

Amplifying Their Voices: Equity and Assistive Technology for Children with Disabilities

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ABSTRACT

Assistive technology devices are crucial to the educational development of children who suffer from hearing loss. For some hearing-impaired children, access to hearing aids is vital to their ability to acquire language, develop speech, and socialize.¹ Yet many hard of hearing children are unable to acquire hearing aids because most insurance policies do not cover them.² Access to

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1. See Brendan W. Williams, *Is Anyone Listening? The Legal Marginalization of Hearing Disabilities*, 16 *IND. HEALTH L. REV.* 133, 139 (2018); Tyler Ostrowski & Jason Mouzakes, *Financial Distress Experienced by Privately Insured Pediatric Hearing Aid Patients: A Pilot Study*, *CLINICAL PEDIATRICS*, June 8, 2022, at 1, 9.

2. See *Normandy Park Resident Advocating for Bill that Would Require Insurance Coverage for Hearing Aids*, *B-TOWN BLOG* (Feb. 1, 2022) [hereinafter *Normandy*], <https://bit.ly/3xSJ9VX> [<https://perma.cc/ZS76-XDFR>].

assistive technology devices for hard of hearing individuals has been the subject of long-standing controversy.³

The law recognizes the benefits of assistive technology devices and includes them within the scope of services school districts may be required to provide in order to ensure that children with disabilities have a free appropriate public education (FAPE) under the Individuals with Disabilities Education Act (IDEA). However, the Supreme Court's FAPE standard requires only that school districts provide special education services that are "reasonably calculated to enable a child to make progress in light of the child's circumstances."⁴ As a result, school districts often deny requests for assistive technology, even if there is medical evidence that such services would benefit the child academically and socially, if the child is making "progress," which is often measured by "passing grades and advancement from year to year."⁵ This narrow interpretation of progress fails to account for the unique benefit evolving technology can have on the development of a child with a disability and the detrimental impact caused by an inability to acquire access. Additionally, children who are unable to acquire assistive technology from their school district are often left with no other options for financial support because government and private insurance funding for certain devices, such as hearing aids, is limited. Many scholars have noted the implications of the Supreme Court's standard, including that it remains "unpredictable" and lacks clarity as to how to define "substantive appropriateness,"⁶ but the scholarship has not addressed the impact the standard has on children who do not have access to hearing aids. This Article analyzes the issues related to access to assistive technology by focusing on children with hearing loss as an illustration of the inequities caused by the limited scope of the law, the substantial cost of hearing aids, and the significant social and academic developmental cost to children who are unable to afford the technology they need. To address the legal and financial barriers to access, the FAPE standard should be interpreted to recognize the unique benefit of quickly evolving and much-needed assistive technology for chil-

3. See Build Back Better Act, H.R. 5376, 117th Cong. § 25001 (2021); Samuel Chamberlain & Steven Nelson, *Biden Claims Senate 'Close' to Passing Huge Spending Bill as Inflation Soars*, N.Y. POST, <https://bit.ly/3u341sb> [<https://perma.cc/LLY8-D2F8>] (Feb. 10, 2022, 1:27 PM).

4. *Andrew F. v. Douglas Cnty. Sch. Dist.* RE-1, 137 S. Ct. 988, 996 (2017).

5. See *Hous. Indep. Sch. Dist. v. V.P. ex rel. Juan P.*, 582 F.3d 576, 590 (5th Cir. 2009); *Mr. & Mrs. G. ex rel. S.G. v. Canton Bd. of Educ.*, No. 3:17-cv-2161 (MPS), 2019 WL 1118094, at *10 (D. Conn. Mar. 11, 2019).

6. See Perry A. Zirkel, Andrew F. *After Six Months: A Game Changer?*, 348 EDUC. L. REP. 585, 594 (2017) (noting that "the net effect on outcomes in the several cases in the period after *Andrew F.* that provide both a pre- and post-outcome, has been either neutral or very slightly in the [school] district's favor").

dren with hearing loss, and states should take steps to mandate government-based and private insurance coverage.

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INTRODUCTION

Access to assistive technology devices is crucial to the educational development of children who have been diagnosed with hearing loss.⁷ For some hard of hearing children,⁸ hearing aids are “essential health-related tools” that facilitate a child’s ability to acquire language, develop speech, and socialize.⁹ Text-to-speech

7. *Assistive Technology for Special Education Students*, DISABILITY RTS. WASH., <https://bit.ly/39UGRgZ> [<https://perma.cc/FQ2W-M8P3>] (last visited Aug. 15, 2022).

8. See Serena Byrd et al., *The Right Not to Hear: The Ethics of Parental Refusal of Hearing Rehabilitation*, 121 LARYNGOSCOPE 1800, 1801 (2011). It is important to note that not all children with hearing disabilities benefit from assistive technology devices. *Id.*

9. Ostrowski & Mouzakes, *supra* note 1.

software, frequency modulation (FM) systems, and hearing aids can enable children to participate more actively on social, academic, and psychological levels, particularly now as educators are relying more on the use of innovative technology in the classroom.¹⁰ Yet many children who benefit from the use of hearing aids are unable to acquire them,¹¹ posing significant long-term consequences, including poor developmental outcomes, particularly regarding socialization, language acquisition, cognition, and communication.¹²

