban on food and gum in all her classes. They filed a lawsuit predicated primarily on Section 504 and the Americans with Disabilities Act (ADA) and secondarily on various other federal non-IDEA bases. The federal district court dismissed their lawsuit for failing to exhaust a due process hearing under the IDEA, but the Sixth Circuit ruled that the exhaustion requirement did not apply and sent the case back to the district court to decide the merits of their various claims. The school district filed a motion for summary judgment, which would end the case prior to the trial stage.

The parents' first Sec. 504/ADA claim was that the school engaged in intentional disability discrimination.	The court ruled that the parents failed to provide sufficient direct or indirect evidence for a reasonable jury to reasonably find intentional discrimination based on the student's disability.
Their alternative Sec. 504/ADA claim was that (a) their requested accommodation was reasonable and (b) the school's neutral policy, with the offered 504 plan, was not.	Here, the court ruled that the particular circumstances presented a sufficient factual question for a jury to determine whether the parents' proposed policy was a reasonable accommodation or, instead, a fundamental alteration of the school's program.
Their additional Sec. 504/ADA claims were for retaliation based on their disability advocacy and disability-based harassment of their daughter.	The court ruled that the parents failed to establish a jury question for the requisite elements of either a Sec. 504/ADA retaliation claim (e.g., causal connection) or a disability-

	based harassment claim (e.g., deliberate indifference).
The parents also raised federal civil liability rights claims based on alleged violations of the Constitution or federal legislation.	The court roundly rejected these Sec. 1983 claims, including 1st Amendment expression (retaliation) and 14th Amendment equal protection (discrimination), for various reasons.
The only claim that survived for a possible trial (or settlement) was the reasonable accommodation issue under Sec. 504/ADA. As a result, in the absence of intentional discrimination (including deliberate indifference), if the parties proceed to complete a trial in this case, they do not qualify for money damages. Instead, the only judicial remedy available to them is injunctive relief (e.g., a court order that is retrospective for compensatory education or, if applicable, tuition reimbursement) and/or a court order that is purely prospective (i.e., for their requested accommodation), and any resulting attorneys' fees recovery. The lesson for others is to be careful about accurately identifying students under Sec. 504/ADA and, for those that are deemed eligible, providing accommodations that are reasonable.	

Buzz from the Hub

Non-Regulatory Guidance Supporting High-Quality Preschool with Title I Funds: Guidance to Local Educational Agencies and Schools on Implementing the Required Head Start Program Performance Standards for Title I-Funded Preschool Programs

On December 18, 2024 the U.S. Department of Education (ED) and the U.S. Department of Health and Human Services (HHS) released Title I ECE program non-regulatory joint guidance. This guidance provides information for local educational agencies (LEAs) and schools on the Head Start Performance Standards that apply when the LEA or school use Title I funds to support an early education program. It supports high-quality, developmentally-informed preschool instruction based on best practices in child development and early learning.

<https://www.ed.gov/media/document/ti-hspps-guidance>

Employment Checklist for Students (Ages 14-22) with Disabilities

Getting a job is an exciting experience that takes planning. There are important documents you may need before you can get a job. There are skills you will need to prepare you for employment, and actions that you may need to take to be successful. This checklist from PEATC can help you prepare for employment.

<https://peatc.org/wp-content/uploads/2023/05/Employment-Checklist-Booklet.pdf>

Voluntary Self-assessment for States to Support Military-connected Children with Disabilities and Their Families Under the IDEA.

OSEP has released a two-part self-assessment as a voluntary technical assistance tool to assist States in supporting military-connected children with disabilities served under the Individuals with Disabilities Education Act.

<https://sites.ed.gov/idea/idea-files/voluntary-self-assessment-for-state-to-support-military-connected-children-with-disabilities-and-their-families-under-the-idea/>

Supporting Military Families

Being part of a military family can be filled with many surprises, challenges, and opportunities. Part of the military life is moving to new locations every few years or even more frequently. This can be a bit more challenging when there's a child in the family who has a disability.

Fortunately, there is help available to make the family's transition from one location to another a bit more smoothly. On CPIR's *Supporting Military Families* page you will find organizations and resources that will be of help.

<https://www.parentcenterhub.org/military/>

Sesame Workshop Extends Partnership with Dicapta to Bring Plaza Sesamo in ASL to Children Across the U.S.

Sesame Workshop and Dicapta are thrilled to announce the expansion of their partnership with the official launch of American Sign Language (ASL) versions of Plaza Sésamo content. This collaboration, supported and funded by the U.S. Office of Special Education Programs-OSEP,

aims to allow U.S. Hispanic children who are deaf or hard-of-hearing and their families enjoy the educational and entertaining content of Plaza Sésamo while practicing and improving their ASL skills.

<https://www.dicapta.com/ver2022/en/blog/15-blog-news/646-sesame-workshop-extends-partnership-with-dicapta-to-bring-plaza-sesamo-in-asl-to-children-across-the-u-s>

Using Functional Behavioral Assessments to Create Supportive Learning Environments

The Office of Special Education and Rehabilitative Services (OSERS) and the Office of Elementary and Secondary Education (OESE) have jointly released guidance on the use of functional behavioral assessments (FBAs) for all students whose behavior interferes with learning.

