2025 Review Journal

Abstract

This Review Journal is the official annual journal for 3DA, a nationwide nonprofit advocating for individuals with developmental disabilities. This journal contains academic literature, nationwide data collection, and more; all as it pertains to 3DA's two priorities: legal rights and assistive technology.

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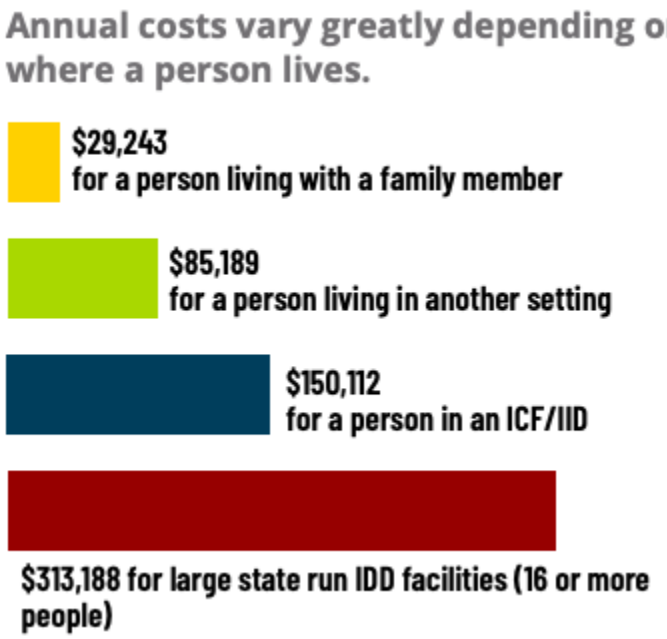
IDD Population Data and Studies

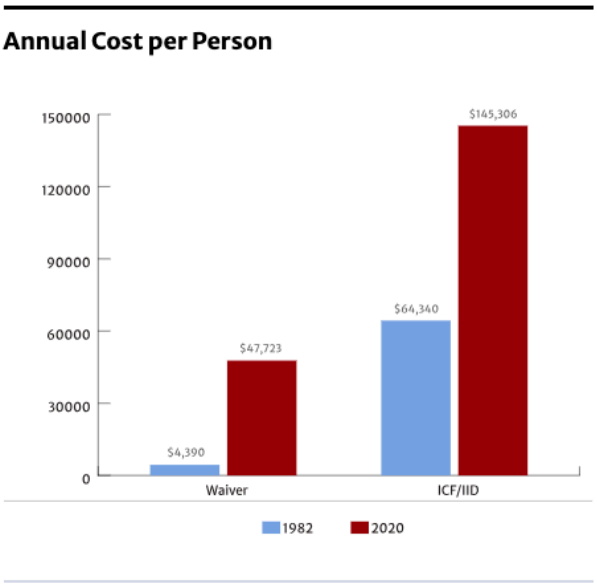
Section A: IDD Population Data

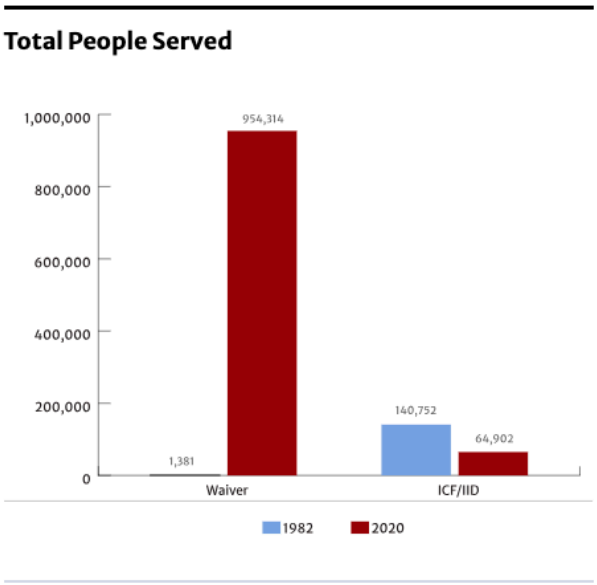
Developmental disabilities "are a group of conditions due to an impairment in physical, learning, language, or behavior areas" and include autism spectrum disorder, cerebral palsy, ADHD, intellectual disability, and more.[1] Research from IE shows that about 16 million people have IDD in the United States, or 1 in 20.[2] Further, one study found that ¼ of children were diagnosed with a developmental disability.[3] Research done by the Residential Information Systems Project (RISP) details that the cost varies on the living situation for individuals with IDD, as detailed in their chart: [4]



Section B: Medicaid

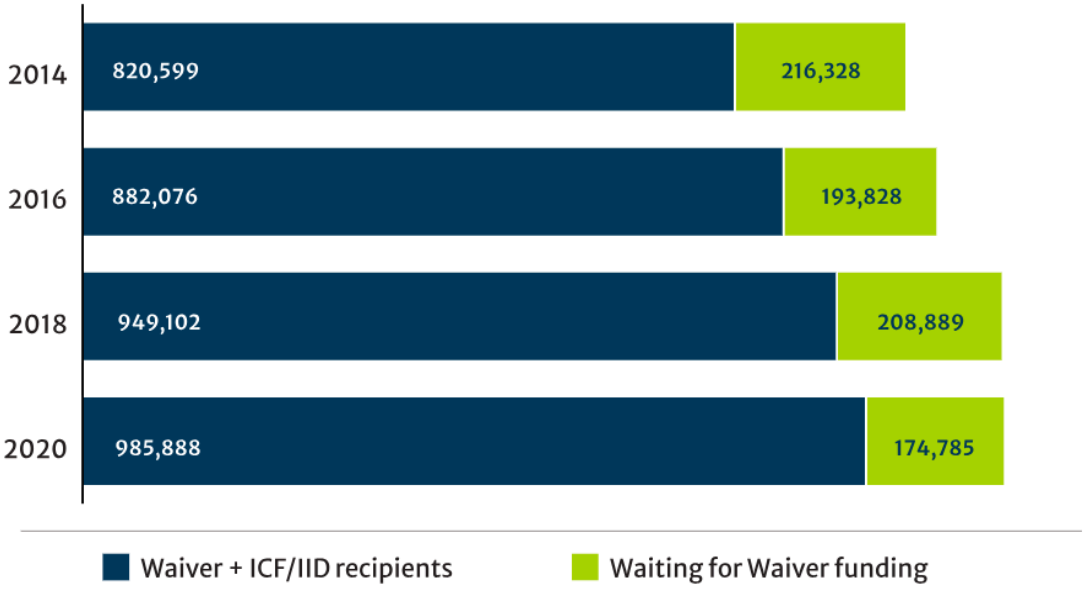
Through Medicaid, millions of eligible individuals with IDD are able to receive home and community based services (HCBS) to avoid institutionalization while engaging in more community participation.[5] Deinstitutionalization of individuals with IDD is continuing to grow in popularity as well as in cost savings. Data from RISP shows that between 1982 and 2020, institutional costs increased while HCBS funding proves to be more cost effective, as displayed in the charts below: [6]





These charts exemplify the need to maintain and increase Medicaid funding for HCBS waivers, as this is a cost effective approach that promotes independence. Furthermore, waitlists to receive HCBS services have been decreasing since 2014, as the chart (also made by RISP) on the next page displays: [7]

Total Medicaid ICF/IID and Waiver Recipients; People in Own or Family Home Waiting for Waiver Funding on June 30 of 2010 to 2020; and Percent Growth Needed to Serve Those Waiting



To add, as people with IDD living in houses of 3 or less people are more likely to receive HCBS services than people living in group homes of 4+.[8] HCBS services can include day programs, employment services, assistive technologies, and more.

Last, with provisions in HB 1, Medicaid cuts are estimated to be $911 Billion over the next decade, or 14% of total medicaid spending, which would leave 7.5 million uninsured. Many states are already anticipating the impact, with it to go into effect FY 2027.[129] Medicaid is essential for many people with IDD so that they can live the most independent and fulfilling life possible.

Self Advocacy

Section A: Skill Development and Self Direction

"Self-advocacy is a fundamental skill for individuals with disabilities that involves understanding and asserting their rights, needs, and personal strengths. It's about learning how to communicate effectively and negotiate for accommodations, services, and resources that support independence and participation."[9] It's important for individuals with IDD to develop self advocacy skills if they haven't yet. In a study, the following findings were made in regards to health and wellness in people with IDD: making healthy choices, participating in everyday activities, benefitting from natural supports (family, friends, peers), and accessing skilled professional supports (healthcare provision and payment). Natural supports are important in an individual with IDD, such as family or friends.[11] In a different study, participants chose their own volunteering and leisure roles and, with local connector support, negotiated transport, paperwork, and reminders of their needs. Results were that adults actively spoke up for what they wanted: selecting roles aligned with their interests, requesting practical accommodations, giving feedback on what did or didn't work, and telling local connectors when they were ready to try new activities.[12] Another study discusses

inequities in end of life decision making for individuals with IDD and that individuals and staff are often left unprepared for those difficult conversations.[13]

Section B: Access

Access to healthcare, jobs, and more is essential for everyone, especially people with intellectual and developmental disability (IDD). Barrington et al found that only a handful of studies described programs that taught people with IDD to speak up for their own health needs. Most advocacy arose from carers or health professionals, not the individuals themselves. Without self advocacy skills, people with IDD remain reliant on third parties, who may misunderstand or override their wishes, undermining autonomy and confidence in healthcare interactions. Where self advocacy training existed, such as tailored workshops on managing epilepsy or advance care planning, it improved engagement in decision-making and respect for patient choices.[14] Continuing, research for self advocacy in autism results in the need to modernize it to include what was formerly known as Asperger's to enhance self advocacy studies for individuals with autism.[10]

The need for self advocacy in regards to access was especially important during the Covid-19 pandemic. A qualitative study explored the shared experiences of people with disabilities during the COVID-19 pandemic through self reporting. Participants had an average age of 28.7, 16.2 years of education, an annual income of $30,770, and an average of 2.2 physical or mental health conditions, which they had lived with for at least 16 years. Prior to the pandemic, 56.2% of participants were employed, but only 40.7% remained employed during the pandemic. Findings show that participants

reported increased social isolation, feeling alienated from others, and disconnected from support networks; negative psychological impacts from returning home; and various barriers to resources such as in-home care, medical care (not COVID), mental health services, dental care, prescriptions, and transportation. Participants also reported negative mental health symptoms, emotions, thoughts, and behaviors, along with a decline in academic performance due to reduced attention, concentration, and ability to complete tasks. Key limitations of this article are that, despite stating it would offer ways to improve preparedness, it only highlighted areas needing improvement, and as a qualitative study with a limited sample, its findings are not generalizable to the broader population.[15]

Beyond Covid-19, inclusive employment and decision making is very important. A focus group in Canada identified solutions to overcome disability employment barriers as "Employer education, individualized and flexible employer procedures, and the need for more accessible supports were identified as solutions."[16] This will help support disabled employees and give those without jobs increased access to meaningful employment.

Furthermore, self advocates have had success in using their self advocacy skills while holding board member positions. A study interviewed 27 stakeholders, including five board members with intellectual disability, about their experiences serving on nonprofit boards. It identified how people with intellectual disability can meaningfully shape organizational culture and decisions when given clear pathways, individualized support, and accessible practices.Board members with intellectual disability actively self advocated by voicing their direct perspective on service design, challenging ableist assumptions, and insisting on plain language materials and decision processes, thereby shifting meeting culture from tokenism to genuine inclusion.[17] Another research article

charts a 25 year evolution of a service-based advocacy council. It shows how meaningful inclusion and scalable learning to lead frameworks can be replicated across regions to build a truly national network. It gathers first hand testimony via focus groups and interviews to uncover how dedicated spaces and places foster real self advocacy.[18]

Lastly for this section, self advocacy is an ageless practice, as the importance is emphasized for the ageing IDD population. One takeaway from the study conducted by et al is that the "education intervention has provided the participants with greater mental strength, self image, and self confidence, thereby enhancing their capacity to combat the injustices to which they feel they are exposed."[23]

Section C: Self Advocacy In Education

The rest of the research pertaining to education will be in the next chapter, Special Education, beginning on page 13. Self advocacy is essential for students, especially those with an Individualized Education Plan (IEP), such as the SMART (specific, measurable, achievable, relevant, time bound) goals being included in IEPs.[19]

A study furthers the concept of self advocacy in IEPs by describing a structured, self advocacy program led by teachers using personal goal sheets, scripts for requesting IEP accommodations, and weekly reflective checklists. Embedded in inclusive middle school classrooms, it demonstrates how these activities empower students with developmental disabilities to understand their IEPs, confidently ask for support, and achieve measurable gains in both self advocacy skills and academic performance.[20]

Going forward to higher education, one study indicated that undergraduate students with disabilities used photovoice to document moments when they felt different or needed to assert their own agency within the academic environment. By giving voice through photography and narrative, students practiced self advocacy by calling out inaccessible spaces, requesting accommodations, and reframing their own experiences as strengths rather than deficits. This process fostered empowerment and equipped them to negotiate for their rights in the university context.[21]