Access to assistive technology devices for individuals with hearing loss has been the subject of long-standing controversy.¹³ The law recognizes the benefits of assistive technology and includes assistive technology devices¹⁴ within the scope of special education services that school districts may be required to provide in order to ensure that children with disabilities have a free appropriate public education (FAPE)¹⁵ under the Individuals with Disabilities Education Act (IDEA).¹⁶ However, school districts typically do not provide access to hearing aids and other similar assistive technology devices under the Supreme Court's FAPE standard, which requires only that school districts provide special education and assistive technology services that are "reasonably calculated to enable a child to *make progress* in light of the child's circumstances."¹⁷ The Court has rejected appeals by parents, special education advocates, and scholars to adopt a standard that requires schools to provide services that give children "an equal educational opportunity" or would "maximize [their] potential."¹⁸ As a result, school districts deny parents' requests for school-funded hearing aids—even if there is medical evidence that such services would benefit the child

10. See Marianne DelPo Kulow & Scott Thomas, *Assistive Technology and the Americans with Disabilities Act: Endearing Employers to These Reasonable Accommodations*, 40 BERKELEY J. EMP. & LAB. L. 257, 258 (2019) (noting the "exponential growth of technology over the past thirty years has had a dramatic impact on all aspects of our lives, including our education and our work"); Matt Richtel, *Technology Changing How Students Learn, Teachers Say*, N.Y. TIMES (Nov. 1, 2012), <https://nyti.ms/3Ibh6py> [<https://perma.cc/FV8Q-QWKT>].

11. *Normandy*, *supra* note 2.

12. *Id.*

13. See Build Back Better Act, H.R. 5376, 117th Cong. (2021); Chamberlain & Nelson, *supra* note 3.

14. See 29 U.S.C. § 3002(4). Assistive technology devices include technology that "improve[s] [the] functional capabilities of individuals with disabilities." *Id.*

15. 20 U.S.C. § 1401.

16. 20 U.S.C. §§ 1400–1482.

17. *Endrew F. v. Douglas Cnty. Sch. Dist. RE-1*, 137 S. Ct. 988, 999 (2017) (emphasis added).

18. *Id.* at 995 (finding that the "equal opportunity" standard was "unworkable").

academically and socially—if the child is making “progress,” measured by “passing grades and advancement from year to year.”¹⁹ While scholars have addressed the potential implications of the Supreme Court’s standard, this Article focuses on the impact the Court’s standard has on requests for accessing assistive technology devices for children with hearing loss.

Using progress as defined by advancing from year to year to determine which special education services are necessary is problematic because it does not allow for an assessment of whether the child has made progress toward his or her individual goals as set forth in her individualized education program (IEP). For example, a child who is hearing impaired may advance from year to year but may struggle in meeting her individual goal to improve her reading skills. If the school district were required to provide the child with access to assistive technology, which would provide the child with access to sound, the child would be more likely to achieve her reading goals. One way to interpret the standard with a focus on the individual needs of the student is to use a framework modeled after the “capabilities approach” pioneered by Professor Martha C. Nussbaum and Amartya Sen.²⁰ A capabilities approach to determining progress would require school districts to look at what service(s) would assist the child in performing at her full capacity and whether the service(s) would enable the child to make progress toward her academic and social goals. If an assistive technology device would allow the child to make progress toward her goals and perform to her capability, the service should be deemed reasonably calculated to enable a child to make progress in light of the child’s circumstances. For children who are hard of hearing, assistive technology devices are often the most effective means of providing them with the capability to hear and understand their teachers and peers.²¹ And the research demonstrates that access to hearing aids

19. *Hous. Indep. Sch. Dist. v. V.P. ex rel. Juan P.*, 582 F.3d 576, 590 (5th Cir. 2009); *Mr. & Mrs. G. ex rel. S.G. v. Canton Bd. of Educ.*, No. 3:17-cv-2161 (MPS), 2019 WL 1118094, at *10 (D. Conn. Mar. 11, 2019).

20. Martha C. Nussbaum, *Foreword: Constitutions and Capabilities: “Perception” Against Lofty Formalism*, 121 HARV. L. REV. 4 (2007) [hereinafter Nussbaum, *Foreword*]; Martha C. Nussbaum, *Capabilities and Human Rights*, 66 FORDHAM L. REV. 273, 279–80 (1997) [hereinafter Nussbaum, *Capabilities and Human Rights*] (noting that the capabilities approach focuses on “an account of the space within which we make comparisons between individuals . . . as to how well they are doing” and is “linked to a concern with equality”).

21. See 29 U.S.C. § 3002(4). Assistive technology devices include “any item, piece of equipment, or product system . . . that is used to increase, maintain, or improve the functional capabilities of children with disabilities.” *Id.*

can provide significant educational and social benefits for hearing-impaired children.²²

In addition to the legal barriers, there are significant financial barriers to access. Hearing aids are expensive, and many families are unable to bear the financial burden associated with high-cost, effective hearing aids.²³ Limited access to assistive technology in schools can be attributed to inadequate funding provided to school districts, particularly in “high-poverty public elementary and secondary school classrooms,” where a significant disparity in federal funding leaves many children with disabilities without sufficient access to assistive technology.²⁴ In some school districts, the disparity in federal funding can be about \$200 per student.²⁵ While resource disparities impact all students, “the disparity in academic achievement across economic levels is particularly pronounced for students with disabilities.”²⁶ Additionally, children who are unable to acquire hearing aids through their school districts are often left with no other options for financial support. Although some children are eligible for funding through government programs, such as Medicaid, those who are ineligible are limited to private insurance, which often excludes, or substantially limits, coverage.²⁷ There has been some progress to mandate private insurance coverage but, to date, only 24 states mandate private insurance coverage for hearing aids.²⁸

These access issues raise questions about whether the current FAPE standard adequately provides for effective and substantive

22. Ostrowski & Mouzakes, *supra* note 1, at 6.

23. See generally RUTH COLKER, *DISABLED EDUCATION: A CRITICAL ANALYSIS OF THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT* (2013).