<https://sites.ed.gov/idea/idea-files/using-functional-behavioral-assessments-to-create-supportive-learning-environments/>

Compendium to the Delivery of Pre-employment Transition Services (Pre-ETS)

This guide from the National Technical Assistance Center on Transition (NTACT) highlights Pre-Employment Transition Services within the Continuum of VR Services. This resource was developed as a collaboration between Vocational Rehabilitation (VR) and Local Education Agencies (LEA).

<https://transitionta.org/pre-ets-compendium/>

Traveling with a Disability

The holiday season can be a time of joy, but for young adults with disabilities, it can also present unique challenges. Finding the right resources, like the sites listed below, to support them can make a big difference in ensuring they have an enjoyable and fulfilling experience.

<https://accessiblego.com/home>

<https://wheelchairtravel.org/>

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.thetechadvocate.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>



Normalizing Nonverbal Behaviors in Autistic Individuals Through Technology: A Theoretical Analysis of the Connection to AI and Technology Use in Higher Education

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Abstract

This paper explores the theoretical underpinnings of technology normalization in public spaces and educational settings for individuals with autism, focusing on the role of iPads as augmentative and alternative communication (AAC) devices in PK-12 and the adoption of artificial intelligence (AI) in higher education. Both iPads for communication and AI tools in educational settings represent a broader societal shift toward technological inclusion and accessibility, addressing unique needs in specific age groups. By situating these technologies within communication theory, inclusion theory, and technological determinism, this paper examines how they contribute to a growing culture of inclusivity and accessibility. This theoretical framework provides insight into the parallel ways in which AAC in PK-12 and AI in higher education reshape societal norms, enhancing participation and support across diverse educational settings.

Keywords: Assistive technology, artificial intelligence, communication theory, inclusion, autism spectrum disorder, higher education, PK-12 education

Normalizing Nonverbal Behaviors in Autistic Individuals Through Technology: A Theoretical Analysis of the Connection to AI and Technology Use in Higher Education

Technological advancements have consistently reshaped social and educational dynamics, from early communication tools to the integration of artificial intelligence (AI) and assistive devices in modern classrooms. For nonverbal students in PK-12 settings, augmentative and alternative communication (AAC) tools, particularly iPads, are essential for facilitating communication and participation, supporting the development of both social and academic skills. In parallel, AI in higher education has transformed how institutions approach inclusivity, offering adaptive tools that personalize learning experiences and address diverse student needs. While AAC and AI are used in distinct educational contexts, both technologies contribute to a shared societal trend: normalizing inclusive practices through the adoption of accessible and supportive technologies.

This paper examines the parallels between AI applications in higher education and AAC tools in PK-12, proposing that both serve as critical agents of inclusivity by addressing unique educational needs. For PK-12 students, AAC devices enable nonverbal individuals to express themselves, participate actively in classroom activities, and socially engage with peers—overcoming barriers that would otherwise limit their access to inclusive education (Delehanty et al., 2018; Koegel et al., 2019). In higher education, AI tools like intelligent tutoring systems and adaptive learning platforms allow for personalized learning pathways, enhancing engagement and supporting diverse learners who may not thrive within traditional educational models (Farrelly & Baker, 2023; Pisica et al., 2023). By exploring these technologies together, this paper underscores how assistive tools designed for specific needs in different educational settings collectively contribute to the normalization of inclusive practices across the educational spectrum.

Through the application of communication theory, technological determinism, and inclusion theory, this paper develops a theoretical framework that clarifies how these technologies support both individual learning and broader societal shifts toward inclusivity. This framework contributes to a nuanced understanding of how AAC and AI tools foster inclusivity by redefining acceptable forms of communication and learning, facilitating greater participation in both public spaces and educational environments. By analyzing the processes that drive the adoption and normalization of assistive technology and AI, this paper highlights their potential to enhance participation and accessibility across age groups and learning environments.

Theoretical Framework

Communication Theory and Nonverbal Communication

At the core of this paper is the application of communication theory to the challenges faced by nonverbal autistic individuals. Communication theory, particularly its focus on nonverbal forms of communication, provides a lens through which we can understand how assistive technologies function as communication tools. Nonverbal communication, as theorized by Birdwhistell (1970), encompasses gestures, facial expressions, and other forms of non-linguistic expression. For autistic individuals, these nonverbal cues are often impaired, requiring alternative forms of expression (Delehanty et al., 2018).

The introduction of iPads as assistive devices aligns with augmentative and alternative communication (AAC) theory, which posits that nonverbal individuals can use tools to replace or augment spoken communication (Koegel et al., 2019). This theoretical approach emphasizes that communication is not restricted to verbal language but can occur through technological mediation. The normalization of iPads in public spaces, therefore, represents a shift in societal understanding of communication, broadening the scope to include mediated forms of expression.

Technological Determinism and Assistive Technology

Technological determinism, a theory that suggests technology shapes social structures and cultural values, provides a framework for understanding the increasing acceptance of iPads in public spaces for autistic individuals. As technologies like iPads become more pervasive, they not only serve as tools for communication but also reshape societal norms regarding what is considered acceptable behavior in public (Hall et al., 2019).