Moving along, a qualitative study explores parents' and advocates' views on making Irish higher education truly inclusive for students with IDD. Through three focus groups (n=22), it highlights inclusion as a legal right , the necessity of campus wide buy in (training, funding, and transition support), and the design of flexible, locally tailored programs featuring mentorship hubs, peer buddies, and clear accreditation pathways.[22] Applying elements of the design moving forward can increase inclusivity in higher education around the world. Disability identity in higher education was studied in another research paper and drew on 10 students in the United States across 3 universities. The key findings are that disability identity is complex and fluid, stigma shapes accommodation usage, self determination emerges in tension, and peer connection and representation matter.[61]

Special Education

Section A: Special Education Population Data and Research

"The Individuals with Disabilities Education Act (IDEA) is a law that makes available a free appropriate public education to eligible children with disabilities throughout the nation and ensures special education and related services to those children, supports early intervention services for infants and toddlers and their families, and awards competitive discretionary grants."[24] The chart below displays the percent changes in students served under IDEA between 2000-2022. [25,26,27]

States	Percent change in number served under IDEA, 2000-01 to 2022-23	Percent change in public school enrollment Fall 2000 to Fall 2022
United States	19.5%	5.1%
Alabama	0.1%	1.5%
Alaska	9.5%	-2.0%
Arizona	55.3%	29.0%
Arkansas	28.9%	9.6%
California	24.8%	-3.4%
Colorado	43.9%	20.2%
Connecticut	20.0%	-8.7%
Delaware	64.1%	23.4%

District of Columbia	43.3%	32.0%
Florida	17.7%	17.9%
Georgia	34.5%	21.2%
Hawaii	-16.8%	-7.7%
Idaho	31.3%	30.0%
Illinois	-0.7%	-9.6%
Indiana	20.3%	4.7%
Iowa	-0.9%	3.3%
Kansas	32.3%	3.7%
Kentucky	16.0%	-0.9%
Louisiana	-1.0%	-3.4%
Maine	0.5%	-16.0%
Maryland	2.4%	4.3%
Massachusetts	12.3%	-5.3%
Michigan	-9.8%	-16.7%
Minnesota	38.2%	1.8%
Mississippi	11.2%	-11.6%
Missouri	-7.3%	-2.2%
Montana	9.3%	-2.7%
Nebraska	29.0%	15.0%
Nevada	67.8%	42.1%
New Hampshire	2.8%	-19.0%
New Jersey	9.6%	5.4%
New Mexico	7.5%	-1.6%
New York	19.0%	-12.1%
North Carolina	16.9%	19.2%
North Dakota	29.3%	8.5%
Ohio	17.4%	-8.4%
Oklahoma	41.3%	12.5%
Oregon	16.5%	5.7%
Pennsylvania	47.5%	-6.7%
Rhode Island	-19.8%	-12.6%
South Carolina	5.9%	16.5%
South Dakota	38.1%	10.8%
Tennessee	5.1%	10.7%
Texas	43.0%	36.0%
Utah	70.1%	43.7%
Vermont	13.6%	-17.7%
Virginia	9.6%	10.1%
Washington	27.8%	8.5%

West Virginia	-6.7%	-12.3%
Wisconsin	0.0%	-6.4%
Wyoming	24.3%	2.8%

In regards to autism, researchers identified disparities in autism spectrum disorder identification and access to resources in public schools, as only 12% of students with disabilities have access to special education. Historically, white students hold higher rates of identification as having autism and receiving tailored education in general education settings in comparison to other racial and ethnic groups. This study examines a ten-year trend (2008 to 2018) in autism identification in students and resource access by race and ethnicity, analyzing data from over 6 million students aged 0 to 22. Researchers utilized data collected from the California Department of Education and Dataquest. They implemented a risk ratio (RR) to describe the likelihood of an event occurring in one group compared to another (RR > 1 indicates a higher likelihood, RR = 1 indicates equal likelihood, and RR < 1 indicates a lower likelihood). The study aims to address the following:

1. Analyze racial and ethnic differences in special education placement, autism identification, and access to special services.
2. Analyze racial and ethnic differences in general education inclusion and the services students receive with autism.
    a. Examine three indicators: Least Restrictive Environment (LRE), separate school placements, and Individualized Education Program (IEP) services.
        i. Six observed IEP services: behavioral interventions, individual counseling, language and speech therapy, mentoring, occupational therapy, and specialized academic instruction.

3. Assess the ten-year trend in autism identification by race and ethnicity.

The findings show that Black (RR=1.4) and Hispanic/Latino (RR=1.09) students were more likely to be enrolled in a special education program than other racial and ethnic groups. In contrast, Asian and Native Hawaiian or Other Pacific Islanders were less likely to be enrolled in special education programs. Hispanics(RR=0.71) and Native Hawaiian and Other Pacific Islanders students (RR=0.75) were less likely to qualify for special education services with autism as the primary concern. Black students (RR=1.6) were less likely to be included in general education settings for more than 40% of the time. Hispanic students were less likely to spend more than 80% of the time in a general educational setting. White students (RR=1.55) were more likely to spend more than 80% of their time in general education. Black students were more likely to have all six services included in IEPs, Hispanic students were more likely to have mentoring services, and White students were more likely to have counseling and other services. In the 2008/09 school year, White students (RR=2.0) were twice as likely to be identified as autistic, and Hispanic students (RR=0.5) were significantly less likely to be identified. Over the past ten years, risk ratios increased across all racial and ethnic groups except for White students. Although there is an improvement in identification among diverse ethnic groups, they still face challenges in IEP service access. Limitations of this study include the results being primarily descriptive, identification and services labels may not be defined, interpreted, or assessed in the same way across districts, schools, or states, and differences in sample sizes based on race/ethnicity.[28]

Section B: Special Education Research

Stanford researchers Lemons and Balasramanian demonstrate that students with intellectual and developmental disabilities can learn full reading skills when taught explicitly and supported with tailored adaptations (like AI). Their work shows these learners can access grade level content and become independent readers, overturning assumptions that they're limited to basic word recognition.[29]

In the study by Dr. Nikolaos et al, they examined the effectiveness of individualized structured multi-sensory educational materials in advancing reading comprehension skills in students with autism spectrum disorder and comorbid intellectual disability. The cognitive machine (educational material utilized in study) is a 3D box with interactive, dynamic learning stimuli on all surfaces, tailored with targeted instruction individualized for the student's needs. The findings show a significant and consistent improvement in students' ability to follow instructions, oral language, spatial orientation, time management, attention retention, and reasoning throughout five years of education. Students experience the most rapid improvement in emotional awareness and apply skills learned in other settings. The limitations of this study are the small participant pool, and all participants pertained to the same special secondary school.[30] Further, a comprehensive systematic review examining how physical education (PE) can be adapted to include students with various disabilities (sensory, motor, intellectual, psychological). It synthesizes studies on teaching strategies, equipment adaptations, collaborative models, and policy implications within PE. The study identifies a wide array of adapted strategies (rule modifications, assistive devices like adaptive wheelchairs, sensory support, peer tutoring, co-teaching). The benefits shown were improved physical fitness, wellbeing, social inclusion, attitudes toward disability,

and self esteem among students with special needs. This study emphasizes the need for teacher training, collaborative structures between general and special educators, individualized planning, and supportive environments. They noted persistent barriers as infrastructure gaps, limited resources, insufficient in-service training, and uneven policy implementation. The authors recommend multifaceted approaches: policy development, professional training, cross-sector collaboration, and leveraging assistive technologies and digital platforms to enhance accessibility.[31] In another study, "The findings suggest that students' attitudes toward peers with disabilities can be significantly improved with [our] intervention and offer valuable insights into how social participation among students with disabilities can be effectively promoted in inclusive education."[32]

Section C: Federal Department of Education

On March 20, 2025, President Donald Trump signed an executive order to shift control of education policy from the U.S. Department of Education (ED) and the federal government to state and local governments. The administration believes that states and local communities are in a better position to oversee education and ensure student success. Furthermore, the executive order states that academic performance has not improved since the ED was founded in 1979 and used national test scores to support its argument. The executive order calls for the closure of the ED and states that the closing will not disrupt the "delivery of services, programs, and benefits on which Americans rely." Lastly, the order states that any entity receiving ED funds should "terminate illegal discrimination obscured under the label "diversity, equity, and inclusion" or similar terms."[33] Continuing, an article by the National Women's Law Center explains

the implications of the executive order on the Department of Education, *Improving Education Outcomes by Empowering Parents, States, and Communities.* After the executive order was signed, the workforce at the Department of Education was reduced by 50% with some of the largest cuts made to the Office for Civil Rights (OCR). Reduction of OCR staff is expected to increase each worker's caseload by over 200% and over half of the regional field offices were closed. Although the order calls for the end of diversity, equity and inclusion (DEI), it cannot overturn federal laws like Section 504, which prohibits disability discrimination. Students still have a right to a discrimination free education, but the cuts to the OCR will significantly limit the office's ability to investigate complaints of rights violations.[34]

Furthermore, the Department of Education released a letter on July 22, 2025 titled *Guidance on the Use of Federal Grant Funds to Improve Education Outcomes Using Artificial Intelligence (AI)* that goes over the responsible way to utilize federal education funds to integrate AI into classrooms, with the main points being AI-Based High-Quality Instructional Materials, AI-Enhanced High-Impact Tutoring, and AI for College and Career Pathway Exploration, Advising, and Navigation.[36] Overall, there is still uncertainty in how the Federal Department of Education will operate in the future, given the circumstances and events from the administration in 2025.

Section D: Assistive Technology in Special Education

This section is only for assistive technology (AT) as it pertains to special education. For more on assistive technology, go to the next chapter on page 35.

A review of literature from 2009 to 2022 showed "advanced AT markedly enhances accessibility and active involvement for students with mobility impairments, improving their academic engagement and social integration, while limitations include the lack of AT training for teachers."[37] More specifically, another study demonstrates that providing students with tablets equipped with text-to-speech, speech-to-text, and scanning apps enables them to overcome severe decoding challenges and engage with text on their own terms. Over the course of a year, students using these modern tools matched or exceeded gains in standardized reading measures compared to peers receiving traditional instruction. Moreover, roughly half of participants and their parents reported significant boosts in confidence, independence, and motivation for all academic work.[38]

Moving along, a systematic literature review examines peer-reviewed studies from 2013 to 2023 on AT in higher education, synthesizing 133 selected papers to identify how AT has evolved, where research is concentrated, and how technologies are classified by supported disabilities. This study is about mapping the evolution and maturation of AT research for students with disabilities in higher education over the past decade. It highlights trends such as the steady rise of foundational tools such as screen readers, text-to-speech, followed by cloud platforms and, more recently, AI and personalized solutions. Finally, the review proposes a classification framework organizing AT into categories (mobile technology, software, sensor-based systems, robotics, AR) according to the disabilities they support, offering a practical resource for educators, researchers, and policymakers aiming to enhance accessibility and inclusiveness.[39]

A systematic review synthesizes studies from 2012 to 2023 on how various assistive technologies (AT) affect learning outcomes for students with disabilities in school settings. It highlights prevailing patterns, gaps, and the need for nuanced, collaborative implementation, with tablets and augmentative reality devices being the most studied

AT. The review emphasizes that successful AT integration depends on the following holistic inclusive practices: educator training, multimodal content delivery, and institutional commitment to ensure technologies complement effective teaching rather than acting as standalone fixes.[40] Further, despite growing evidence of AT, or specifically alternative and augmentative communication (AAC) benefits, most schools lack formal policies mandating their integration into special-education curricula. It notes that teachers receive minimal training on these technologies, leaving implementation largely ad hoc and teacher driven. Early pilot initiatives in some districts have begun to allocate budget lines for AT purchases and professional development, but these remain limited in scope and duration. The review emphasizes the need for coordinated policy action at both the school district and national levels to standardize AT integration.[40] Dumitru finds that policy efforts to date have focused primarily on equipment acquisition rather than on sustainable implementation strategies, leading to uneven access across schools. Key barriers include insufficient funding streams for ongoing maintenance, lack of certified AAC specialists, and absence of clear guidelines on AT selection and evaluation. The article calls for policies that mandate comprehensive teacher training, establish minimum technology standards, and require regular monitoring of AT outcomes in student IEPs.[41]

An analysis tracing shifts in autism mathematics learning (2010–2024) finds growing research on technological and personalized instruction. Early work focused on behavioral and structured approaches. By 2021–2024, studies emphasize AI platforms, interactive software, and digital tools tailored to autistic learners' profiles.[42] To add, AI AT from smarter screen readers and AAC devices to AI transcription, text-to-speech, and AI assistants are making learning and teaching more accessible for people with disabilities. The article stresses the importance of inclusive policies and co-design with

users to ensure these AI solutions comply with ADA/IDEA and truly remove, not add, barriers.[43]