24. See Catrina C. Miksis, Note, *Technology Is Leaving Select Children Behind: The Effects of Resource Disparity when Federal Policies Fail to Equalize the Benefits of Technical Innovation in Public Education for Students with Disabilities*, 2016 ILL. J.L. TECH. & POL’Y 183, 190, 195 (2016).

25. See CLARE McCANN, *FEDERAL FUNDING FOR STUDENTS WITH DISABILITIES: THE EVOLUTION OF FEDERAL SPECIAL EDUCATION FINANCE IN THE UNITED STATES* 4 (2014); Claire S. Raj, *Rights to Nowhere: The IDEA’s Inadequacy in High-Poverty Schools*, 53 COLUM. HUM. RTS. L. REV. 409, 427 (2022).

26. See Miksis, *supra* note 24, at 185 (citing Andrew M.I. Lee, *What Is Assistive Technology?*, UNDERSTOOD, <https://u.org/3R4h86r> [<https://perma.cc/F8CZ-RG48>] (last visited Aug. 15, 2022)).

27. See *List of Medicaid Eligibility Groups*, MEDICAID, <https://bit.ly/3nzwf9E> [<https://perma.cc/82AT-HMHP>] (last visited Aug. 15, 2022), for a list of mandatory eligible individuals.

28. Williams, *supra* note 1, at 135; see *State Insurance Mandates for Hearing Aids*, AM. SPEECH-LANGUAGE-HEARING ASS’N, <https://bit.ly/3nA7VWa> [<https://perma.cc/KDH3-4AQC>] (last visited Aug. 15, 2022) (listing state legislation that mandates insurance coverage).

access²⁹ to assistive technology devices and services and highlight the need for additional states to step in to mandate insurance coverage. This Article builds on the work of scholars and advocates who have addressed the impact of the Supreme Court's FAPE standard and the barriers to assistive technology³⁰ by focusing on children with hearing loss³¹ as an illustration of the inequity caused by the limited scope of the law, the substantial cost of certain assistive technology devices, and the significant social and academic developmental cost to children who are unable to afford the technology they need. Part I of this Article provides an overview of the right to education for children with disabilities and the requirement that schools provide children with a FAPE under the IDEA. Part II explores the benefits of assistive technology for children with disabilities and the academic and social harm that can result from a lack of access to necessary assistive technology. Part III analyzes the development of the Supreme Court's FAPE standard and the lower courts' interpretations of the standard in evaluating requests for assistive technology services. Part IV examines the consequences of failing to consider the unique benefit of assistive technology devices in the scope of special education services and the related financial barriers to accessing assistive technology devices when applying the FAPE standard. In light of the identified barriers to access, Part V proposes addressing the access and financial barriers head-on: States should mandate private insurance coverage for hearing aids, courts can interpret the FAPE standard with a focus on the potential and capability of students to achieve their academic goals, and schools should consider using the IDEA reimbursement framework to allow for reimbursement of the cost of hearing aids and increase access to assistive technology.

29. See Talha Syed, *Educational Accommodation and Distributive Equity: The Principle of Proportionate Progress*, 50 CONN. L. REV. 485, 511 (2018) (arguing for distributive equity in determining how to tailor special education needs); see also Albert M. Cook, *Ethical Issues Related to the Use/Non-Use of Assistive Technologies*, 37 DEVELOPMENTAL DISABILITIES BULL. 127 (2009) (providing a more complete analysis of the equitable issues related to access to assistive technology).

30. See Miksis, *supra* note 24, at 183; Williams, *supra* note 1, at 133; Josh Cowin, Note, *Is That Appropriate?: Clarifying the IDEA's Free Appropriate Public Education Standard Post-Andrew F.*, 113 NW. UNIV. L. REV. 587, 587 (2018) (proposing that "courts adopt a two-part test for applying the new standard that evaluates both the procedures of particular institutions and the substantive value of students' individualized curricula").

31. See *Quick Statistics About Hearing*, NAT'L INSTS. HEALTH, <https://bit.ly/3OIFCAO> [<https://perma.cc/9BC6-4MUV>] (Mar. 25, 2021). According to the National Institute on Deafness and Other Communication Disorders, "[a]bout 2 to 3 out of every 1,000 children in the United States are born with a detectable level of hearing loss in one or both ears." *Id.*

I. PUBLIC EDUCATION RIGHTS FOR CHILDREN WITH DISABILITIES

Children with disabilities have faced significant barriers to obtaining equal access to education. They “were either totally excluded from schools or [were] sitting idly in regular classrooms awaiting the time when they were old enough to ‘drop out.’”³² In the early 1970s,³³ Congress began investigating issues related to education for children with disabilities, and the Office of Special Education Programs³⁴ determined that, of the 8 million children who were in need of special education services, only 3.9 million had adequate educational services, 2.5 million were receiving a substandard education, and 1.75 million were not in school at all.³⁵ This resulted in the enactment of the Individuals with Disabilities Education Act³⁶ (IDEA) to address concerns that children with disabilities were “excluded entirely from the public school system,” “did not receive appropriate educational services,” had undiagnosed disabilities, or that there were a “lack of adequate resources within the public school system.”³⁷

32. *Bd. of Educ. v. Rowley*, 458 U.S. 176, 179 (1982) (quoting H.R. REP. NO. 94-332, at 2 (1975)).

33. See *Timeline of the Individuals with Disabilities Education Act (IDEA)*, UNIV. KAN. SCH. EDUC. & HUM. SCIS., <https://bit.ly/3nAgjFa> [<https://perma.cc/A2H7-SYFY>] (last visited Aug. 15, 2022).