From a theoretical perspective, the widespread adoption of iPads for communication by nonverbal autistic individuals reflects a deterministic view in which technology alters the social landscape. Rather than technology being passively adopted, it actively transforms public spaces, making them more inclusive for those who rely on assistive communication. The theory of technological determinism thus explains how iPads are not just tools but agents of social change, normalizing nonverbal behaviors in a way that traditional communication methods cannot.

Inclusion Theory and Social Integration

Inclusion theory, particularly as it relates to education and social participation, is essential for understanding the broader impact of assistive technologies and AI. Social inclusion theory posits that individuals with disabilities must be provided with the tools and opportunities to fully participate in society (Southworth et al., 2023). In this framework, technology is seen as a critical enabler of inclusion, allowing individuals who are otherwise marginalized to engage with their communities.

The use of iPads by autistic individuals in public spaces is a manifestation of inclusion theory, in which the technology serves as a mediator between the individual and their environment, facilitating participation that would otherwise be hindered by communication barriers (Delehanty et al., 2018). Similarly, the integration of AI in higher education reflects the application of inclusion theory, as AI tools are used to adapt learning environments to the needs of diverse learners, including those with disabilities (Pisica et al., 2023). In both cases, technology serves as a bridge to inclusivity, transforming previously exclusive spaces into ones that accommodate a wider range of participants.

The Normalization Process: AI and Higher Education

The normalization of AI in higher education can be understood through the lens of diffusion of innovations theory, as introduced by Rogers (2003). This theory describes how new ideas and technologies spread through a population, becoming integrated into mainstream practices. In higher education, AI is moving through the stages of diffusion, from early adoption by forward-thinking institutions to broader acceptance as a standard tool for teaching and learning (Farrelly & Baker, 2023).

AI technologies, such as intelligent tutoring systems and adaptive learning platforms, are now recognized as essential components of modern education. According to Pisica et al. (2023), AI enhances the ability of institutions to personalize learning experiences, providing tailored support to students who may struggle in traditional educational settings. This personalization process mirrors the use of iPads for autistic individuals, where technology is adapted to the unique needs of the user. The diffusion of AI in higher education follows a similar trajectory as the adoption of assistive technologies, with both being initially viewed as supplementary but eventually becoming integral to inclusive practices.

Applications of Theoretical Framework

Assistive Technology as a Communication Tool

Applying communication theory, technological determinism, and inclusion theory offers a comprehensive view of how AI in higher education and AAC in PK-12 foster inclusive practices in educational settings. These frameworks illuminate how assistive and adaptive technologies address distinct needs while contributing to a broader societal trend toward inclusivity and accessibility.

Communication Theory and Nonverbal Communication

Central to this analysis is communication theory, which provides insight into the challenges faced by nonverbal students with autism and the role of assistive technologies in addressing these barriers. Communication theory, especially its focus on nonverbal forms, allows for an understanding of how tools like AAC devices serve as critical aids for communication. Birdwhistell's (1970) theory on nonverbal communication emphasizes gestures, facial expressions, and other non-linguistic forms of expression, which are often impaired in individuals with autism, necessitating alternative modes of communication (Delehanty et al., 2018).

AAC devices, such as iPads, align with augmentative and alternative communication (AAC) theory, which posits that nonverbal individuals can utilize tools to replace or supplement spoken communication (Koegel et al., 2019). This theoretical approach expands the definition of communication beyond verbal language, highlighting that it can also occur through technological mediation. The normalization of AAC devices in public and educational spaces reflects a shift in societal perception, broadening the scope of communication to include mediated forms that facilitate expression for nonverbal individuals.

Technological Determinism and the Role of Assistive Technology

Technological determinism offers a framework for understanding the acceptance of iPads and similar AAC devices in PK-12, showing how these technologies reshape societal expectations for communication in public and educational settings. Technological determinism posits that technology itself drives social structures and cultural values, influencing behaviors and norms in significant ways. As AAC tools become more prevalent, they actively transform public perceptions, establishing new norms around acceptable communication methods (Hall et al., 2019).

From a deterministic perspective, the widespread adoption of AAC devices by nonverbal students with autism illustrates how technology does more than merely facilitate communication; it also reshapes the social landscape, making public and educational spaces more inclusive for those who rely on assistive communication. AAC devices thus function as agents of social change, facilitating a shift in how nonverbal communication is perceived and valued within educational contexts.

Inclusion Theory and Social Integration

Inclusion theory, particularly as it relates to education and social participation, is essential for understanding the broader impact of assistive technologies and AI. Inclusion theory asserts that individuals with disabilities should be equipped with the tools and opportunities necessary for full societal participation (Southworth et al., 2023). Within this framework, technology is recognized as a critical enabler of inclusion, allowing individuals who might otherwise be marginalized to engage more fully with their communities.

The use of AAC devices by nonverbal students with autism is a practical application of inclusion theory. These technologies act as mediators between individuals and their environments, facilitating participation that would otherwise be hindered by communication barriers (Delehanty et al., 2018). Similarly, the integration of AI in higher education reflects the principles of inclusion theory, as AI tools enable adaptive learning environments that accommodate the needs of diverse learners, including those with disabilities (Pisica et al., 2023). In both cases, technology serves as a bridge to inclusivity, transforming previously exclusive educational spaces into inclusive ones that support a wider range of participants.