Through case examples, another study shows that these tools significantly increase student autonomy, access to digital content, communication, and academic engagement. The paper also emphasizes that AI tools outperform older technologies because they adapt to user needs, interpret complex content, and provide real-time support tailored to diverse learners. Despite these benefits, the authors highlight major barriers including algorithmic bias, inconsistent accuracy, infrastructure gaps, insufficient educator training, and ethical concerns related to privacy and data security. To address these issues, the article proposes policy recommendations such as increasing funding for accessible infrastructure, mandating AI literacy training for educators, enforcing strong data protections, and requiring inclusive design standards for all AI educational tools.[116] Another study that explored AI-powered assistive technologies in K-12 classrooms serving students with intellectual and developmental disabilities (IDD) demonstrates that AI assistive technology has a strong future in special education but requires funding for teacher training and clear policies to ensure equity and ADA/IDEA compliance.[45] Further, a review analyzes 13 empirical studies (2018–2024) on AI teaching interventions for students with ASD. It groups tools into social robots, smart glasses (AR), and mobile applications, most often delivered through game based and systematic instruction to target social skills, emotion recognition, eye contact, and social communication; a few studies addressed cognitive skills or STEM. Reported outcomes were largely positive with improvements in attention, engagement, emotional labeling, and social interaction, and has been proven in other studies as well.[46,4748]

Section E: Special Education Around the World

When discussing international special education at large, The United Nations' Sustainable Development Goal 4 (SDG 4) calls for "inclusive and equitable quality education" for all by 2030, but several barriers such as limited resources, large class sizes, and a one size fits all approach are preventing true inclusion.[44] Further, "The United Nations Convention on the Rights of Persons with Disabilities (CRPD), adopted in 2006, is one of the most significant of these frameworks. Article 24 of the CRPD mandates that "States Parties shall ensure an inclusive education system at all levels and lifelong learning," requiring countries to create inclusive education systems that support children with disabilities in the most integrated setting possible."[49] With this, many countries around the world have their own strategies based on the CRPD. From the start of the 2024-2025 academic year, a number of initiatives are put in place to make schools and higher education institutions more accessible to pupils and students with disabilities, and more widely to those with special educational needs. In order to provide better care for pupils with special educational needs, 100 schooling support centers have been deployed in a number of departments from the start of the 2024-2025 school year. The role of these centers is to offer immediate and appropriate responses to the difficulties encountered by pupils, providing them with enhanced support in their educational journey. Lastly, the publication of the circular letter covered the rights of students with disabilities or disabling health conditions. This circular sets out the specific rights of students with disabilities throughout their higher education career, as part of their training and student life. It embodies a rights-based approach to disability, in line with the CRPD. For the first time, the circular has been translated into FALC, which means easy to read and understand. The aim of this initiative is to make regulatory texts more accessible and to ensure that all students and their families have

clear and easy access to their rights.[53] Another area of research is universal design for learning (UDL).[58]

Montenegro adopted the Education Reform Strategy from 2025-2035 with the following serving as their strategic goals: improving inclusiveness of education, supporting teachers through enhanced training and strengthening school teams, improving education management and financing, and modernizing school infrastructure.[50]

A common model in Austria is the integration class which is composed of subject teachers, regular students, up to five students with special educational needs and a special education teacher. The three case studies in this research paper suggest that when teachers adopt a broad perspective on their role, including responsibility for students' development as future citizens, professional development in relation to inclusive education becomes possible.[54]

Ontario, Canada provides a lot of support for children with disabilities until the age of 19. The Assistance for Children with Severe Disabilities Programme awards parents up to C$470 a month for help with medical costs, clothes, drugs, necessary equipment for the child and so on. There are also programs in place to provide rehabilitation assistance, respite care and special assistance at home; as well as some dealing with specific disabilities such as autism. The majority of children with special needs attend mainstream school. These children are offered different classes or a modified program which is specially designed by school boards. Ontario also provides assistance to help acquire assistive technology for students with disabilities.[55] In Quebec, Canada, students with disabilities are entitled to attend school up to the age of 21. The Competency-Based Approach to Social Participation (CASP-I) is for students aged 6 to 15, and has been designed primarily to meet the needs of students with moderate to

severe intellectual disabilities. The CASP-I Education Program targets the development of five competencies that enable students to acquire the knowledge and skills required for greater social participation. For young adults between the ages of 16 and 21, community living and preparing for the job market are areas of top priority. The aim of this program is the development of the knowledge, skills and attitudes that are essential for integration into today's society.[56]

Bhutan is making strides towards inclusive education for all. The success of inclusion programs heavily relies on the preparedness of educators, with many teachers reporting inadequate preparation and training for inclusivity. Despite the country having 44 inclusive schools and 2 specialized institutes for Deaf and Blind students, serving 1,236 students with disabilities, most teachers in inclusive settings are general educators with limited special education training. The Ministry of Education and Skill Development has provided professional development workshops lasting three to five days during school vacations for teachers in inclusive schools, although evaluations indicate that these programs are insufficient in equipping teachers with the necessary skills. There since have been 16 day training and educational programming.[57]

A study reviews inclusive education practices in Indian government schools, emphasizing the role of assistive technology (AT) alongside individualized programs, functional curricula, and curricular adaptations to support students with IDD. It demonstrates that AT must be embedded within individualized education programs and co-teaching models, ensuring AT is selected to match each student’s functional levels. The study also notes the importance of training and coordination among general and special educators to implement AT effectively in classrooms. Overall, it argues that strategically adopted AT, when combined with functional curricula and universal

design principles, can significantly enhance access, engagement, and independence for students with intellectual disabilities in inclusive settings. [59]

By integrating students with intellectual disabilities into a social pedagogy module, research at Rudolf Steiner University College demonstrates how prioritizing artistic and practical learning can challenge traditional academic exclusivity. The findings reveal that these diverse learning groups foster comprehensive teaching methodologies and reduce praxis shock by providing all students with more authentic and experience based preparation for professional practice.[51]

A study of 27 students across 10 institutions in Switzerland reveal that researchers and lecturers with disabilities face discrimination and barriers in their daily professional lives. The findings suggest that current inclusion efforts are often superficial, requiring a deep institutional transformation to address systemic issues like ableism and stigmatization.[52]

IDD Transition

Section A: IDD Transition Overview and Programs

The transition to adulthood is important for individuals with IDD, and many studies demonstrate that. To begin, A study of 391 U.S. parents found that awareness of adult IDD services is significantly limited, with Black, Hispanic, and low income families reporting the lowest levels of knowledge regarding complex systems like Medicaid waivers. To bridge these gaps, the authors recommend that schools and agencies provide targeted outreach and proactive engagement to ensure more equitable access to transition planning.[60]

There are currently 358 nondegree programs reported to Think College. [71] An example of a nondegree program is The Mason LIFE Program, a 4-year post-secondary comprehensive transition program for young adults with intellectual and developmental disabilities who desire a university experience in a supportive academic environment.[75] Transition programs go beyond the nondegree programs reported to Think College, including the following: The Parental Educational Advocacy Training Center[72], The Disability Champions Mentoring Network,[73] and the Carroll County Public Schools Transition Connections Academy.[74]

Participation in inclusive higher education significantly improves employment and independent living outcomes for youth with IDD, especially when programs emphasize career development and campus integration. However, systemic barriers like financial hurdles and unequal access continue to limit the availability and consistent quality of these programs nationwide.[62]

In another study, research for youth with complex communication needs is limited and narrowly focused on speech technology, leaving significant gaps in areas like employment and community participation. To address this, future studies must adopt holistic frameworks that prioritize adult transitions and the social-environmental factors shaping long term life outcomes.[63]

This study of 89 school districts in a southwestern state examined how transition education practices, such as student involvement and vocational training, relate to legal IEP compliance (Indicator 13) and post-graduation outcomes (Indicator 14). The findings revealed that while transition practices did not significantly affect compliance scores, active student participation in IEP meetings and paid work experience during high school were strongly associated with higher post school employment and education rates. Ultimately, the research suggests that future funding and programming should prioritize hands on vocational experiences and student led planning to effectively improve long term outcomes for students with disabilities.[64]

This qualitative study uses Disability Studies in Education to highlight how inclusive postsecondary education students navigate the tension between wanting to be treated the same as atypical students and the need for accessible instruction. The findings emphasize that while hands on, empathetic teaching fosters agency, persistent ableist

norms and inaccessible course designs often make students feel intrusive rather than valued members of the university community.[65]

A pilot of the modular STEPS [autism transition] curriculum demonstrated high feasibility and clinician fidelity, showing significant improvements in adolescent transition readiness and functional independence. While short term employment outcomes were mixed, these preliminary results suggest a promising and scalable model for addressing the service cliff facing autistic youth in rural communities.[76]

Last, quantitative findings showed significant reductions in emotional symptoms and improvements in wellbeing indicators at the follow up compared to the control groups. The largest effects were present at the 14 week follow up, possibly because it takes time to apply the skills learned in the intervention program into real-life contexts. Several students reported personal transformations over the course of the program, evolving from avoidance of social situations to actively approaching them as opportunities for connection. The integration of SDT into the program provided students with a sense of agency and autonomy over their emotional regulation process.[77]

Section B: Transition in Healthcare Services

In addition to the educational transition cliff that exists for individuals with IDD, a similar cliff also exists in transitioning from youth to adult healthcare services. In one study regarding systemic health disparities, it concludes that nursing education often fails to provide standardized training for caring for individuals with IDD. To achieve health equity, nursing programs must undergo transformational change by integrating

experiential learning, advocacy partnerships, and legislative frameworks across all levels of the curriculum.[70]

This cross sectional study found that social determinants such as Hispanic ethnicity, public insurance, and neighborhood disadvantage significantly hinder healthcare stability, leading to higher emergency room reliance and confusion over preventive care. Additionally, the research highlighted that mental health is a critical factor, as depressive symptoms are linked to both disrupted healthcare continuity and increased functional stress for young adults with disabilities. [66]

Emine and Stathopoulou's (2025) review of 20 health promotion initiatives demonstrates that diverse methods, including immersive stays, virtual reality, and mobile prompting, effectively teach essential daily living and vocational skills to individuals with IDD. Across various age groups, these interventions consistently improved autonomy and confidence, with participants retaining significant gains in self care, money management, and job readiness after just 10 to 28 sessions.[69]

In a specific study, young individuals with 22q11.2DS face complex medical and psychiatric needs that continue into adulthood, although current systems lack standardized transition pathways into adult healthcare. The findings include a lack of transition protocol and broken communication, while designing transition tools such as transfer summaries and assessments, as well as customized manuals for family readiness.[67] In another specific study, young adults with cerebral palsy and their caregivers report that the transition to adult rehabilitation is filled with negatives such as fear, fragmentation, and gaps in provider expertise.[68]

Policy and Legal Changes

Section A: Supreme Court Decisions

Stanley v. City of Stanford, Florida

This case was granted 6/24/2024, argued 1/13/2025, and decided 6/20/2025

Karyn Stanley sues her former employer, the City of Stanford, for violating her rights under the Americans with Disability Act, Rehabilitation Act, Florida Civil Rights Act, and Equal Protection Clause of the U.S. Constitution. Stanley worked as a firefighter, and when she joined the department, the City's policy offered free health insurance until the age 65 for employees who retired due to a disability. She served for 19 years before retiring due to Parkinson's Disease. In 2003, the City altered its policy to limit health insurance to 24 months after retirement. The Supreme Court ruled in favor of the City of Stanford (8-1), finding Stanley needed to prove she was employed or sought employment, while having the ability to perform necessary tasks without accommodation when disability discrimination occurred. [78]

Medina v. Planned Parenthood South Atlantic

This case was granted 12/18/2024, argued 4/2/2025, and decided 6/26/25.

Julie Edwards and Planned Parenthood are suing the South Carolina Department of Health and Human Services for terminating their enrollment agreements that provide services to medicaid beneficiaries and, in doing so, violating the "free choice of provider" provision added in 1967, which ensures Medicaid beneficiaries can obtain medical assistance from any qualified provider. The district court initially granted a preliminary injunction blocking South Carolina from terminating Planned Parenthood's Medicaid enrollment, and Medicaid beneficiaries can sue to enforce their right to choose their provider. The Supreme Court decided "Section 1396a(a)(23)(A) of the Medicaid Act does not clearly and unambiguously confer individual rights enforceable under 42 U.S.C. § 1983. Justice Neil Gorsuch authored the 6-3 majority opinion of the Court."[79]

Advocate Christ Medical Center v. Kennedy

This case was granted 6/10/24, argued 11/5/24, and decided 4/29/25.

Hospitals can receive extra compensation from Medicare for having a high percentage of low-income patients, through the Disproportionate Share Hospital Adjustment (DSH), which is determined by the Medicaid and Medicare fraction. Hospitals are arguing that there is an oversight with the medicare fraction, as only those who receive SSI cash payments are included in the fraction calculation. The Supreme Court ruled in favor of the Department of Health and Human Services, 7-2, stating that Medicare can

only include those receiving SSI monthly payments during their hospital stay under the Constitution.[80]

A.J.T v. Osseo Area Schools, Independent School District No. 279

This case was granted 1/17/25, argued 4/48/25, and decided 6/12/25.