34. The Office of Special Education Programs, a unit within the U.S. Department of Education, was originally named the Bureau of Education for the Handicapped. See *generally Welcome to OSEP*, U.S. DEP’T OF EDUC., <https://bit.ly/3JYkrkj> [<https://perma.cc/8DCF-UTCD>] (July 27, 2022).

35. See S. REP. NO. 94-168, at 8 (1975), as reprinted in 1975 U.S.C.C.A.N. 1425, 1432.

36. Individuals with Disabilities Education Improvement Act of 2004, Pub. L. No. 108-446, 118 Stat. 2647. The Act was originally named the Education for All Handicapped Children Act. Education for All Handicapped Children Act of 1975, Pub. L. No. 94-142, 89 Stat. 773. In 1990, when Congress reauthorized the Act, it changed the name to the IDEA. Education of the Handicapped Act Amendments of 1990, Pub. L. No. 101-476, § 901, 104 Stat. 1103, 1142. The IDEA was again reauthorized in 2004. See *Individuals with Disabilities Education Improvement Act*.

37. See 20 U.S.C. § 1400(c)(2)(A); Kelsey A. Manweiler, *IDEAs that Provide a Solution when the Courts Have Disabled the System*, 38 CHILD’S LEGAL RTS. J. 47, 51 (2018) (citing Megan McGovern, *Least Restrictive Environment: Fulfilling the Promises of IDEA*, 21 WIDENER L. REV. 117, 118 (2015)); OFF. OF SPECIAL EDUC. & REHAB. SERVS., U.S. DEP’T OF EDUC., THIRTY-FIVE YEARS OF PROGRESS IN EDUCATING CHILDREN WITH DISABILITIES THROUGH IDEA 3 (2010); S. REP. NO. 94-168, at 5, as reprinted in 1975 U.S.C.C.A.N. 1425, 1429 (noting that prior to the enactment of the Elementary and Secondary Education Act of 1965, the legal protections were insufficient).

[T]he Federal Government had done little to assist in the education of handicapped children, and the effectiveness of existing programs was dissipated by the lack of a single strong administrative body. The Bureau of

The IDEA was one of the most significant pieces of legislation to advance the rights of children with disabilities. The statute affords children with disabilities a “substantive right”³⁸ to a free and appropriate public education (“FAPE”).³⁹ Since the enactment of the IDEA, millions of children with disabilities have received special education services. From 2020 to 2021, approximately 7.2 million children received special education services under the IDEA.⁴⁰ And more children with disabilities are graduating from high school than ever before.⁴¹

The IDEA requires states to “establish a goal of providing full educational opportunities to all children [with disabilities]; [and] provide procedures for insuring that [children with disabilities] and their parents or guardians are guaranteed procedural safeguards in decisions regarding identification, evaluation, and educational placement of children.”⁴² The Act is intended “to ensure that all children with disabilities have available to them a free appropriate public education [FAPE], designed to meet their unique needs and to prepare them for further education, employment and independent living.”⁴³

Education for the Handicapped was established by this law in order to provide the leadership necessary in this field.

S. REP. NO. 94-168, at 5, *as reprinted in* 1975 U.S.C.C.A.N. 1425, 1429.

38. *Andrew F. v. Douglas Cnty. Sch. Dist. RE-1*, 137 S. Ct. 988, 993 (2017) (citing *Bd. of Educ. v. Rowley*, 458 U.S. 176, 176 (1982)).

39. 20 U.S.C. §§ 1400–1482. Formerly known as the Education for All Handicapped Children Act, the IDEA was initially enacted in 1975. *See* Education for All Handicapped Children Act.

40. *Students with Disabilities*, NAT’L CTR. FOR EDUC. STAT. (May 2022), <https://bit.ly/3QJoviL> [<https://perma.cc/Q2SN-M8ST>].

41. *See* Kulow & Thomas, *supra* note 10, at 269 (noting that “[i]n 2015, 70% of younger people with disabilities graduated from high school, compared to a mere 27% twenty years earlier”).

42. S. REP. NO. 94-168, at 8, *as reprinted in* 1975 U.S.C.C.A.N. 1425, 1432.

[A] “child with a disability” means a child (i) with intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance . . . orthopedic impairments, autism, traumatic brain injury, other health impairments, or special learning disabilities; and (ii) who, by reason thereof, needs special education and related services.

20 U.S.C. § 1401(3)(A)(i)–(ii).

43. 20 U.S.C. § 1400(d)(1)(A). In 2004, the IDEA was reauthorized and the purpose section amended to specify that special education students are also preparing for “further education.” *Id.* FAPE is defined as:

[S]pecial education and related services that (A) have been provided at public expense, under public supervision and direction, and without charge, (B) meet the standards of the State educational agency, (C) include an appropriate preschool, elementary, or secondary school education in the State involved, and (D) are provided in conformity with the

The IDEA's FAPE mandate requires states to provide "specially designed instruction" and "such . . . supportive services . . . as may be required to assist a child to benefit from special education."⁴⁴ FAPE includes special education and related services⁴⁵ that "[a]re provided at public expense, under public supervision and direction and without charge" and "in conformity with an individualized education program (IEP)."⁴⁶ In order to provide a FAPE, the child's IEP must include an educational program that is "reasonably calculated to enable the child to receive educational benefits"⁴⁷ and "make progress appropriate in light of the child's circumstances."⁴⁸ Once it is determined that a child is eligible for FAPE under the IDEA,⁴⁹ the child is evaluated by a team⁵⁰ to discuss and document appropriate services for the child. This process, known as the individualized education program (IEP), results in a written

individualized education program required under section 1414(a)(5) of this title.