The Normalization Process: AI in Higher Education

The normalization of AI in higher education is further elucidated by diffusion of innovations theory, as introduced by Rogers (2003). Diffusion of innovations theory describes the stages through which new ideas and technologies are adopted and integrated into mainstream practices. AI in higher education has progressed through these stages, moving from early adoption by pioneering institutions to broader acceptance as a standard tool for enhancing teaching and learning (Farrelly & Baker, 2023).

AI technologies, including intelligent tutoring systems and adaptive learning platforms, are now recognized as essential components of modern education. According to Pisica et al. (2023), AI enables institutions to personalize learning experiences, providing tailored support to students who may struggle in traditional settings. This process of personalization mirrors the use of AAC devices for nonverbal students in PK-12, where technology is adapted to meet the unique needs of each individual. The normalization of AI in higher education, much like AAC in PK-12, reflects a broader societal acceptance of these technologies as integral to inclusive practices.

Discussion

The comparison between AI in higher education and AAC in PK-12 illustrates how each technology addresses specific needs within its educational context while contributing to a broader societal movement toward inclusivity. In higher education, AI is increasingly utilized to personalize learning experiences, providing adaptive content and resources that support students from diverse backgrounds with varying learning needs. AI-driven tools, such as intelligent

tutoring systems and adaptive learning platforms, enable institutions to tailor educational pathways to individual students, enhancing engagement, retention, and academic success. Farrelly and Baker (2023) highlight that AI is not only improving personalized learning experiences but also expanding institutions' reach, supporting students who may have struggled within traditional educational models. This personalization process aligns with inclusive educational practices, making higher education more accessible and responsive to diverse learners.

Conversely, in PK-12 settings, AAC tools play a fundamental role in supporting nonverbal students, particularly those with autism and other communication disabilities, by enabling essential communication and social interaction. Enhanced with AI capabilities, AAC devices allow nonverbal students to express themselves, interact with peers and teachers, and actively participate in classroom activities. By bridging communication gaps, AAC tools enable these students to overcome barriers that would otherwise limit their educational and social experiences. This aligns closely with inclusion theory, which advocates for educational environments that support all students in actively participating and succeeding, regardless of communication methods or abilities (Delehanty et al., 2018; Koegel et al., 2019).

Although their applications differ, both AI in higher education and AAC in PK-12 serve to normalize inclusive practices within their respective educational settings. The integration of these technologies fosters a shift in societal perceptions of accessibility, broadening what is recognized as acceptable and effective communication and learning. Both AI and AAC tools are now considered essential rather than supplementary resources, thereby transforming educational environments to better support students with diverse needs. This evolution aligns with technological determinism, which posits that technology influences and reshapes social norms. As these tools become normalized within educational settings, they not only enhance accessibility but also contribute to a redefined societal understanding of inclusivity in education (Hall et al., 2019).

The diffusion of innovations theory provides further insight into the normalization processes for both AI and AAC. In PK-12 classrooms, AAC devices have transitioned from specialized tools to standard resources, transforming exclusive spaces into inclusive environments where nonverbal communication is recognized and valued. Similarly, in higher education, AI tools have moved from experimental applications to indispensable components of instructional design, enabling institutions to cater to increasingly diverse student populations. This diffusion process reflects a growing societal recognition of the benefits these technologies provide, leading to their broader acceptance and integration within educational contexts (Pisica et al., 2023; Rogers, 2003).

The parallel normalization processes of AI in higher education and AAC in PK-12 settings highlight a collective commitment to inclusivity in education. AAC tools support essential communication for nonverbal students in PK-12, fostering their active participation and social integration within classrooms. Likewise, AI tools in higher education provide personalized learning opportunities, offering students with varying needs and backgrounds the support needed to succeed academically. By examining these technologies through the lenses of inclusion theory, technological determinism, and diffusion of innovations, this paper demonstrates how technology not only meets individual learning and communication needs but also reshapes educational spaces to be more adaptive, inclusive, and equitable for all learners.

Future Impacts

The potential future impact of AI-powered AAC devices and adaptive AI tools in education is substantial. In PK-12 settings, continued advancements in AI-integrated AAC devices may enhance their functionality, allowing for more personalized and seamless communication experiences. For instance, incorporating advanced AI algorithms could enable AAC devices to predict user intentions more accurately based on contextual cues, allowing nonverbal students to communicate more fluidly in real time. Southworth et al. (2023) highlight how AI-powered prediction and adaptation capabilities are already transforming learning environments; these advancements in AAC technology could further reduce communication barriers by tailoring devices to the unique nonverbal cues and communication styles of each student, ultimately fostering more personalized and effective interactions.

In higher education, AI's influence is expected to expand beyond personalized learning into institutional decision-making processes, such as admissions, curriculum development, and career guidance (Farrelly & Baker, 2023). As AI systems become increasingly sophisticated, their role in creating data-driven insights could shape how educational pathways are designed and how support is provided to students, potentially leading to more equitable and efficient educational practices. However, these advancements also bring ethical considerations, such as the risk of bias within AI algorithms and the challenge of maintaining human oversight. Institutions will need to balance the efficiencies gained through AI with ongoing commitments to fairness, transparency, and equity, ensuring that AI-driven decisions do not inadvertently reinforce educational disparities.