A.J.T. and her parents sued the Ossoso School District for failing to provide evening classes for A.J.T. to accommodate her epilepsy, which makes it hard to attend morning classes due to consistent morning seizures. They claimed this violated her rights in disability discrimination under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. The Supreme Court ruled in favor A.J.T., stating students with disabilities don't have to prove that their school acted with bad intentions to win a discrimination case under the ADA or Rehabilitation Act. So now, her case goes back to the lower court, where she'll have a fairer chance to prove that the school violated her rights under the ADA or the Rehabilitation Act. [81]

Section B: Administrative and Executive Decisions

There have been many administrative changes, many of which are still ongoing. For special education specific policy changes, go to page 18.

Downsizing the staffing and role HHS plays is part of the Trump Administration's efforts to reduce the federal government's role in health. It is proposed that staffing be

reduced from 82,000 to 62,000 (staffing cuts in FDA, CDC, NIH, and CMS), and 10 regional offices be consolidated into 5. Services supporting individuals with disabilities, like the Administration for Community Living (ACL), are proposed to be dismantled and split among the Administration for Children and Families (ACF), the Assistant Secretary for Planning and Evaluation (ASPE), and the Centers for Medicare and Medicaid Services (CMS).[82] As the ACL already serves as a centric disability agency of efficiency, the dismantling of an agency of its importance would be very harmful.

Continuing, the Social Security Administration has cut nearly 7,000 jobs to reduce its workforce by 12%, the most significant staffing cut in its history. A substantial portion of these cuts is expected to occur in field offices, which serve as the primary points of contact for the public on Social Security matters. The reductions have raised concerns about potential service disruptions, particularly for individuals applying for disability benefits or relying on in-person assistance. Given the current circumstances, one SSA agent may be responsible for 1,480 beneficiaries.[83]

Furthermore, as of June 2025, HHS terminated the Office of Equal Opportunity and Civil Rights, which previously oversaw civil rights compliance, processing reasonable accommodation requests, and addressing discrimination complaints. With its closure, those responsibilities shifted to managers (who are untrained in reasonable accommodations policy) across departments, potentially resulting in inconsistent decisions, longer delays for accommodations, and reduced protections for employees with disabilities.[84]

Chapter VI: Assistive Technology

Section A: Assistive Technology Act Data

Assistive technology (AT) is defined as "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities."[85] The World Health Organization (WHO) established the 5Ps of assistive technology: people, products, personnel, provision, and policy; all of which are crucial for AT access and success.[86] For assistive technology in special education, go to page 19.

The most significant law for assistive technology in the United States is the Assistive Technology Act, or otherwise referred to as the AT Act. Originally from 1988, this Act created the 56 State AT Programs; 1 program for each state, DC, and the 5 US territories. The programs are responsible for assistive technology assessments, device demonstrations, loan services, refurbishing, financing, and more within their respective state.[87] The AT Act was recently reauthorized in 2022 and will need to be reauthorized again in 2027.[88] This section will go over the data from the AT Programs, primarily but not limited to data found in CATADA's *AT Act Data Brief. A National Data Summary of State Assistive Technology Programs: Fiscal Year 2024.*

Funding

The total funding allocated to the State AT Programs in FY 2024 was $31,058,30 with the most funding going to California ($1,395,699) and the least (excluding DC and the US territories) going to Wyoming ($410,963).[100] The following graph is from the Administration for Community (ACL) Living page "Assistive Technology Act Funding Allocations."[100]

FY2024 AT Act State Grants for Assistive Technology Annual Allocation for the States and Territories

State/Territory	Grantee	State Grants for Assistive Technology Program (ATSG)
Alabama	Alabama Department of Rehabilitation Services	$525,999
Alaska	AK Division of Vocational Rehabilitation	$479,643
Arizona	ABOR for and on behalf of Northern Arizona University	$712,460
Arkansas	ARKANSAS REHABILITATION SERVICES	$537,478
California	CALIFORNIA DEPARTMENT OF REHABILITATION	$1,395,699
Colorado	University of Colorado Denver	$556,914
Connecticut	State of Connecticut Department of Rehabilitation	$474,529
Delaware	University of Delaware	$465,906
District of Columbia	Department on Disability Services Rehab Srvcs Adm	$421,569
Florida	Florida Dept. of Education	$904,025
Georgia	Georgia Tech Research Corporation	$719,682
Hawaii	Hawaii Department of Human Services	$502,262
Idaho	Regents of the University of Idaho	$480,883
Illinois	Illinois Department of Human Services	$732,748
Indiana	Indiana Division of Disability & Rehabilitation	$566,683
Iowa	University of Iowa	$512,363
Kansas	The University of Kansas Center for Research, Inc.	$471,111
Kentucky	Kentucky Office of Vocational Rehabilitation	$544,674
Louisiana	Louisiana Department of Health and Hospitals	$572,768
Maine	MAINE DEPARTMENT OF EDUCATION	$514,971
Maryland	MARYLAND TECHNOLOGY ASSISTANCE	$581,822
Massachusetts	Massachusetts Rehabilitation Commission	$608,290
Michigan	Michigan Department of Labor and Economic Opportunity	$769,395
Minnesota	Minnesota Department of Administration	$573,024
Mississippi	Mississippi Department of Rehab Services	$455,633
Missouri	SOCIAL SERVICES, MISSOURI DEPARTMENT OF	$640,557
Montana	University of Montana	$495,721
Nebraska	NE ST DEPARTMENT OF EDUCATION	$512,888
Nevada	Nevada Department of Health and Human Services	$484,207
New Hampshire	UNIVERSITY SYSTEM OF NEW HAMPSHIRE	$483,030
New Jersey	NJ Department of Labor and Workforce	$590,377
New Mexico	New Mexico Governor's Commission on Disability	$502,194
New York	NYS JUSTICE CENTER FOR THE PROTECTION OF PEOPLE	$873,503
North Carolina	North Carolina Dept. of Health & Human Services	$671,942
North Dakota	North Dakota Department of Health and Human Services	$420,235
Ohio	Ohio State University	$688,158

Oklahoma	Oklahoma State University	$503,284
Oregon	Oregon DHS OFFICE OF FINANCIAL SERVICES	$499,661
Pennsylvania	Temple University CSHE	$822,834
Rhode Island	Rhode Island Department of Human Services	$420,653
South Carolina	University of South Carolina	$601,164
South Dakota	South Dakota Department of Human Services	$469,794
Tennessee	Tennessee Department of Human Services	$540,247
Texas	The University of Texas at Austin	$1,150,129
Utah	UTAH STATE UNIVERSITY	$524,930
Vermont	Vermont Agency of Human Services	$455,104
Virginia	Virginia Department for Aging and Rehabilitative Services	$604,740
Washington	University of Washington Center for Technology and Disability Studies	$585,531
West Virginia	WEST VIRGINIA UNIVERSITY RESEARCH CORPORATION	$478,168
Wisconsin	Wisconsin Department of Health Services	$553,200
Wyoming	University of Wyoming	$410,963
American Samoa	Division of Vocational Rehabilitation	$125,764
Guam	University of Guam	$127,723
Northern Mariana Islands	CNMI Council on Developmental Disabilities	$125,838
Puerto Rico	University of Puerto Rico Medical Sciences Campus	$488,515
Virgin Islands	University of the Virgin Islands	$126,717
TOTAL		**$31,058,302**

Return on Investment

The $31 Million investment into the State AT Programs resulted in savings of over $91 Million in FY 2024, including $2.1M in Demonstrations, $28.6M in Device Loans, and $38.3M in Device Reutilization Programs.[89]

Device Demonstrations

In FY 2024, the 56 AT Act programs conducted 42,614 demonstrations of various assistive technologies with the most being for speech communication (9,109) and the least being vehicle modification/transportation (1,095). Participation for these demonstrations totaled 61,410 participants, including individuals with disabilities (35,811), family members/guardians (12,878), and more.[90]

Device Loans

In FY 2024, the AT Programs provided short term loans for 58,071 devices with the most being speech communication (18,080) and the least being vehicle modification/transportation. Loans were provided to 32,527 borrowers, including individuals with disabilities (14,444) family members/guardians (5,869), representatives of education (5,427) and more.[90]

Device Reutilization Program

Across the 56 AT programs, there were 98,578 devices that were reutilized for 65,845 AT users in FY 2024; occurring either by refurbishment (86,556 devices) or device exchange (12,022 devices). The most reutilized AT was mobility, seating and positioning (53,932 devices) followed by daily living (33,491 devices) while least was vehicle modification and transportation (179 devices).[90] These programs are great for saving costs of AT for new users while recycling old devices effectively.

State Financing

In FY 2024, there were 33 states that provided reports on financing services. There are three types of programs are cash loans for purchasing AT, activities for reduced cost AT, and other methods to provide AT Hearing devices was the most common device financed (443) while Vehicle modification and transportation was the largest in value ($8,976,098).[90]

Additional AT Act Information

The Association of Assistive Technology Act Programs (ATAP) is a national nonprofit organization that unites all state and territory Assistive Technology Act Programs funded under the federal AT Act. Founded in 1997, ATAP works to strengthen and coordinate these programs so individuals with disabilities and older adults can access assistive technology for education, employment, and daily living. It provides training, data collection, technical assistance, and policy support to ensure programs offer services like device demonstrations, loans, and reuse initiatives. ATAP also manages the AT3 Center, which serves as the national hub for assistive technology information and program improvement. Overall, ATAP acts as a central advocate and support network to expand equitable access to assistive technology nationwide.[91]

Section B: Technology First

Technology first is defined as a "framework for systems change where technology is considered first in the discussion of support options available to individuals and families through person-centered approaches to promote meaningful participation, social inclusion, self-determination and quality of life."[92] It's important to note that while Technology First is mainly geared towards assistive technology, it includes all technological solutions. The State of the States in Intellectual and Developmental Disabilities, 1 of 3 longitudinal studies of national significance leads the nationwide research in Technology First and has made benchmark rankings based on states reporting to them:[92]

- Expert (9-7 benchmarks; 6 states)

- Advanced (6-5 benchmarks; 5 states and DC)
- Intermediate (4-3 benchmarks; 6 states)
- Novice (2 or fewer benchmarks; 21 states)

During the 2025 Arizona Legislative session, 3DA had AZ HB 2801, which while titled "technology study committee; assistive technology," the intent of the bill was to implement technology first initiatives in the State of Arizona. This bill ultimately passed the house by a vote of 40-17 but was halted from being assigned to committee in the Senate.[93] This was due to party politics, although 3DA is a nonpartisan organization and will never sponsor any political party or candidate under any circumstances. Technology First was our main policy agenda item in 2025 and remains as one of our top priorities in 2026, as we are rerunning AZ HB 2801 [assumingly under a different number] and will also have a similar bill in New Hampshire.

Forward, The National Council of State Legislatures (NCSL) had a brief on June 4, 2025 that overviews how access to technology can improve outcomes for individuals with IDD, including states establishing technology first task forces, the importance of telehealth, and other existing assistive technology related initiatives occurring in states around the country.[94]

On August 4, 2025, Kansas University was awarded $1 Million by the Kansas Department for Aging and Disability Services, which will be overseen by the State of the State in Intellectual and Developmental Disabilities and Assistive Technology for Kansans (ATK). The grant will help increase access to assistive technology for Kansans and over time make Kansas a Technology First state.[95] Maryland's Governor declared August 15, 2025 as Technology First Day for the State of Maryland after the State was first declared as a Technology First State in 2022.[96]

Furthermore, a Maryland Department of Health guide explains major 2025 updates to the Developmental Disabilities Administration (DDA) Medicaid waiver programs, combining the Family Supports and Community Supports Waivers into the unified Community Pathways Waiver. The goal is to simplify access to services, speed up delivery, and ensure that supports are more consistent and person centered. The guide introduces expanded AT and environmental modification options, including smart home devices, enabling technology certification requirements, and monthly service fees added to person centered plans. It also details new policies for remote support services, emphasizing participant control, privacy, and informed consent when using monitoring technology. The amendment enhances virtual supports and self-directed service options, giving individuals and families greater flexibility in how they receive care.[97] In continuation, the 2025 DDA Remote Supports Services Policy outlines how assistive technology and remote supports will be used to promote independence, inclusion, and safety for people with intellectual and developmental disabilities under the Home and Community Based Services (HCBS) waivers. It mandates a person centered planning approach, ensuring that all remote services align with each individual's goals, preferences, and assessed needs within their Individual Support Plan (ISP) and Plan of Care (POC). The policy defines specific telehealth and remote service types such as employment readiness, day habilitation, and therapy and establishes strict privacy, consent, and emergency response requirements. Providers must complete specialized certification in enabling technology and uphold HIPAA compliance while offering these services through secure, two-way communication systems.[98]

Section C: General Assistive Technology Research

Beyond policy data, there is plenty of research on assistive technology (AT). To begin, a study exemplifies a broader trend of extending assistive technology beyond schooling into adult community settings, highlighting both mainstream and specialized tools to be utilized for lifelong independence.[99] Continuing, the Çay & Bozak systematic review examines AT used from 2010–2023 to enhance leisure participation among individuals with severe and multiple disabilities and exemplifies the broader AT trends in moving away from specialized hardware and utilizing software and application based solutions in everyday devices.[101] There is still a necessity for many specialized hardwares, but this shift helps demonstrate the seamlessness that many new applications carry.