20 U.S.C. § 1401(9). Interpreting the FAPE requirement, the Supreme Court noted that the statutory definition "tend[ed] toward the cryptic rather than the comprehensive" and applied the following two-part test: (1) "whether the State has complied with the procedures set forth in the Act" and (2) "whether the individualized education program is 'reasonably calculated to enable the child to receive educational benefits.'" *Rowley*, 458 U.S. at 188, 216. "Educational benefits" continue to be the subject of much discussion and debate within the area of special education law.

44. 20 U.S.C. § 1401(26)(A).

45. See 34 C.F.R. § 300.34(a) (2022). Special education and related services can include "transportation and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education, and includes speech-language pathology and audiology services, interpreting services, psychological services, physical and occupational therapy." *Id.*

46. 34 C.F.R. §§ 300.17(a), (d).

47. *Andrew F. v. Douglas Cnty. Sch. Dist.* RE-1, 137 S. Ct. 988, 996 (2017) (quoting *Rowley*, 458 U.S. at 207). The Court, however, declined "to establish any one test for determining the adequacy of educational benefits conferred upon all children covered by the Act" given that the "Act requires States to 'educate a wide spectrum'" of children with disabilities and that "the benefits obtainable by children at one end of the spectrum will differ dramatically from those obtainable by children at the other end." *Id.*

48. *Id.* at 1001.

49. See 34 C.F.R. § 300.8(a)(1).

Child with a disability means a child evaluated in accordance with [34 C.F.R.] §§ 300.304 through 300.311 as having an intellectual disability, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as "emotional disturbance"), an orthopedic impairment, autism, traumatic brain injury, and other health impairment, a speech learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.

Id.

document that describes the child’s current academic performance, establishes objectives and goals for improvements in that performance, and “describes the specially designed instruction and services that will enable the child to meet those objectives.”⁵¹ Described as “the centerpiece of the [IDEA’s] education delivery system for [children with disabilities],”⁵² the IEP “serves as the ‘vehicle’ or ‘means’ of providing a FAPE.”⁵³ The Supreme Court has noted that it is “through the IEP that ‘[t]he “free appropriate public education” required by the Act is tailored to the unique needs of’ a particular child.”⁵⁴ The IEP must be reviewed annually in order to ensure that it is tailored to the unique needs of the child,⁵⁵ which is in line with the IDEA’s goal of “provid[ing] each child with meaningful access to education by offering individualized instruction and related services appropriate to her ‘unique needs.’”⁵⁶ The IEP is intended to evaluate the child’s annual educational goals and the need for special education services necessary to achieve those goals.⁵⁷ While the first IEP meeting must be scheduled within 30 days after the school district determines the child is eligible for services,⁵⁸ subsequent annual IEP reviews are scheduled so that the IEP “team” can assess the child’s progress over the last year and determine whether services should be adjusted for the next academic year.⁵⁹ In the event that the parent or guardian seeks to challenge the IEP, the parent or guardian is required to seek relief

50. See 34 C.F.R. § 300.23 (defining “Individualized Education Program team” or “IEP team” as “a group of individuals . . . that is responsible for developing, reviewing, or revising an IEP for a child with a disability”).

[The IEP team must include] (1) [t]he parents of the child; (2) [n]ot less than one regular education teacher of the child (if the child is, or may be, participating in the regular education environment); (3) [n]ot less than one special education teacher of the child . . . ; (4) [a] representative of the public agency . . . ; (5) [a]n individual who can interpret the instructional implications of evaluation results . . . ; (6) [a]t the discretion of the parent or the agency, other individuals who have knowledge or special expertise regarding the child . . . ; and (7) [w]henver appropriate, the child with a disability.

34 C.F.R. § 300.321.

51. *Honig v. Doe*, 484 U.S. 305, 311–12 (1998) (citing 20 U.S.C. § 1401(19) (current version at 20 U.S.C. § 1436)).

52. *Andrew F.*, 137 S. Ct. at 994.

53. *Fry v. Napoleon Cmty. Schs.*, 580 U.S. 154, 156 (2017).

54. *Andrew F.*, 137 S. Ct. at 1000 (quoting *Bd. of Educ. v. Rowley*, 458 U.S. 176, 181(1982)).

55. See 20 U.S.C. § 1414(d)(1)(A)(i).

56. *Fry*, 580 U.S. at 170 (quoting 20 U.S.C. § 1401(29)).

57. 20 U.S.C. § 1414(d)(1)(A).

58. See *id.* § 1414(d).

59. See *id.* § 1414(d)(5)(iii)(II)(CC).

through an administrative review process under the IDEA's exhaustion provision prior to seeking relief from the court.⁶⁰

Special education services can include modifications in instructional design or support services such as speech-language therapy, physical and occupational therapy, or other adaptive services.⁶¹ Special education services also include technology or assistive technology devices, which are defined as "any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities."⁶² Assistive technology includes a range of tools and devices that "enable children to improve learning, mobility, communication, and positioning within the home, school, and community environments,"⁶³ including voice-activated computers, wheelchairs, electronic note-taking devices, word prediction devices, pencil grips, tactile materials for visually impaired students, auditory FM trainers, and hearing aids.⁶⁴ The type of assistive technology needed depends on the nature of the disability.

II. BENEFITS OF ASSISTIVE TECHNOLOGY FOR CHILDREN WITH DISABILITIES

Technology has become critical to the way in which education is delivered and received. For children with disabilities, technology and assistive technology devices can be vital to their academic and social development.⁶⁵ Assistive technology is intended to increase the individual's independence⁶⁶ and can enhance a child's performance by "augmenting [their] strengths or providing an alternative mode of performing a task to compensate for the effects of a disability."⁶⁷ Research has shown that assistive technology is an effective tool for self-management for persons with intellectual disabilities and an effective tool for teaching new skills.⁶⁸ Assistive

60. *See id.* §§ 1412(a)(1)(C), 1415(i)(2).