A significant future consideration is the potential of AI to act as a bridge between academic learning environments and professional applications. As students in higher education develop AI-related skills, they will carry these competencies into the workforce, where AI is increasingly prevalent. This creates a cyclical effect: students who become adept at using AI in their studies may influence future AI developments in their careers, which may subsequently be reintegrated into educational settings. This feedback loop holds promise for continual improvements in educational technologies that are responsive to real-world applications.

Research Directions

Future research should focus on how AI-powered AAC and adaptive learning tools continue to evolve and shape educational environments. One area for exploration is the ethical considerations associated with these technologies, particularly in terms of data privacy, algorithmic bias, and access. Studies investigating the potential biases within AI algorithms, as well as the impact of socio-economic factors on access to AAC and AI tools, are essential to ensure these technologies support equitable outcomes.

In the PK-12 context, longitudinal studies could explore the long-term psychological, social, and educational impacts of AAC devices on students with autism and other nonverbal communication needs. Research examining how these devices influence students' identity development, relationships with neurotypical peers, and academic engagement would provide valuable insights into the broader implications of AAC technology (Delehanty et al., 2018). Additionally, examining how AI advancements could enhance the predictive capabilities of AAC

devices would help educators and developers better understand how to facilitate smoother, contextually relevant communication for nonverbal students.

In higher education, longitudinal studies on the effects of AI integration on student success, engagement, and retention are crucial to understanding the full impact of these tools over time. Investigating potential drawbacks, such as whether an over-reliance on AI tools might impact students' critical thinking and problem-solving abilities, would provide a more nuanced understanding of AI's role in higher education. Ethical considerations, especially regarding data privacy, algorithmic transparency, and the risk of student data exploitation, remain vital areas of research as AI continues to be integrated into educational settings (Pisica et al., 2023). Addressing these issues will be essential to establish frameworks for responsible AI use that prioritize student welfare and uphold educational integrity.

Conclusion

The normalization of nonverbal behaviors in autistic individuals using iPads in public spaces parallels the increasing acceptance of AI in higher education. Both technologies serve to break down barriers to communication and learning, promoting inclusivity and accessibility in their respective contexts. Through the application of communication theory, technological determinism, and inclusion theory, this paper demonstrates how technology can transform social norms, fostering greater participation and engagement for all individuals.

By understanding the theoretical processes that underpin the normalization of assistive technology and AI, we gain insight into how these tools not only support individuals with communication and learning challenges but also contribute to broader societal shifts toward inclusivity. As these technologies continue to develop, they hold the potential to further enhance participation and accessibility in both public spaces and educational environments.

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Exploring the Relationship Between Collaborative and Experiential Teacher Training Models and Academic Achievement for Students with Disabilities: A Literature Review

By

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Abstract

This literature review examines collaborative and experiential teacher training models and their impact on student achievement. Research supports the effectiveness of collaborative approaches like Professional Learning Communities (PLCs) and co-teaching in enhancing instructional practices. Experiential methods, including simulations, case studies, and fieldwork, increase teacher confidence in addressing diverse learning needs. The review highlights the need for further research to strengthen the evidence base and guide effective program design for inclusive education.

Keywords: collaborative learning, experiential learning, co-teaching, teacher preparation, special education teacher training, student achievement, evidence-based practices

Exploring the Relationship Between Collaborative and Experiential Teacher Training Models and Academic Achievement for Students with Disabilities: A Literature Review

In an era marked by a critical shortage of qualified educators and an increasing emphasis on inclusive education, the preparation of special education teachers demands innovative and effective approaches (Leko et al., 2024; U.S. Department of Education, 2024). Collaborative and experiential learning models have emerged as essential components of teacher preparation programs, providing aspiring educators with the knowledge, skills, and confidence to navigate the complexities of diverse learning environments (Hoaglund et al., 2014; IRIS Center & TIES Center, 2022). This literature review explores the theoretical and empirical foundations of these models, analyzes various collaborative and experiential learning approaches, and discusses their impact on student achievement. Furthermore, this review will consider the challenges and considerations inherent in implementing these approaches and identify areas for future research to enhance the effectiveness of special education teacher preparation programs.

Theoretical and Empirical Foundations

Collaborative learning theory emphasizes the importance of social interaction in constructing knowledge. Vygotsky's Zone of Proximal Development highlights the role of more knowledgeable others in scaffolding learning, a principle that applies to both students and teachers (Simply Psychology, 2024). Similarly, Kolb's experiential learning theory underscores the necessity of reflective and active engagement in learning processes (Dave, 2023). These theories inform teacher preparation programs designed to equip educators with practical, real-world skills for inclusive education (IRIS Center & TIES Center, 2022).

Empirical research supports the effectiveness of collaborative and experiential models in improving academic outcomes for students with disabilities. Studies indicate that teacher training programs incorporating collaborative approaches, such as Professional Learning Communities (PLCs) and interdisciplinary team teaching, enhance instructional practices (Hoaglund et al., 2014). Likewise, experiential methods, including simulated teaching and co-teaching practicums, increase teacher confidence and competence in addressing diverse learning needs (Sundqvist et al., 2021). Together, these models create an environment where teachers can develop the skills necessary to meet the challenges of inclusive education effectively (IRIS Center & TIES Center, 2022).