A systematic review by Ilaria D'Angelo examines AT for people with profound intellectual and multiple disabilities. It surveys current interactive devices, AAC tools, and sensor-based systems, then explores integrations with virtual reality, machine learning, and internet of things that personalize daily support. The paper emphasizes that users often communicate via cues, facial expressions, postures, vocalizations, making AT a crucial communication tool for individuals and caregivers. Ethical and pedagogical challenges, including data privacy and the need for person centered implementation and training, are also discussed in depth. The review concludes that sustainable benefit depends on robust staff training, privacy safeguards, and embedding technologies within ethical, person-centred care frameworks.[102]

Another study analyzed how sustainable assistive technology (SAT) influences employment opportunities for 205 university graduates with disabilities in Saudi Arabia. The research found that technology type, accessibility, and long term viability

significantly improve career outlook, with the government serving as a vital mediator. The results suggest that individuals with disabilities should prioritize regular assessments and increased investment in SAT to empower graduates and ensure workplace inclusivity.[103]

A systematic review of literature from 2010–2019 identifies AT (including AI and VR) as vital tools for enhancing workplace productivity and inclusion for persons with disabilities. The authors recommend a socio-technical approach that combines inclusive design and representative datasets with rigorous policy frameworks to mitigate AI bias and infrastructural barriers.[104] Another study found that both modified goal management training and an assistive application significantly improved the performance of specific daily tasks for adults with intellectual disabilities, with skills being successfully retained over time, although these improvements remained task specific and rarely generalized to broader executive functions.[105]

A study describes a program that uses a modified touch screen system to help adults with moderate to severe intellectual and multiple disabilities independently access leisure activities and engage in simple cognitive and physical exercises. Seven adults with IDD could not use standard tablets or independently access music, comics, cartoons, or activity tasks at baseline. The researchers created a touchscreen interface that was forgiving of imprecise touches and alternated preferred leisure videos with tasks and guided body movements. With this adapted system, participants were able to independently choose and play leisure stimuli and complete most cognitive and movement tasks with 90–100% accuracy. The authors conclude that this kind of low demand, technology aided setup can meaningfully increase independence, engagement, and constructive activity for people with intellectual and multiple disabilities, while also reducing the need for constant staff supervision, though they note future work is

needed on satisfaction, generalization, and long term impact.[106] To support, another study discusses how technology is one element to evolve beyond formal systems of support in person centered planning.[107]

Another article introduces an AI platform designed to connect individuals' symptoms and chronic conditions with tailored housing adaptations and assistive technologies. Built on advanced natural language processing and fuzzy matching algorithms, the system interprets user inputs in real-time to generate personalized recommendations, such as sling hoists, ramps, or environmental controls. With a resolution accuracy of 98 %, the web-based interface helps individuals navigate chronic care needs with dignity and autonomy, bridging the gaps in housing and healthcare accessibility.[108]

A study was done which observed how disabled adults in the United Kingdom living in residential care homes experience assistive technology (AT), and how certain technology affects their daily life. The study uses an approach known as Critical Realist Disability Studies (CRDS), which observes how material, social, and personal factors interact with one another to shape an individual's experience with AT. The study consisted of three main phases. First, the researcher conducted an iterative review of academic and grey literate to generate initial theories about how AT led to specific outcomes; second, multi-round interviews and focus groups with disabled technology users and AT professionals to refine and test those theories; third, a stakeholder survey to prioritize which outcome should be emphasized in the final analysis. In addition, participants were recruited through social media, mailing lists, and referrals and all interviews were conducted remotely on accessible platforms. The results led to four major outcomes of individuals' experience with AT agency and autonomy, independence, wellbeing and satisfaction, and social inclusion. It's important to note that in order for one to feel independent when using AT, the staff needs to take the time

to understand what the user wants and note that their communication through a device is real and valid. Second, emotional and personal fulfillment are important factors to analyze when observing the effects of using AT as it can help an individual gain more confidence, a sense of identity, and allows them to stay connected within their community.[109]

Disability culture celebrates the unique community and creativity of the disabled experience, offering a positive alternative to traditional medical or deficit based framings. By synthesizing insights from disability studies and interviewing disabled innovators, this research explores how values like solidarity and agency influence the creation of accessibility technologies. Ultimately, the work demonstrates that a cultural lens helps align technology design with the lived experiences of disabled people while revealing new directions for future inquiry.[123]

Section D: Artificial Intelligence

The advancement of Artificial Intelligence (AI) has become increasingly important in the Healthcare industry, particular with Assistive Technology (AT). AI can improve assistive devices to make them more beneficial and address an individual's unique needs. In order to see the significance of incorporating AI into this field, researchers analyzed the current state between AT's and AI with specific objectives to analyze the growth of research in AT and AI, identify established themes and categories, and examine opportunities and challenges. Researchers saw a great increase in AI and AT research; out of 150 studies since 2007, 95% were published in the last 10 years and 78% within the last five years. 68 studies on the specific language of AI with AT were

published since 2015. Additionally, solely searching for "assistive technology" without AI found well over 3,000 studies with 44% having been published in the last five years and 73% in the last ten. These trends illustrate the increase of how AI is emerging with assistive technology research. Throughout the years, AI has played a big role in enhancing diagnosis, navigation, robotics, and human-machine interactions. Other roles for AI have been in developing assistive systems such as for vision or multimodal support. AI has also been applied in skin cancer diagnosis and screening by image processing and molecular analysis. For individuals with autism, AI has been used in devices such as smart glasses and robotics to support communication and social engagement. For older adults who suffer from dementia, certain AI tools, including robots and sensors have been used to provide support to caregivers and improve healthcare overall. Although AI has transformed the healthcare industry, there are still challenges that it faces. For example, although it has had a beneficial role in screening for skin cancer, there are barriers to clinical implementation, ethical concerns, and the need for integration with existing medical practices and systems. AI has had success in enhancing communication, interaction, and social engagement for individuals with autism, but it still faces regulatory and acceptance challenges, the need for a stronger presence in healthcare, and barriers in implementation. However, there are key actions to take for each specific topic. In helping improve skin cancer screening, there can be enhancements in AI models to improve diagnostic precision in fields like oncology and neurology. Even simply adapting AI solutions to diverse cultural contexts and healthcare systems can help ensure that technologies are culturally appropriate. AI is changing assistive technologies to improve a variety of areas and help individuals with their independence, communication, cognitive skills, and mobility. However, there are still a number of challenges that AI faces in order for everyone to benefit and more research needs to be devoted to address obstacles such as ethical concerns, high cost, and limited access to certain resources.[110,120]

AI can be utilized in numerous ways for supporting individuals with autism. Another review looks at how AI and machine learning are being used to support early screening, diagnosis, and intervention for autism in infants, toddlers, and preschoolers. The authors describe AI tools that build predictive models from behavioral checklists, analyze brain imaging and genetic data to diagnose earlier than traditional behavior methods, use eye tracking and deep learning for early detection, and create intelligent screening systems such as apps, telehealth tools, and robots that can be used in community and remote settings. However, challenges such as privacy and risk of overreliance on AI and machine learning still persist.[111] Another research article highlights how generative AI can support non-verbal autistic individuals in bridging the gap of exclusion in clinical systems that privilege speech and neurotypical communication by recognizing cues such as facial expressions or sensory signals; bringing meaningful communication. The authors position AI not as a replacement for human empathy but as a relational tool that enhances understanding and trust between clinicians and neurodivergent clients starting with neurodivergent design in AI systems; all while maintaining ethical safeguards, algorithmic transparency, and global equity standards to prevent misuse or bias in AI care.[112] Another study suggests that AI AT can meaningfully augment behavioral interventions for autism. Limitations include a modest sample size, single center recruitment, and a high dropout rate, underscoring the need for larger, more diverse trials.[113]

Chatbots are another AI tool that can be utilized to support individuals with IDD. One study highlights using ChatGPT-3.5 to generate step by step instructions and prompts.[114] In another study, a group of young adults with mild learning difficulties felt more confident and found the AI chatbot easy to use. Many said they were proud to write their own questions and wanted to keep using it.[115] Similarly, another paper discusses that by leveraging computer vision and generative AI, researchers are

developing hand-free control systems and autonomous wheelchair navigation to enhance independence for individuals with motor disabilities. Furthermore, these technologies provide essential cognitive support through automated task prompting for Alzheimer's patients, social cue analysis for autism, and environmental alerts for those with IDD or ADHD.[124] A specific study focuses explicitly on adults with IDD employed in a Japanese social enterprise. It investigates how AI workshops can help these employees reflect on and rediscover competencies beyond their routine job tasks. The study presents a structured framework showing how AI supported creation can promote reflective thinking and strengthen workplace relationships for individuals with IDD.[117]

Obviously, AI is a far from perfect tool. A study by Hadar Souval et al. critically reviews emerging research at the intersection of disability studies, AI ethics, and computer science to examine how generative AI (GenAI) can both expose societal biases against people with cognitive disabilities (including IDD and autism) and actively support their daily functioning. They introduce AI as a social mirror that reflects and can amplify cultural prejudices, and as a cognitive copilot that provides personalized assistance in tasks ranging from communication to navigation. The paper proposes a user centered development protocol, emphasizing active involvement of people with cognitive disabilities in AI design, ethical oversight, and iterative adaptation.[118] Another paper suggests ethical considerations such as data safety protocols to protect personal data, such as accessible consent, participant control over data use, etc.[119] This New York City Bar Association Presidential Task Force report analyzes how current AI systems are already harming people with disabilities and how those harms are likely to deepen without deliberate intervention, such as misrepresentation of disability or by overemphasizing narrow tropes. They also emphasize the need for collaboration amongst policymakers, the industry, and the disability community and creating

accessibility benchmarks for AI.[120] To add, The 2025 report by the Center for Democracy & Technology (CDT) and the American Association of People with Disabilities (AAPD) outlines how artificial intelligence (AI) and algorithmic systems both benefit and endanger people with disabilities across employment, education, healthcare, transportation, and the justice system; with similar findings in research by Mladenov. There is a strong need for disability co-design of AI systems to remove biases and risk.[121,122]

Miscellaneous IDD Research

In a large scale review of 97,547 citations, there was a 6.9% annual increase in quality of life focused disability research, with early work (1980s–1990s) centered on deinstitutionalization and the development of multidimensional QoL questionnaires, and more recent studies (post-2006) emphasizing family and social systems perspectives.[125]

One article highlights the worldwide Direct Support Professional (DSP) shortage, while focused on Illinois, and how it affects individuals with disabilities. The underlying cause in all jurisdictions is lack of resources. Employees have trouble finding jobs with fair pay, stable working conditions and career development. In Illinois, advocates formed the They Deserve More coalition to lobby state lawmakers to raise DSP pay.[126]

Researchers conducted a global study examining individual's responses and reactions to disability hate crimes and whether those reactions changed depending on what disability was shown to them. Participants were recruited through social media and university panels with a total of 467 participants participating in the study (24 Danish, 22 Finnish, 116 Hungarian, 88 Italian, 18 Swedish, and 199 from UK). Researchers presented each individual with a hate crime scenario that either involved an individual in a wheelchair or an individual who was deaf. The first scenario involved a random

person mocking an individual for using a wheelchair even though they were able to walk short distances, while the second scenario consisted of a deaf person being ridiculed for not responding to someone who was talking behind them. The results of this study indicated clear patterns in how people reacted to the disability hate crime scenarios. First, people who experienced feelings of empathy and anger were more likely to help the victim in the scenario instead of ignoring them, while participants who felt more anxious were likely to avoid helping. Also, participants who surrounded themselves with disabled individuals were more likely to want to help each victim in the different scenarios. When comparing different countries, there was no great difference based on the specific disability. However, Italian participants were the most familiar with having direct contact with disabled individuals and thus, were more willing to help compared to the other groups. Individuals from the UK felt more angry about the hate crimes compared to those in the Nordic countries. The study also observed what motivated people to help people reach the decision of helping a disabled individual. The analysis indicated that people who had more contact with disabled individuals were more likely to help instead of avoid, which was triggered by feelings of anger and anxiety. People who felt this way explained that they had prior experience with disability and viewed it as a moral duty to help as a way of promoting justice and equality. On the other hand, those who said they would avoid acting lacked prior experience with disability and detailed they would not act because they are not familiar with the situation or it was not their business to get involved. Some admitted that they feared confrontation or did not want to overstep boundaries by doing something that is unfamiliar to them or by assuming a disabled person needed help. When people did decide to step in and help, many noted that they would first ask if the disabled individual would want help and would then confront the attacker if needed. While those who avoided the situation perceived the scenario to be not as serious or harmful enough to challenge the discrimination. Overall, the study observed cultural differences

in reacting to disability hate crimes. Much of the decision to either step in to help or ignore had to do with prior experiences and largely on one's emotions. This study calls for more awareness and positive interactions with disabled individuals and a push to encourage more bystanders to stand up and promote equality.[127]