61. *See id.* § 1401(26)(A).

62. 29 U.S.C. § 3002(4).

63. Selena Isabelle et al., *Assistive Technology for Children with Disabilities*, 16 OCCUPATIONAL THERAPY HEALTH CARE 29, 30 (2003).

64. *Assistive Technology for Special Education Students*, *supra* note 7.

65. *Id.*

66. Cook, *supra* note 29, at 129.

67. Linda C. Mechling, *Assistive Technology as a Self-Management Tool for Prompting Students with Intellectual Disabilities to Initiate and Complete Daily Tasks: A Literature Review*, 42 EDUC. & TRAINING DEVELOPMENTAL DISABILITIES 252, 253 (2007).

68. *Id.* (first citing Taku Hagiwara & Brenda Smith Myles, *A Multimedia Social Story Intervention: Teaching Skills to Children with Autism*, 14 FOCUS ON AUTISM & OTHER DEVELOPMENTAL DISABILITIES 82 (1999); then citing Linda C.

technology can also reduce the marginalization of individuals with disabilities by “provid[ing] some equalization of functional ability and thus positively alter[ing] the societal perception of dependence through this increased functionality.”⁶⁹

In 1988, Congress enacted the Technology-Related Assistance for Individuals with Disabilities Act, which was later amended and renamed the Assistive Technology Act (Tech Act), to raise awareness regarding the benefit of assistive technology for individuals with disabilities, to highlight the potential to reduce costs to society, and to “support programs of grants to States to address the assistive technology needs of individuals with disabilities.”⁷⁰ The Tech Act defines assistive technology devices as “[a]ny item, piece of equipment, or product system . . . that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.”⁷¹

At the time the Tech Act was enacted, the deaf community raised concerns that the Act did not go far enough:

It does little good to have such technology available in some “assistive device center” some miles away, which may be used a few hours a week. As well intentioned as the Tech Act is, it does too little, focusing mostly on such centers. Rather, we need an innovative new approach that would result in the hardware and software used in the classroom and in the child’s home being “accessible” to deaf and other disabled children, youth and adults.⁷²

Mechling & David L. Gast, *Combination Audio/Visual Self-Prompting System for Teaching Chained Tasks to Students with Intellectual Disabilities*, 32 EDUC. & TRAINING IN MENTAL RETARDATION & DEVELOPMENTAL DISABILITIES 138 (1997); and then citing Jacqueline M. Norman et al., *Using an Instructional Package Including Video Technology to Teach Self-Help Skills to Elementary Students with Mental Disabilities*, 16 J. SPECIAL EDUC. TECH. 5 (2001)).

69. Cook, *supra* note 29, at 143 (noting that “the use of assistive technology can exacerbate this negative perception of people with disabilities by creating a stigma that calls attention to the disability rather than the capability of the individual,” but “[s]tigmas associated with assistive technologies can also be dispelled if the technology becomes very familiar”).

70. Assistive Technology Act of 2004, Pub. L. No. 108-364, 118 Stat. 1707, 1707, 1709 (noting that “[o]ver 54,000,000 individuals in the United States have disabilities, with almost half experiencing severe disabilities that affect their ability to see, hear, communicate, reason, walk, or perform other basic life functions”). ConnectEd is another federal initiative intended to encourage teacher training to support and integrate technology into the classroom. See *ConnectEd*, OFF. EDUC. TECH., <https://bit.ly/3w6UqC1> [<https://perma.cc/Q7AP-WJN4>] (last visited Aug. 16, 2022).

71. Assistive Technology Act § 3. The Tech Act defines assistive technology services as “[a]ny service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device.” *Id.*

72. Rehabilitation Act Amendments of 1986, Pub. L. No. 99-506, 100 Stat. 1807; Education of the Handicapped Act Amendments of 1986, Pub. L. No. 99-457, 100 Stat. 1145; Handicapped Children’s Protection Act of 1986, Pub. L. No.

To address these concerns, the Commission on the Education of the Deaf suggested an extension of the law, “making school districts and other recipients of federal financial assistance responsible for ensuring that electronic equipment purchased, leased, rented or otherwise obtained, is in fact accessible to and usable by both students and faculty/staff who have physical, sensory, mental, or other disabilities.”⁷³

In 1994, the U.S. Department of Education established the Office of Educational Technology (OET) to “develop[] national educational technology policy” and the “vision for how technology can be used to transform teaching and learning and how to make everywhere, all-the-time learning possible for early learners through K-12, higher education, and adult education.”⁷⁴ OET’s mission includes “[p]romoting equity of access to transformational learning experiences enabled by technology” and “[e]nsuring all learners . . . have access to high-quality, affordable digital learning resources at school and at home.”⁷⁵

The U.S. Department of Education released the National Education Technology Plan (NETP) as the “flagship educational technology policy document for the United States.”⁷⁶ The Plan includes recommendations that “focus[] on using technology to transform learning experiences with the goal of providing greater equity and accessibility.”⁷⁷ The NETP, which was updated in 2017, defines “accessibility” as “enabling students with disabilities to use content and participate in activities,” including “accommodating the individual learning needs of students, such as . . . [students] from economically

99-372, 100 Stat. 796; *Hearing Before the Subcomm. on the Handicapped of the S. Comm. on Lab. & Hum. Res.*, 100th Cong. 47–48 (1987) [hereinafter *Hearing*] (statement of National Commission on Education of the Deaf).