The foundation of education should rest on high-quality training for future teachers, built on a robust base of teaching strategies, psychological principles, and their application across varying levels of comprehension and age-appropriate development. However, the current reality in schools is challenging due to a significant shortage of qualified teachers in classrooms. Principals appear desperate to find educators, and districts are implementing strategies to rapidly train future teachers (Leko et al., 2024).

It is also important to emphasize that co-teaching is a valuable component of teacher education, fostering inclusion and collaboration. According to Sundqvist et al. (2021), the success of co-teaching depends on adequate planning time, strong supervisory support, and clear discussions about roles and responsibilities. Teacher education programs must prepare candidates to embrace inclusive practices and adapt to diverse needs, ultimately promoting more equitable and inclusive classrooms.

Examining Collaborative Models in Special Education Teacher Training

Educational researchers frequently discuss Professional Learning Communities (PLCs) and Communities of Practice (CoPs) as collaborative models in special education teacher training. While both models emphasize collaborative learning, their scope, structure, and purpose differ, offering complementary approaches to enhancing teacher preparation. PLCs, as defined by DuFour (2004), are groups of educators who work together to improve student learning. They focus on data analysis, problem-solving, and developing shared instructional strategies (DuFour, 2004). PLCs are often formally structured within schools and guided by specific protocols and goals (Hoaglund et al., 2014). In contrast, CoPs are more organically formed groups of people who share a passion for something and learn how to do it better through regular interaction. As described by Wenger (2011), CoPs are driven by a shared domain of interest and develop a shared repertoire of resources, experiences, and practices. They may emerge informally among

teachers, parents, and other stakeholders who share a concern for a particular student or group of students (Wenger, 2011).

The combined implications of these models for teacher training are considerable. PLCs provide a structured framework for collaborative learning and data-driven decision-making, equipping pre-service teachers with essential skills for working effectively within a school setting (Hoaglund et al., 2014; IRIS Center & TIES Center, 2022). CoPs, with their emphasis on shared passion and organic knowledge creation, offer a valuable complement to PLCs by fostering a deeper understanding of individual student needs and encouraging creative problem-solving in inclusive settings (Mortier, 2018). Integrating both PLCs and CoPs into teacher preparation programs can create a powerful synergy, providing pre-service teachers with structured collaborative experiences in PLCs to develop skills in data analysis, lesson planning, and problem-solving, while also participating in CoPs that offer a space for more nuanced and individualized support for students with disabilities. CoPs can help bridge the gap between general and special education by fostering shared understanding and a collective responsibility for student success (Mortier, 2018). They can also empower pre-service teachers to become more confident and responsive to the dynamic needs of inclusive classrooms (Mortier, 2018).

However, effectively implementing both models requires careful consideration, including clear guidance and support for both PLC participation and CoP development from teacher training programs (Hoaglund et al., 2014). Adequate time and resources are essential to ensure meaningful collaboration and knowledge sharing, and mentorship from experienced educators can further enhance the learning experience. By embracing both structured collaboration through PLCs and the organic knowledge creation of CoPs, teacher training programs can prepare pre-service teachers to be more effective and responsive educators in inclusive settings.

Experiential Learning in Special Education Teacher Training

Experiential learning is a critical component of teacher preparation programs, especially in special education, where bridging the gap between theory and practice is essential for success (Juarez & Purper, 2017). This approach provides pre-service and in-service teachers with hands-on, real-world experiences that enhance their skills, confidence, and ability to address the diverse needs of students with disabilities.

Integrating experiential learning into teacher education programs helps educators move beyond passive learning to engage with real-world scenarios actively. Juarez and Purper (2017) highlight that experiential learning fosters knowledge transfer, enabling teachers to effectively apply what they learn in the classroom. This process is essential in special education, where individualized instruction and flexible problem-solving are critical for student success. Similarly, the study by An (2019) demonstrates how community-based experiences provide future educators opportunities to interact with students with disabilities in authentic settings. This hands-on exposure deepens their understanding of disability, increases empathy, and enhances their effective implementation of inclusive practices. Types of experiential learning models include:

- **Simulations:** Simulations create controlled environments where teachers can practice behavior management, IEP development, and instructional delivery skills. These scenarios mimic real-life challenges, providing a safe space for trial and error. Juarez and Purper (2017) emphasizes the role of simulations in developing decision-making and

critical-thinking skills that are essential for special education teachers. However, the research on simulations in teacher training presents varying levels of effectiveness depending on the type of simulation employed.

- **Case Studies:** Case studies allow teachers to explore diverse instructional strategies and reflect on best practices by analyzing real or hypothetical situations. Case-based learning helps develop diagnostic skills and fosters a deeper understanding of adapting teaching to meet individual student needs (Juarez & Purper, 2017). However, the effectiveness of case studies in teacher training depends heavily on the quality of the cases and how they are facilitated. Cases should be carefully selected to represent a range of student needs and teaching contexts.
- **Fieldwork and Practicum:** Field experiences, such as student teaching or internships, offer direct exposure to classroom dynamics. Teachers collaborate with mentor educators to implement instructional strategies and receive feedback. The Community Service-Learning study highlights how fieldwork in community settings builds confidence and practical skills, preparing teachers for inclusive classroom environments (An, 2019). While all fieldwork experiences provide opportunities for practical application, the specific type of placement can drastically impact teacher development.
- **Action Research:** In action research, teachers identify a problem in their practice, implement a solution, and analyze the results. This iterative process promotes reflective practice and continuous improvement, both essential for effective special education teaching. Action research empowers teachers to become active agents of change in their classrooms. However, conducting rigorous action research in busy classroom settings can be challenging.