Loneliness is a challenge for many adults, especially adults with intellectual and developmental disabilities (IDD), as it was reported that 24% of individuals with IDD experience substantial loneliness with 46% of individuals experiencing long-lasting loneliness. Unfortunately, the longer the depression, the poorer the health outcomes. Many of the reasons why there is such a greater percentage rate of loneliness compared to people without a disability, is due to fewer social opportunities, negative perception from the public, lack of needed communication and support systems. Thus, how do we overcome this barrier? Social inclusion and belonging help prevent loneliness of adults with IDD, such as participating in a group or activity to feel a sense of purpose and meaning. This calls for more opportunities to allow IDD individuals engage in community activities to build social networks and develop common goals or interests. Technology can also be a great assistance to help individuals with IDD build social connections. This had a prominent role during COVID-19 as videoconferencing, messaging apps, and social media kept individuals with IDD participating in activities and work, although it was not the same as in-person social contact. Another way for individuals with IDD to experience social inclusion, is even simply having a quick conversation with people in the community. Not only does this help people with IDD feel a sense of belonging, but it also helps community members become more comfortable and skilled with interacting with people with disabilities as it breaks away from the negative stereotypes. Zach Taylor, an artist and employee at Town Line Redemption Center as well as an individual with IDD, says that making the effort to go up to people to greet them makes more of a difference in helping to feel more connected

within the community. Janer Sauer, a special education professor and a parent of a child with IDD, explained her perspective on how hard the transition can be of their child with IDD to full adulthood. When their child moved into his own apartment, it was a concerning time, and although the neighbors in her son's apartment building would frequently greet him as well as the owners of the local coffee shop he would go to, there would always be constant concern as to whether he has adjusted to his new surroundings. The life of an individual with IDD is not an easy one, as there are many negative perceptions from the general public of people with IDD which creates a difficulty for a bond to form. There is a call for society to have more networking events for people with and without disabilities to come together and form social connections and improve their overall health and well-being.[128]

Citations

[1] "Developmental Disability Basics." *Centers for Disease Control and Prevention*, 2 June 2025, https://www.cdc.gov/child-development/about/developmental-disability-basics.html.

[2]: Institute for Exceptional Care. "Understanding the IDD Community: Essential Data and Insights." *Institute for Exceptional Care*, www.ie-care.org/about-idd/. Accessed 10 Dec. 2025.

[3] Bonino, Angela Yarnell, et al. "Developmental disabilities among children (Bonino et al., 2025)." *figshare*, 6 Mar. 2025, https://asha.figshare.com/articles/dataset/Developmental_disabilities_among_children_Bonino_et_al_2024_/27857847. Dataset.

[4]: Larson, Sheryl A., and Jon Neidorf. "Jails, Prisons, and Large State Institutions, Selected Years 1985 to 2023." *RISP Data Bytes*, Institute on Community Integration, University of Minnesota, 15 Apr. 2025, publications.ici.umn.edu/risp/data-bytes/jails-prisons-and-large-state-institutions.

[5] "Home & Community Based Services." *Medicaid.gov*, Centers for Medicare & Medicaid Services, https://www.medicaid.gov/medicaid/home-community-based-services. Accessed 10 Dec. 2025.

[6] Larson, Sheryl A., and Jon Neidorf. "Medicaid-Funded Services for People With IDD Shift From Institutions to Home and Community-Based Services Between 1982 and 2020." *Institute on Community Integration, University of Minnesota*, 1 May 2025, https://publications.ici.umn.edu/risp/data-bytes/medicaid-funded-servic-for-people-with-IDD-from-institutions-to-home-and-community-based-services-between-1982-and-2020.

[7] Larson, Sheryl A., Jon Neidorf, and Brian C. Begin. "Total Medicaid ICF/IID and Waiver Recipients and Percent Growth Needed to Serve Those Waiting: Fiscal Year 2020." *RISP Data Bytes*, Institute on Community Integration, University of Minnesota, Feb. 2025, publications.ici.umn.edu/risp/data-bytes/waitlists-for-medicaid-hcbs-waiver-funded-long-term-services-and-supports.

[8] Larson, Sheryl A., Jon Neidorf, and Brian C. Begin. "More People with IDD Get Services in Homes Shared by Three or Fewer People: Fiscal Year 2020." *RISP Data Bytes*, Institute on Community Integration, Jan. 2025, publications.ici.umn.edu/risp/data-bytes/more-people-with-idd-get-services-in-homes-shared-by-three-or-fewer-people.

[9] Heart to Heart Healthcare. "Helping Individuals with Disabilities Develop Self-Advocacy Skills." *Heart to Heart Healthcare*, 2 May 2025, https://www.h2hhc.com/blog/helping-individuals-with-disabilities-develop-self-advocacy-skills.

[10] Martino, Daniele C., et al. "The role of self-advocacy and self-determination in positive adjustment for autistic adolescents and young adults: a mini-review." *Frontiers in Child and Adolescent Psychiatry*, vol. 4, 1 May 2025, https://doi.org/10.3389/frcha.2025.1542543.

[11] Nicholson, Joanne, et al. "Diverse perspectives on supporting the health and wellness of people with intellectual and developmental disabilities." *Disability and Health Journal*, 2025, https://www.sciencedirect.com/science/article/pii/S1936657425000032.

[12] Boland, Geraldine, et al. "Social Inclusion Through Making Neighbourhood Connections: Experiences of Older Adults With Intellectual Disabilities of Local Volunteering and Leisure, Facilitated by Local Connectors." *British Journal of Learning Disabilities*, vol. 53, no. 1, Oct. 2024, pp. 145-157. https://onlinelibrary.wiley.com/doi/full/10.1111/bld.12624.

[13] Tuffrey-Wijne, Irene, et al. "Co-Designing a Toolkit of Approaches and Resources for End-of-Life Care Planning With People With Intellectual Disabilities Within Adult Social Care Settings: A Multi-Phase Study." *Journal of Applied Research in Intellectual Disabilities*, vol. 38, no. 1, Jan. 2025, p. e70019. doi: 10.1111/jar.70019.

[14] Barrington, Maryann, et al. "Access to healthcare for people with intellectual disability: a scoping review." *Scandinavian Journal of Public Health*, 12 Feb. 2025, doi:10.1177/14034948251317243.

[15] Fitzgerald, Sandra, et al. "The Lived Experiences of People with Disabilities During COVID-19." *Review of Disability Studies: An International Journal*, vol. 20, no. 1, 2024, pp. 1-55, https://rdsjournal.org/index.php/journal/article/view/1355/2806.

[16] Christianson-Barker, Jennifer, et al. "Addressing Barriers to Employment for Workers with an Intellectual Disability in Canada: A Focus Group Study." *Research and Practice in Intellectual and Developmental Disabilities*, vol. 12, no. 2, 2025, pp. 195-210. *Taylor & Francis Online*, https://doi.org/10.1080/23297018.2025.2501261.

[17] Curryer, Bernadette, et al. "Inclusion of people with intellectual disability in the decision-making and governance of disability and community organisations." *Journal of Intellectual & Developmental Disability*, vol. 50, no. 3, 2025, pp. 255-268, doi:10.3109/13668250.2025.2458124.

[18] Mc Carthy, John, and Valerie McTaggart. "Fostering Self-Advocacy Development in Service-Based Self-Advocacy Groups." *Journal of Intellectual & Developmental Disability*, vol. 50, no. 4, 2025, pp. 398–410, doi:10.3109/13668250.2025.2474199.

[19] Fullmind Team. "20 Best Self-Advocacy IEP Goals for Students with Disabilities." *Fullmind Learning*, 1 Apr. 2025, https://www.fullmindlearning.com/blog/best-self-advocacy-iep-goals.

[20] Lee, Yeunjoo, et al. "EMPOWERMENT THROUGH SELF-ADVOCACY: FOSTERING INCLUSIVE EDUCATION FOR YOUNG ADOLESCENTS WITH MILD TO MODERATE SUPPORT NEEDS." *European Journal of Special Education Research*, vol. 11, no. 2, 2025, oapub.org/edu/index.php/ejse/article/view/5883/8510.

[21] Malka, Menny. "Disability as a transitional state in the lived experiences of undergraduate students navigating disabilities in academic arenas." *Disability & Society*, vol. 40, no. 11, 2025, pp. 2966–2996. doi:10.1080/09687599.2025.2458687.

[22] Hennessy, Therese, Jennifer McMahon, and Owen Doody. "Views of parents and advocates on embedding inclusive practices within higher education for people with intellectual disability in the Republic of Ireland." *Journal of Intellectual & Developmental Disability*, vol. 50, no. 4, 2025, pp. 460-473. *Taylor & Francis Online*, doi:10.3109/13668250.2025.2499655.

[23] The Meaning of Ageing and the Educational Intervention “Good Life in Old Age”: An Ethnographic Study Reflecting the Perspective of Older Adults with Mild Intellectual Disability

[24] "Individuals with Disabilities Education Act (IDEA)." *U.S. Department of Education*, 6 Aug. 2025, https://www.ed.gov/laws-and-policy/individuals-disabilities/idea.

[25] National Center for Education Statistics. "Number and percentage of children served under Individuals with Disabilities Education Act (IDEA), Part B, by age group and state or jurisdiction: Selected school years, 1990-91 through 2022-23." *Digest of Education Statistics, 2023*, U.S. Department of Education, Dec. 2023, https://nces.ed.gov/programs/digest/d23/tables/dt23_204.70.asp?current=yes.

[26] United States Government Accountability Office. *Special Education: Varied State Criteria May Contribute to Differences in Percentages of Children Served*. GAO-19-348, 11 Apr. 2019, www.gao.gov/assets/gao-19-348.pdf.

[27] National Center for Education Statistics. "Table 203.20. Enrollment in Public Elementary and Secondary Schools, by Region, State, and Jurisdiction: Selected Years, Fall 1990 through Fall 2023." *Digest of Education Statistics, 2024*, U.S. Dept. of Education, Oct. 2024, https://nces.ed.gov/programs/digest/d24/tables/dt24_203.20.asp?current=yes.

[28] Yu, Yue, et al. "Examining a Decade of Changes in Autism Identification and Inclusion by Race and Ethnicity in California Education System." *The Journal of Special Education*, vol. 59, no. 3, Nov. 2025, pp. 1–11, https://doi.org/10.1177/00224669251321461.

[29] Spector, Carrie. "Learners with Disabilities Benefit from More Complex Reading Instruction, Stanford Researchers Say." *Stanford Report*, Stanford U, 16 Jan. 2025, https://news.stanford.edu/stories/2025/01/learners-with-disabilities-benefit-from-more-complex-reading-instruction.

[30] Panopoulos, Nikolaos. "A TEACHING APPROACH TO READING SKILLS FOR STUDENTS WITH AUTISM SPECTRUM DISORDER AND COMORBID INTELLECTUAL DISABILITY IN SECONDARY EDUCATION." *European Journal of Special Education Research*, vol. 11, no. 1, 2025, pp. 1-20. *European Journal of Special Education Research*, http://dx.doi.org/10.46827/ejse.v11i1.5790.

[31] Ben Rakaa, Omar, Mustapha Bassiri, and Said Lotfi. "Adapted pedagogical strategies in inclusive physical education for students with special educational needs: a systematic review." *Pedagogy of Physical Culture and Sports*, vol. 29, no. 2, 2025, pp. 67-85. https://sportpedagogy.org.ua/index.php/ppcs/article/view/3009/1161.

[32] Löper, Marwin Felix, et al. "Effects of a social participation intervention on primary school students' attitudes toward peers with disabilities." *Journal of Research in Special Educational Needs*, 2025, doi:10.1111/1471-3802.70050.

[33] The White House. "Improving Education Outcomes by Empowering Parents, States, and Communities." *The White House*, 20 Mar. 2025, https://www.whitehouse.gov/presidential-actions/2025/03/improving-education-outcomes-by-empowering-parents-states-and-communities/.

[34] National Women's Law Center. "The Executive Order to Dismantle the Department of Education and the Impact on Gender Justice at School." *National Women's Law Center*, 4 Apr. 2025, nwlc.org/wp-content/uploads/2025/04/DoE-EO-Explainer-4.4.2025v1.pdf.

[35] United States, Department of Education. "Applications for New Awards; Technical Assistance and Dissemination To Improve Services and Results for Children With Disabilities and Demonstration and Training Programs—National Technical Assistance Center on Transition for Students and Youth with Disabilities." *Federal Register*, vol. 90, 18 June 2025, pp. 26038–26045. *FederalRegister.gov*, https://www.federalregister.gov/documents/2025/06/18/2025-11219/applications-for-new-awards-technical-assistance-and-dissemination-to-improve-services-and-results.