73. *Hearing*, *supra* note 72, at 47–48 (statement of National Commission on Education of the Deaf). Children with disabilities may also have a right to assistive technology under the Americans with Disabilities Act, which protects the rights of individuals with disabilities, and Section 504 of the Rehabilitation Act, which ensures that a child with a disability has equal access to education. *See* Americans with Disabilities Act of 1990, Pub. L. No. 101-336, 104 Stat. 327; Every Student Succeeds Act of 2015, Pub. L. No. 114-95, § 504, 129 Stat. 1802, 1973. Additionally, the Every Student Succeeds Act, signed into law by President Obama in 2015, provides support for funding for technology. *See* Every Student Succeeds Act.

74. *What We Do*, OFF. EDUC. TECH., <https://bit.ly/3P0mVbp> [<https://perma.cc/G4UF-L4BW>] (last visited Aug. 16, 2022).

75. *Id.*

76. *National Education Technology Plan*, OFF. EDUC. TECH., <https://bit.ly/3Cn7Sp3> [<https://perma.cc/8C94-ED5P>] (last visited Aug. 21, 2022).

77. *Reimagining the Role of Technology in Education: 2017 National Education Technology Plan Update*, OFF. EDUC. TECH. 5 (Jan. 2017), <https://bit.ly/3dFvMSI> [<https://perma.cc/X6EF-RHQ3>].

disadvantaged homes.”⁷⁸ “Equity” is defined as “increasing all students’ access to educational opportunities with a focus on closing achievement gaps and removing barriers that students face based on their race, ethnicity, or national origin; sex; sexual orientation or gender identity or expression; disability; English language ability; religion; socioeconomic status; or geographical location.”⁷⁹ Despite Congress and the U.S. Department of Education’s recognition of the need for equitable access to assistive technology for students, legal and financial barriers to access remain a challenge for many families of children with disabilities.

A. Assistive Technology for Children with Hearing Loss

An estimated 48 million people in the United States suffer from hearing loss,⁸⁰ including 3 million children.⁸¹ Assistive technology devices used by children with hearing loss vary depending on the nature of the disability and the child’s individual educational need. One of the most common assistive technology devices for an individual with hearing loss is a hearing aid device.⁸² Indeed, “hearing aids are the third most widely used medical assistive device in the United States, following eyeglasses and canes.”⁸³ Research shows that many individuals who have a mild to moderate hearing loss benefit greatly from the use of a hearing aid.⁸⁴ But hearing aids are expensive.⁸⁵ As noted by members of the deaf community: “[I]t

78. *Id.*

79. *Id.*

80. *The Facts About Hearing Loss*, CTR. FOR HEARING & COMM’N., <https://bit.ly/3R3SkLY> [<https://perma.cc/XE85-N93V>] (last visited Aug. 16, 2022).

81. See Danielle S. Ross et al., *Hearing Screening and Diagnostic Evaluation of Children with Unilateral and Mild Bilateral Hearing Loss*, 12 TRENDS AMPLIFICATION 27, 29 (2008) (noting that approximately 3 in 1,000 babies are born with permanent hearing loss, making hearing loss one of the most common birth defects in the United States).

82. *But see* Byrd et al., *supra* note 8, at 1801. It is important to note that not all hearing-impaired or deaf individuals prefer or benefit from hearing aids. *Id.* Some individuals prefer American Sign Language (“ASL”) as their preferred mode of communication. *Id.*

83. Steven B. Adams, Comment, *Who Will Hear? An Examination of the Regulation of Hearing Aids*, 11 J. CONTEMP. HEALTH L. & POL’Y 505, 505 (1995).

84. J. Bruce Tomblin et al., *The Influence of Hearing Aids on the Speech and Language Development of Children with Hearing Loss*, 140 JAMA OTOLARYNGOLOGY HEAD & NECK SURGERY 403, 407 (2014).

85. See Shira Ovide, *A Hearing Aid for Everyone*, N.Y. TIMES (Oct. 20, 2021), <https://nyti.ms/3y4vPxK> [<https://perma.cc/KE6E-M9XY>]. The average cost of a pair of prescription hearing aids is \$5,000. *Id.* While over-the-counter, lower cost hearing aids are now available, most hearing-impaired individuals require medically prescribed hearing aids, as evaluated by an audiologist, in order to provide the most effective amplification. *Id.*

is expensive to be Deaf.”⁸⁶ “By the time we have brought [sic] hearing aids, TDDs, television decoders, special alarm clocks, baby cry lights, door lights, smoke alarms . . . one can understand why.”⁸⁷

The Commission of Education for the Deaf has noted the importance of access to assistive technology for children with hearing loss: “[A]ssistive technology [should] be recognized for what it in fact is—and must become: technology that children, youth and adults with disabilities such as deafness need to use every day, all day, in order to learn most effectively and efficiently.”⁸⁸ Beyond the obvious benefit of allowing one to hear better, hearing aids can improve the quality of one’s life.⁸⁹ Early intervention is also critical. If unmanaged, hearing loss can have long-lasting effects on a child’s speech, language, and overall cognitive and social development.⁹⁰ Providing adequate assistive technology and related services also has significant long-term benefits to society. Experts have noted that “by the time a child with hearing loss graduates from high school, more than \$400,000 per child can be saved in special education costs if the child is identified early and given appropriate educational, medical, and audiological services.”⁹¹

Despite the clear benefit of assistive technology and the right to assistive technology devices under the law, many children who would benefit from hearing aids do not have access to them because funding is not available from the school districts. When hearing aids are not provided by the school district, some children have no other funding available because government-based and private health insurance coverage for hearing aids is limited. While some states have enacted legislation mandating health insurance companies to provide coverage, many other states have not.⁹² Recent efforts by

86. H.R. REP. NO. 100-819, at 26 (1988).

87. *Id.*

88. *Id.*

89. Adams, *supra* note 83, at 506–08.

90. Christine Yoshinaga-Itano et al., *Language of Early- and Later-Identified Children with Hearing Loss*, 102 PEDIATRICS 1161, 1168–71 (1998) (“Left undetected, mild or unilateral hearing loss can result in delayed speech and language acquisition, social-emotional or behavioral problems, and lags in academic achievement.”).