The literature on experiential learning highlights the need for a balance between theoretical coursework and practical experiences in teacher preparation programs. While theory provides a foundation for understanding different pedagogical approaches and disability-related issues, experiential learning allows for the application and refinement of this knowledge in real-world contexts. However, there is no clear consensus on the optimal balance between these two components. Some researchers advocate for a greater emphasis on fieldwork experiences, arguing that direct interaction with students and classrooms is crucial for developing effective teaching skills. Others emphasize the importance of a strong theoretical foundation, suggesting that pre-service teachers need a deep understanding of educational psychology, disability law, and inclusive practices before entering the classroom.

Resource constraints are a common challenge in implementing high-quality experiential learning activities. Providing adequate field placements, simulations, and mentorship requires significant financial investment and coordination between teacher training programs and schools. Addressing this challenge requires creative solutions, such as developing partnerships with community organizations to provide fieldwork opportunities or leveraging technology to create virtual simulations. Ensuring high-quality mentorship is another critical issue. Mentors need to have the expertise and time to provide individualized support to pre-service teachers. Teacher training programs can address this by providing mentors with training on effective supervision

strategies and by creating structures that allow for regular communication and feedback between mentors and pre-service teachers.

The Impact of Teacher Training Programs on Student Achievement

The existing literature highlights the growing popularity of co-teaching as a means to improve educational results for students with disabilities. However, these studies also acknowledge the need for more rigorous research to establish a solid evidence base for its effectiveness. Friend et al. (2010) point out that much of the existing literature focuses on logistical aspects of co-teaching, such as defining teacher roles and program structures, rather than directly examining its impact on student achievement. This gap in the research is echoed by Bundock et al. (2023), who observe a similar scarcity of studies evaluating the implementation and impact of co-teaching on student academic performance, particularly in secondary mathematics.

While studies focusing on program structures and teacher roles provide insights into the operational aspects of co-teaching, they offer limited evidence for its impact on student outcomes. These studies often rely on qualitative data, such as teacher interviews or observations, which may not be generalizable to other contexts. To strengthen the evidence base, future research should employ more rigorous designs, such as randomized controlled trials or quasi-experimental studies that directly measure the impact of co-teaching on student achievement while controlling for other variables.

Despite the lack of conclusive evidence, several studies suggest a positive correlation between co-teaching and various indicators of student success. Rea et al. (2002) found that students with learning disabilities in co-taught classes showed improvement in areas like report card grades and attendance compared to those in single-teacher classrooms. Wilson and Michaels (2006) surveyed 346 secondary students, both with and without disabilities, and found that they generally perceived co-teaching favorably, reporting improved grades and a better understanding of material in co-taught English classes. These findings suggest that co-teaching, while not consistently linked to measurable gains in standardized test scores, can contribute to a positive learning environment and enhance students' perceptions of their academic progress.

The inconsistency in findings regarding the impact of co-teaching on standardized test scores raises questions about the appropriateness of using these tests as the sole measure of effectiveness. Standardized tests may not capture the full range of benefits associated with co-teaching, such as improvements in student engagement, social skills, or self-esteem. Furthermore, methodological differences between studies, such as the length of the co-teaching intervention or the specific co-teaching model implemented, can contribute to variations in findings. Future research should explore a wider range of student outcomes and consider the influence of contextual factors on co-teaching effectiveness.

Some studies also shed light on some of the challenges inherent in implementing co-teaching effectively, emphasizing the crucial role of professional development in addressing these obstacles. Magiera et al. (2005) observed that in some co-taught classrooms, general education teachers tended to interact less with students with disabilities, potentially undermining the intended benefits of the model. This finding underscores the need for co-teachers to receive adequate training that clarifies their roles and responsibilities and promotes equitable student engagement.

The finding that general education teachers may interact less with students with disabilities in co-taught classrooms suggests that teacher attitudes, beliefs, and training play a crucial role in effective implementation. Pre-service and in-service professional development programs should address potential biases and misconceptions about students with disabilities and emphasize the importance of equitable student engagement. Specific training on different co-teaching models, such as team teaching, parallel teaching, and station teaching, can help co-teachers to understand their roles and responsibilities and to develop strategies for working collaboratively to meet the needs of all students.

Furthermore, professional development emerges as a critical factor in equipping teachers with the necessary skills and knowledge to implement co-teaching successfully. Bundock et al. (2023) evaluated a professional development program for secondary mathematics co-teachers in Utah, which focused on topics such as co-teaching models, growth mindset, differentiated instruction, and reflective practices. Their findings indicate that the program led to increased use of effective co-teaching strategies, improved teacher perceptions of co-teaching, and, importantly, significant academic gains for students both with and without disabilities. These results underscore the potential of well-designed professional development to play a pivotal role in maximizing the impact of co-teaching and, ultimately, improving student outcomes.