[36] U.S. Department of Education. "RE: Guidance on the Use of Federal Grant Funds to Improve Education Outcomes Using Artificial Intelligence (AI) Dear Colleague." 22 July 2025, https://www.ed.gov/media/document/opepd-ai-dear-colleague-letter-7222025-110427.pdf.

[37] Abdelwahab, Mahmoud M., Khamis A. Al-Karawi, and H. E. Semary. "A Systematic Review of Assistive Technology for Enhancing the Students with Disabilities." *Journal of Disability Research*, vol. 4, no. 2, 22 Mar. 2025, doi:10.57197/JDR-2024-0117.

[38] Svensson, Idor, et al. "Effects of Assistive Technology for Students with Reading and Writing Disabilities." *Disability and Rehabilitation: Assistive Technology*, vol. 16, no. 2, 2021, pp. 196-208, doi:10.1080/17483107.2019.1646821.

[39] Putri, Nuril Kusumawardani Soeprapto, et al. "Assistive Technology Classification for Students With Disabilities in Higher Education: A Systematic Literature Review." *IEEE Access*, vol. 13, 4 Feb. 2025, pp. 28135-28149, doi:10.1109/ACCESS.2025.3538322.

[40] Mukhtarkyzy, Kaussar, et al. "A systematic review of the utility of assistive technologies for SEND students in schools." *Frontiers in Education,* vol. 10, 10 Feb. 2025, doi:10.3389/feduc.2025.1523797.

[41] Dumitru, Cristina. "Assistive Technology and Alternative and Augmentative Communication Options in the Language Skills Development of Students with Specific Learning Disorders." *Education Sciences*, vol. 15, no. 2, 2025, p. 170. doi:10.3390/educsci15020170.

[42] Ang, P. S., S. M. Maat, and R. Rosli. "Tracing the Evolution of Autism Mathematics Learning: A Bibliometric Analysis." *European Journal of Educational Research*, vol. 14, no. 3, 2025, pp. 961-979. https://pdf.eu-jer.com/EU-JER_14_3_961.pdf.

[43] Every Learner Everywhere. "How AI in Assistive Technology Supports Students and Educators with Disabilities." *Every Learner Everywhere*, Apr. 2025, https://www.everylearnereverywhere.org/blog/how-ai-in-assistive-technology-supports-students-and-educators-with-disabilities/.

[44] Tsirantonaki, Smaragdi, and Anastasia Vlachou. "AI-Driven Inclusive Practices: Innovative Approaches to Differentiated Teaching and Educational Inclusion." *European Journal of Inclusive Education*, vol. 4, no. 1, 2025, pp. 134-46, https://tidsskrift.dk/ejie/article/view/156613/202129.

[45] Fitas, Ricardo. "Inclusive education with AI: supporting special needs and tackling language barriers." *AI and Ethics*, vol. 5, no. 6, 2025, pp. 5729-5757, https://doi.org/10.1007/s43681-025-00824-3.

[46] Kotsi, Sofia, et al. "A Review of Artificial Intelligence Interventions for Students with Autism Spectrum Disorder." *Disabilities*, vol. 5, no. 1, 2025, Article 7. https://www.mdpi.com/2673-7272/5/1/7.

[47] Cabanes, Aileen A., and Regina P. Galigao. "Evaluating AI-Powered Assistive Technologies in Inclusive Education: A Systematic Review of Literature on Efficacy and Accessibility." *International Journal of Research and Innovation in Social Science*, vol. 9, no. 3, 2025, pp. 5568–5577, doi:10.47772/IJRISS.2025.903SEDU0405.

[48] Alsolami, Abdulaziz S. "The effectiveness of using artificial intelligence in improving academic skills of school-aged students with mild intellectual disabilities in Saudi Arabia." *Research in Developmental Disabilities*, vol. 156, no. 2, 2024, p. 104884. doi:10.1016/j.ridd.2024.104884.

[49] Salama, Or. "Inclusive Education for Children with Disabilities in Europe." *Humanium*, 5 Dec. 2025, https://www.humanium.org/en/inclusive-education-for-children-with-disabilities-in-europe/.

[50] "Montenegro: Education for the future - adopting the Education Reform Strategy 2025-2035." *Eurydice*, 3 July 2025, https://eurydice.eacea.ec.europa.eu/news/montenegro-education-future-adopting-education-reform-strategy-2025-2035.

[51] Winther, Josefin. "Inclusion in Higher Education: A Research Project on Views of Knowledge, Inclusion and Authentic Learning Situations." *European Journal of Inclusive Education*, vol. 4, no. 1, 11 June 2025, doi:10.7146/ejie.v4i1.151445.

[52] Darvishy, Alireza, et al. "Accessibility barriers in teaching and research: A survey in Switzerland." *European Journal of Inclusive Education*, vol. 4, no. 1, 2025, pp. 70-83. https://tidsskrift.dk/ejie/article/view/149703/199794.

[53] Eurydice. "France: Measures to Make School and Higher Education More Accessible." *Eurydice*, 15 Apr. 2025, https://eurydice.eacea.ec.europa.eu/news/france-measures-make-school-and-higher-education-more-accessible.

[54] Gilde, Judith 't, and Anke Wegner. "Inclusive Education and the Developmental Tasks of Three Subject Teachers in Integration Classes in Academic Secondary Schools in Vienna, Austria." *European Journal of Inclusive Education*, vol. 4, no. 1, 2025, doi:10.7146/ejie.v4i1.155297.

[55] Government of Ontario. "Children with special needs." *Ontario.ca*, 5 July 2021, https://www.ontario.ca/page/children-special-needs.

[56] Gouvernement du Québec. "Education Programs for Students with a Moderate to Severe or Profound Intellectual Disability." *Gouvernement du Québec*, 29 May 2025, https://www.quebec.ca/en/education/preschool-elementary-and-secondary-schools/resources-tools-school-network/students-handicaps-disabilities-social-maladjustments-learning-difficulties/programs-students-moderate-severe-deficiency.

[57] Dema, Dorji. "Assessing the Impact of a 16-Day Professional Development Workshop on Inclusive Education in Bhutan." *European Journal of Inclusive Education*, vol. 4, no. 1, 2025, https://tidsskrift.dk/ejie/article/view/158185/202359.

[58] Quirke, Mary, and Tracy Galvin. "Universal Design for Learning and the Sustainable Development Goals: Reimagining Inclusive Education – An Alice in Wonderland Journey." *European Journal of Inclusive Education*, vol. 4, no. 1, 2025, pp. 99-113. tidsskrift.dk/ejie/article/view/150454/201191.

[59] Singh, Suraj. "Building inclusive classrooms for students with intellectual disabilities." *International Journal of Science and Research Archive*, vol. 14, no. 01, 2025, pp. 1605-1609, doi:10.30574/ijsra.2025.14.1.0259.

[60] Sanderson, Dawn L., and Kelly A. Stout. "Parent Awareness of Adult Services During Transition Planning for Youth with Intellectual and Developmental Disabilities." *Career Development and Transition for Exceptional Individuals*, 2025, advance online publication.

[61] Milarsky, Amy B., et al. "Disability Identity and Self-Determination for Students with Learning Disabilities in Higher Education." *Remedial and Special Education*, 2025, advance online publication.

[62] Papay, Chris, et al. "The Impact of Postsecondary Programs on the Transition to Adulthood for Students with Intellectual and Developmental Disabilities." *Career Development and Transition for Exceptional Individuals*. 2025. Advance online publication.

[63] Batorowicz, Barbara, et al. "Transition to Adulthood for Individuals With Complex Communication Needs: A Scoping Review." *OTJR: Occupational Therapy Journal of Research*, vol. 45, no. 1, 2024, pp. 66-84, doi:10.1177/15394492241271162.

[64] Hennessey, Maeghan N., James E. Martin, and Juan C. Portley. "Impact and Policy Implications of Transition Education Practices on IDEA Indicator 13 Scores and Indicator 14 Outcomes." *Journal of Disability Policy Studies*, vol. 36, no. 2, Sept. 2025, pp. 108-117. doi:10.1177/10442073241289084.

[65] Smith, Phillandra S., and Beth Myers. "Narrating Access and Agency: Students With Intellectual Disability Share Their Experiences With Higher Education." *Remedial and Special Education*, vol. 46, no. 1, 2024, doi:10.1177/07419325231226109.

[66] Kritikos, Tessa K., et al. "Health Care, Educational, and Vocational Transitions in Young Adults With Pediatric-Onset Disabilities: Associations With Social Determinants of Health." *Archives of Physical Medicine and Rehabilitation*, vol. 106, no. 5, Dec. 2024, doi:10.1016/j.apmr.2024.11.015.

[67] Macisaac, Molly F., et al. "Healthcare Transition to Adulthood in Patients with 22q11.2 Deletion Syndrome: A Comprehensive Literature Review and Transition Framework." *The Cleft Palate-Craniofacial Journal*, 13 Apr. 2025, doi:10.1177/10556656251331392.

[68] Sarmiento, Cristina A., et al. "Experiences of Young Adults with Cerebral Palsy in Pediatric Care Transitioning to Adult Care." *Developmental Medicine & Child Neurology*, vol. 67, no. 1, 2024, pp. 99-110, doi:10.1111/dmcn.15907.

[69] Hatzi Halil, Emine, and Agathi Stathopoulou. "Health promotion programs for the development of daily living skills in individuals with neurodevelopmental disorders." *World Journal of Biology Pharmacy and Health Sciences*, vol. 21, no. 1, Feb. 2025, pp. 491–502. *ResearchGate*, https://www.researchgate.net/publication/388799207.

[70] Fisher, Mark J., et al. "Innovating Nursing Education Through Partnership With Individuals With Intellectual and Developmental Disabilities." *Journal of Nursing Education*, vol. 64, no. 2, 2025, pp. 75-80, doi:10.3928/01484834-20240923-03.

[71] Think College. "College Search." *Think College*, https://thinkcollege.net/college-search. Accessed 13 Dec. 2025.

[72] Parent Educational Advocacy Training Center. "Transition to Adulthood." *PEATC*, https://peatc.org/services/transition-to-adulthood/. Accessed 14 Dec. 2025.

[73] Disability Champions Mentoring Network. "Home." *Disability Champions Mentoring Network*, http://www.disabilitychampionsmentoringnetwork.org/.

[74] "Transition Connections Academy." *Carroll County Public School District*, https://carrollk12org.finalsite.com/academics/special-education/transition-connections-academy. Accessed 14 Dec. 2025.

[75] "Mason LIFE." *George Mason University*, 2025, https://masonlife.gmu.edu/.

[76] White, Susan W., Alexis M. Brewe, and Nicole Powell. "Stepped Transition to Employment and Postsecondary Education Success (STEPS) for Adolescents and Adults with Autism: Community Implementation Pilot Trial." *JMIR Formative Research*, vol. 9, no. 1, 29 Aug. 2025, article e70137. doi:10.2196/70137.

[77] Leung, Siu-Ling Angela, and Helen Payne. "The Effects of a Dance/Movement Therapy Emotional Self-Regulation Program for Adolescents with Intellectual Disabilities in Hong Kong." *American Journal of Dance Therapy*, 2025, doi:10.1007/s10465-025-09423-5.

[78] "Stanley v. City of Sanford, Florida." *Oyez*, www.oyez.org/cases/2024/23-997. Accessed 14 Dec. 2025.

[79] *Medina v. Planned Parenthood South Atlantic*. *Oyez*, 26 June 2025, www.oyez.org/cases/2024/23-1275. Accessed 14 Dec. 2025.

[80] "Advocate Christ Medical Center v. Kennedy." *Oyez*, 29 Apr. 2025, www.oyez.org/cases/2024/23-715. Accessed 14 Dec. 2025.

[81] *A. J. T. v. Osseo Area Schools, Independent School District No. 279*. *Oyez*, 12 June 2025, https://www.oyez.org/cases/2024/24-249. Accessed 14 Dec. 2025.

[82] U.S. Department of Health and Human Services. "Fact Sheet: HHS' Transformation to Make America Healthy Again." *HHS.gov*, 2 Apr. 2025, https://www.hhs.gov/press-room/hhs-restructuring-doge-fact-sheet.html.

[83] AFGE. "Due to DOGE Cuts, 1 SSA Employee Is Expected to Serve 1,480 Beneficiaries." *AFGE*, 30 June 2025, https://www.afge.org/article/due-to-doge-cuts-1-ssa-employee-is-expected-to-serve-1480-beneficiaries/.

[84] "Trump Administration to Close a Civil Rights Office in RFK Jr.'s HHS." *Politico*, 28 Apr. 2025, https://www.politico.com/news/2025/04/28/trump-administration-to-close-a-civil-rights-office-in-rfk-jr-s-hhs-00312735.

[85] "Federal Definitions of Assistive Technology." *ECTA Center*, ectacenter.org/topics/atech/definitions.asp. Accessed 14 Dec. 2025.

[86] World Health Organization. "Assistive Technology." *World Health Organization*, www.who.int/teams/health-product-policy-and-standards/assistive-and-medical-technology/assistive-technology.