While the study by Bundock et al. (2023) provides promising evidence for the impact of professional development on co-teaching effectiveness, it is essential to consider its limitations. The study was conducted in a specific context (secondary mathematics classrooms in Utah) and may not be generalizable to other settings. The sample size and characteristics of participating teachers should be carefully examined to assess the study's external validity. Furthermore, the study's reliance on teacher self-reported data raises potential concerns about bias. Future research should employ more objective measures of co-teaching practices and student outcomes to strengthen the evidence base.

The literature on co-teaching highlights the need for ongoing research to better understand the factors that contribute to its effectiveness. Future studies should explore the impact of different co-teaching models, the role of teacher characteristics and training, and the influence of contextual factors, such as school climate and administrative support. Rigorous research designs, including experimental and quasi-experimental studies, are needed to provide more conclusive evidence for the impact of co-teaching on student outcomes.

In conclusion, Collaborative and experiential learning are vital in preparing special education teachers to effectively meet students' diverse needs in inclusive settings. These approaches foster collaborative cultures and provide authentic, hands-on experiences that align with national policies and standards. By embracing these methods, teacher preparation programs can cultivate competent and confident educators capable of navigating the complexities of inclusive education. However, it is essential to recognize and address challenges in implementing these approaches. Resource constraints, ensuring high-quality mentorship, and maintaining consistency between theory and practice are key areas that require attention. Further research is necessary to understand how teacher training programs, collaborative models, and experiential learning translate into improved student outcomes. This understanding will enable the design and implementation of more effective programs that empower teachers and promote the academic success of students with disabilities.

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10 Essential Qualities and Characteristics of Effective Special Education Teachers

Introduction

Special education teachers play a crucial role in shaping the lives of students with diverse learning needs. Their work requires a unique blend of skills, qualities, and personal characteristics to meet the challenges of the profession effectively. Beyond mastering instructional strategies, special education teachers must foster patience, empathy, and adaptability to support students with disabilities and create an inclusive learning environment. These educators must also collaborate with families, colleagues, and specialists to ensure each student receives personalized support tailored to their individual goals. Below are 10 essential qualities and characteristics of effective special education teachers, explained in detail, to highlight what makes them so impactful in the lives of their students.

1. Patience

- **Explanation:** Special education teachers often work with students who may need extra time to grasp concepts or exhibit behavioral challenges. Patience helps teachers stay calm and supportive, even in stressful situations.
- **Impact:** Patience fosters a positive and nurturing classroom environment where students feel safe to learn and grow at their own pace.

2. Empathy

- **Explanation:** Understanding the struggles, frustrations, and emotions of students with disabilities requires a deep sense of empathy. Teachers must put themselves in their students' shoes to address their needs effectively.
- **Impact:** Empathy builds trust and strengthens relationships between teachers and students, promoting emotional well-being and engagement.

3. Adaptability

- **Explanation:** Special education classrooms are dynamic, with students requiring varied teaching methods and interventions. Teachers must be flexible in adjusting lesson plans and approaches to meet individual needs.
- **Impact:** Adaptability ensures that all students receive the support they need, even when unexpected challenges arise.

4. Strong Communication Skills

- **Explanation:** Effective communication is essential for collaborating with parents, colleagues, and specialists, as well as for explaining concepts to students in ways they can understand.
- **Impact:** Clear communication ensures that everyone involved in a student's education is on the same page, fostering teamwork and consistent support.

5. Organizational Skills

- **Explanation:** Special education teachers juggle multiple responsibilities, including lesson planning, documentation, IEP management, and progress monitoring. Strong organizational skills are crucial for keeping track of these tasks.
- **Impact:** Being organized allows teachers to manage their workload efficiently and provide timely interventions for their students.

6. Creativity

- **Explanation:** Teaching students with disabilities often requires innovative strategies and materials to make learning engaging and accessible. Creativity helps teachers find solutions to unique challenges.
- **Impact:** Creative teaching methods can spark curiosity and motivation in students, leading to better engagement and academic success.

7. Collaboration Skills

- **Explanation:** Special education teachers frequently work as part of a team with general education teachers, specialists, paraprofessionals, and parents. Strong collaboration skills are essential for creating cohesive support plans.
- **Impact:** Collaborative efforts ensure that students receive well-rounded and consistent support in all areas of their education.

8. Resilience

- **Explanation:** The demands of special education can be emotionally taxing, as progress may be slow, and setbacks are common. Resilience helps teachers stay committed and positive despite challenges.
- **Impact:** Resilient teachers maintain their dedication and enthusiasm, inspiring students and fostering a culture of perseverance.

9. Knowledge of Disabilities

- **Explanation:** Effective special education teachers must have a deep understanding of various disabilities, including their characteristics, impacts on learning, and appropriate interventions.

- **Impact:** This knowledge allows teachers to design targeted strategies and provide the most effective support for each student.

10. Passion for Teaching

- **Explanation:** A genuine love for teaching and a commitment to making a difference in students' lives is a foundational quality of successful special education teachers.
- **Impact:** Passion drives teachers to go above and beyond, creating a positive and inspiring learning environment that empowers their students.

Conclusion

The qualities and characteristics of effective special education teachers extend beyond technical skills. They encompass emotional intelligence, interpersonal skills, and a deep commitment to student success. By cultivating these traits, special education teachers can overcome challenges and make a lasting impact on the lives of their students.

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