[87] Association of Assistive Technology Act Programs. "History of the Assistive Technology Act." *ATAP.org*, Oct. 2018,

https://ataporg.org/wp-content/uploads/docs/at-act-info/21st-century-at-act/history-of-at-act.pdf.

[88] United States, Congress, Senate. *S. 2401: 21st Century Assistive Technology Act* (117th Congress). Congress.gov, Library of Congress, 7 Aug. 2021, https://www.congress.gov/bill/117th-congress/senate-bill/2401.

[89] Association of Assistive Technology Act Programs (ATAP). *FY2024 Return on Investment Report*. ATAP, 27 May 2025, https://ataporg.org/wp-content/uploads/accessible-fy24-roi-5-27-25.pdf.

[90] Domin, Daria, and John Shepard. *A National Data Summary of State Assistive Technology Programs: Fiscal Year 2024*. Issue No. 17, Center for Assistive Technology Act Data Assistance, 2024, https://catada.info/assets/files/AT-Report-FY25_R.pdf.

[91] Association of Assistive Technology Act Programs. "About Us." *Association of Assistive Technology Act Programs*, 2025, ataporg.org/about-us/. Accessed 14 Dec. 2025.

[92] Tanis, E.S. "Technology First." *State of the States in Intellectual and Developmental Disabilities*, U of Kansas, 2019, https://stateofthestates.ku.edu/technology-first.

[93] Arizona. Legislature. House of Representatives. *H.B. 2801: Relating to Assistive Technology Study Committee*. 57th Legislature, 1st Regular Session, 2025. *Arizona State Legislature Bill Status*, https://apps.azleg.gov/BillStatus/BillOverview/83270. Accessed 14 Dec. 2025.

[94] National Conference of State Legislatures. "State Options for Improving Care for People with Intellectual and Developmental Disabilities." *NCSL*, 4 June 2025, https://www.ncsl.org/health/state-options-for-improving-care-for-people-with-intellectual-and-developmental-disabilities.

[95] Humphrey, Jen. "KU receives $1M to expand technology access for Kansans with disabilities." *KU News*, The University of Kansas, 4 Aug. 2025, https://news.ku.edu/news/article/ku-receives-1-million-to-expand-technology-access-for-kansans-with-disabilities.

[96] Maryland Department of Health. "Maryland Technology First Day Proclaimed 2025." *Maryland Department of Health*, health.maryland.gov/newsroom/Pages/Maryland-Technology-First-Day-Proclaimed-2025.aspx. Accessed 14 December 2025.

[97] Maryland Department of Health. Developmental Disabilities Administration. *The Guide to October 2025 Waiver Changes and You*. Maryland Department of Health, 24 Sept. 2025, https://health.maryland.gov/dda/Documents/DDA%20-%20The%20Guide%20to%20October%202025%20Waiver%20Changes%20and%20You%20Final%209-24-25.pdf.

[98] District of Columbia, Department on Disability Services. "Remote Supports Policy." DDS, 29 Sept. 2025, https://dds.dc.gov/sites/default/files/dc/sites/dds/publication/attachments/Remote%20Supports%20Policy%20%28Final%29_0.pdf.

[99] Aquino, Camille Alexandra, et al. "Technol-OT and CreATivity: Implementing Occupational Therapy (OT) and Assistive Technology (AT) into Art and Music for Adults with Disabilities." *Dominican Scholar*, Dominican University of California, 2025, scholar.dominican.edu/occupational-therapy-capstone-projects/66/.

[100] "Assistive Technology Act Funding Allocations." *Administration for Community Living*, 18 July 2024, acl.gov/about-acl/assistive-technology-act-funding-allocations. Accessed 28 Dec. 2025.

[101] Çay, Evgin, and Burak Bozak. "The Use of Assistive Technologies in Increasing the Participation of the Individuals with Severe and Multiple Disabilities to Leisure: Systematic Review." *Participatory Educational Research*, vol. 12, no. 1, 2025, pp. 1-17. doi:10.17275/per.25.1.12.1.

[102] D'Angelo, Ilaria. "Advanced technologies for people with intellectual and multiple profound disabilities: state of the art, challenges and future prospects." *Italian Journal of Special Education for Inclusion*, vol. 13, no. 1, 2025, pp. 96-106. doi:10.7346/sipes-01-2025-7.

[103] Alanazi, Adel Saber, Houcine Benlaria, and Saad Awadh Alanazi. "Sustainable assistive technology and employment opportunities for graduates with disability: Mediating role of government support." *Education and Information Technologies*, vol. 30, no. 1, July 2024, pp. 257–78. doi:10.1007/s10639-024-12863-0.

[104] Guha, Anwesha, et al. "Are Disability Inclusive Practices Truly Inclusive? A Thematic Analysis of Current Practices." *Journal of Integrated Health*, vol. 4, no. 1, 23 Jan. 2025, pp. 327-331, doi.org/10.51219/JIH/mariaet-wilson/57.

[105] Ertas-Spantgar, Funda, et al. "Enhancing task performance in adults with intellectual disability through modified goal management training and assistive technology with errorless learning: A randomized controlled trial." *Neuropsychological Rehabilitation*, vol. 35, no. 5, 2025, pp. 982-1003. doi:10.1080/09602011.2024.2384518.

[106] Lancioni, Giulio E., et al. "A Technology-Aided Program to Help People With Intellectual and Multiple Disabilities Access Leisure Stimuli and Engage in Cognitive and Physical Activity: Development and Usability Study." *JMIR Rehabilitation and Assistive Technologies*, vol. 12, 15 Oct. 2025, art. e82596, doi:10.2196/82596.

[107] Reynolds, Michelle C., et al. "Expanding Person-Centered Thinking Approaches for Developing Personalized Integrated Supports for People with Disabilities and Their Families." *Journal of Developmental and Physical Disabilities*, vol. 37, no. 1, 2023, pp. 35-50. doi:10.1007/s10882-023-09941-5.

[108] Saleela, Divya, et al. "Development of AI-Driven Decision Support System for Personalized Housing Adaptations and Assistive Technology." *Journal of Aging and Environment*, Taylor & Francis, 22 Jul. 2025, doi:10.1080/26892618.2025.2534956.

[109] Eshleman, J. "Everyday tech, everyday autonomy: Understanding how assistive technology works in UK care settings." *Technology and Disability*, 2025, p. 0. *DOI:10.1177/10554181251379191*.

[110] Giansanti, Daniele, and Antonia Pirrera. "Integrating AI and Assistive Technologies in Healthcare: Insights from a Narrative Review of Reviews." *Healthcare*, vol. 13, no. 5, 2025, art. 556. doi:10.3390/healthcare13050556.

[111] Zhang, Sijun. "AI-assisted early screening, diagnosis, and intervention for autism in young children." *Frontiers in Psychiatry*, vol. 16, 13 Apr. 2025, doi:10.3389/fpsyt.2025.1513809.

[112] Joseph, Akhil P., and Anithamol Babu. "Redefining communication in mental healthcare: generative AI for neurodivergent equity and non-verbal autistic inclusion." *Frontiers in Psychiatry*, vol. 16, 12 Aug. 2025, Article 1611101. *Frontiers*, doi:10.3389/fpsyt.2025.1611101.

[113] Atturu, Harini, Somasekhar Naraganti, and Bugatha Rajvir Rao. "Effectiveness of Artificial Intelligence–Based Platform in Administering Therapies for Children With Autism Spectrum Disorder: 12-Month Observational Study." *JMIR Neurotechnology*, vol. 4, art. e70589, 28 Apr. 2025, doi:10.2196/70589.

[114] Sapre, Tania, et al. "Enhancing Home-Based Physical Activity for Neurodivergent Children: Adapting the InPACT at Home Program with AI and Universal Design." *Frontiers in Physiology*, vol. 15, 2024, doi:10.3389/fphys.2024.1496114.

[115] Carruba, Maria Concetta, Alba Caiazzo, and Caterina Sapone. "A UDL-BASED APPROACH TO AI CHATBOT INTERACTION FOR YOUNG ADULTS WITH INTELLECTUAL DISABILITIES." *Italian Journal of Health Education, Sport and Inclusive Didactics*, vol. 9, no. 1, 2025, https://www.researchgate.net/profile/Alba-Caiazzo/publication/393501490_A_UDL-BASED_APPROACH_TO_AI_CHATBOT_INTERACTION_FOR_YOUNG_ADULTS_WITH_INTELLECTUAL_DISABILITIES/links/686d1d21b991270ef302318e/A-UDL-BASED-APPROACH-TO-AI-CHATBOT-INTERACTION-FOR-YOUNG-ADULTS-WITH-INTELLECTUAL-DISABILITIES.pdf.

[116] Kooli, C., and R. Chakraoui. "AI-driven assistive technologies in inclusive education: benefits, challenges, and policy recommendations." *Sustainable Futures*, vol. 10, 2025, 101042. *ScienceDirect*, doi:10.1016/j.sftr.2025.101042.

[117] Chen, Sifan, et al. "A Reflective Journey for Individuals with Intellectual Disabilities: Rediscovering Competency Through AI-Enhanced Iron Beads Crafting." *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*, ACM, 2025, doi:10.1145/3706598.3713984.

[118] Dorit Hadar Souval, Yuval Haber, Amir Tal, Tomer Simon, Tal Elyoseph, and Zohar Elyoseph. "Transforming Perceptions: Exploring the Multifaceted Potential of Generative AI for People With Cognitive Disabilities." *JMIR Neurotechnology*, vol. 4, 15 Jan. 2025, e64182. doi:10.2196/64182.

[119] McDonald, Katherine, Madison Brodeur, and Ariel Schwartz. "Risks and Safeguards in Social-Behavioural Research With Adults With Developmental Disabilities: A Qualitative Systematic Review." *Journal of Applied Research in Intellectual Disabilities*, vol. 38, no. 2, Mar. 2025, e70031. *Wiley Online Library*, doi:10.1111/jar.70031.

[120] Presidential Task Force on Artificial Intelligence and Digital Technologies. "The Impact of the Use of AI on People with Disabilities." *New York City Bar Association*, 12 June 2025, www.nycbar.org/reports/the-impact-of-the-use-of-ai-on-people-with-disabilities/.

[121] Mladenov, Teodor. "AI and disabled people's independent living: a framework for analysis." *AI & Society*, 30 Sept. 2025. *SpringerLink*, doi:10.1007/s00146-025-02642-x.

[122] Aboulafia, Ariana, and Henry Claypool. "Building A Disability-Inclusive AI Ecosystem: A Cross-Disability, Cross-Systems Analysis Of Best Practices." Center for Democracy & Technology / American Association of People with Disabilities, Mar. 2025, www.aapd.com/wp-content/uploads/2025/03/2025-03-11-CDT-Building-A-Disability-Inclusive-AI-Ecosystem-report-final.pdf.

[123] Desai, Aashaka, Jennifer Mankoff, and Richard E. Ladner. "Exploring Disability Culture Through Accounts of Disabled Innovators of Accessibility Technology." *The 27th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '25)*, 26 Oct. 2025, ACM, pp. 1–14. *ACM Digital Library*, doi:10.1145/3663547.3746330.

[124] Tian, Yapeng, et al. "Introduction to the First Workshop on Vision Foundation Models and Generative AI for Accessibility." *ICCV CV4Ally Workshop*, 2025. *University of Washington Makeability Lab*, https://makeabilitylab.cs.washington.edu/media/publications/Tian_IntroductionToTheFirstWorkshopOnVisionFoundationModelsAndGenerativeAiForAccessibility_CV4A11y2025.pdf.

[125] Cavallaro, Riccardo, et al. "Beyond disability: A scientometric review of quality of life in developmental disabilities." *Research in Developmental Disabilities*, vol. 158, 2025, 104919. *ScienceDirect*, doi:10.1016/j.ridd.2025.104919.

[126] While this story mainly focuses on the lack of Direct Support Professionals (DSP) in Illinois, this article highlights the world-wide DSP shortage and how it affects individuals with disabilities. The underlying cause in all jurisdictions is lack of resources. Employees have trouble finding jobs with fair pay, stable working conditions and career development. In Illinois, advocates formed the They Deserve More coalition to lobby state lawmakers to raise DSP pay.

[127] Jones, Siân E., et al. "'It's Not OK To Talk To Anyone This Way": Helping Targets of Disability-Based Hate Crime." *International Journal of Disability and Social Justice*, vol. 5, no. 1, 2025, pp. 48-75. *JSTOR*, doi:10.13169/intljofdissocjus.5.1.0003.

[128] *Feature Issue on Loneliness and People with Intellectual, Developmental, and Other Disabilities.* Edited by Sarah Hall and Zach Rossetti, vol. 38, no. 1, *Impact*, Institute on Community Integration, U of Minnesota, Spring/Summer 2025, publications.ici.umn.edu/impact/38-1/cover.

[129] Williams, Elizabeth, et al. "Medicaid Enrollment & Spending Growth: FY 2025 & 2026." *KFF*, 13 Nov. 2025, www.kff.org/medicaid/medicaid-enrollment-spending-growth-fy-2025-2026/.