91. *Infant Hearing Loss Facts*, WYO. EARLY HEARING DETECTION & INTERVENTION, <https://bit.ly/3c7Pd5w> [<https://perma.cc/6T5G-575A>] (last visited Aug. 16, 2022).

92. See Mandy Mroz, *Insurance and Financial Assistance for Hearing Aids*, HEALTHY HEARING (Mar. 24, 2022), <https://bit.ly/3tZau7M> [<https://perma.cc/4K93-EDCC>] (“[A]bout 23 states mandate health insurance companies provide full or partial hearing aid coverage for children. Five states . . . also extend those mandates to adults.”).

states such as New York have been met with opposition from the insurance industry.⁹³

B. *Consequences of Lack of Access*

Lack of access to hearing aids for a hearing-impaired child can be detrimental to their educational and social development. Scholars have noted that “[w]ithout these devices and services, students with disabilities may be prevented from full inclusion in the classroom with regular education peers.”⁹⁴ Additional consequences of untreated hearing loss include social consequences related to depression, anxiety, and isolation and educational consequences that impact speech and cognitive development.⁹⁵

Medical studies have found that children with unilateral hearing loss “had lower language and verbal IQ scores than their siblings with normal hearing.”⁹⁶ Additionally, they are “at risk for delays in speech-language development, cognition, and behavioral problems that can affect functioning at school.”⁹⁷ The negative effects of untreated hearing loss can include difficulty with socializing, problems with memory and attention, poor reading, behavioral issues, and reduced quality of life.⁹⁸

III. ASSISTIVE TECHNOLOGY UNDER THE IDEA

The IDEA expressly contemplates assistive technology devices and services as a special education service.⁹⁹ As stated in the statute, “[a]lmost 30 years of research and experience has demonstrated that the education of children with disabilities can be more effective by . . . [s]upporting the development and use of technology, including assistive technology devices and assistive technology services, to maximize accessibility for children with disabilities.”¹⁰⁰ However, the scope of services required by school districts is limited by what the school district is required to provide under the FAPE standard.

93. See Williams, *supra* note 1, at 133.

94. Miksis, *supra* note 24, at 196–97.

95. See Yoshinaga-Itano et al., *supra* note 90, at 1168–71. Even mild or moderate hearing loss can result in delayed academic development. CHERYL D. JOHNSON ET AL., OPTIMIZING OUTCOMES FOR STUDENTS WHO ARE DEAF OR HARD OF HEARING 8 (3d ed. 2018), <https://bit.ly/3c3Q088> [<https://perma.cc/74CH-J9YK>].

96. Williams, *supra* note 1, at 139.

97. See *id.*

98. See Ostrowski & Mouzakes, *supra* note 1.

99. See 42 U.S.C. § 1400(c)(5)(H).

100. *Id.*

A. *FAPE Under the IDEA*

The right to assistive technology devices under the IDEA is incorporated within the statute's guarantee to provide children with disabilities with a FAPE. A FAPE is defined as:

[S]pecial education and related services¹⁰¹ that (A) have been provided at public expense, under public supervision and direction, and without charge, (B) meet the standards of the State educational agency, (C) include an appropriate preschool, elementary, or secondary school education in the State involved, and (D) are provided in conformity with the individualized education program required under section 1414(a)(5) of this title.¹⁰²

A FAPE includes assistive technology, which is defined as “[a]ll forms of technology that improve the ‘functional capabilities’ of individuals with disabilities,”¹⁰³ including “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 a child with a disability.”¹⁰⁴ Assistive technology “does not include a medical device that is surgically implanted, or the replacement of such device”¹⁰⁵ but

101. See 20 U.S.C. § 1401(26) (defining related services as “transportation, and such developmental, corrective, and other supportive services (including speech-language pathology and audiology services . . .) as may be required to assist a child with a disability to benefit from special education”); see also 34 C.F.R. § 300.34(c)(1)(iii) (2022) (stating that audiology services include “[p]rovision of habilitative services, such as language habilitation, auditory training, speech reading (lip-reading), hearing evaluation, and speech conservation”).

102. 20 U.S.C. § 1401(9).

103. Kulow & Thomas, *supra* note 10, at 259–60, 260 n.10 (noting that the Technology-Related Assistance for Individuals with Disabilities Act of 1988, which was repealed and replaced by the Assistive Technology Act of 1998, defined the term “assistive technology device” 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”); Technology-Related Assistance for Individuals with Disabilities Act of 1988, Pub. L. No. 100-407, § 3(1), 102 Stat. 1044, 1046, *repealed by* Assistive Technology Act of 1998, Pub. L. No. 105-394, § 3(a)(3), 112 Stat. 3627, 3631 (codified as amended at 29 U.S.C. § 3002).

104. 20 U.S.C. § 1401(1)(A). The definitions of assistive technology and assistive technology services are derived from the Technology-Related Assistance for Individuals with Disabilities Act § 3.

105. 20 U.S.C. § 1401(1)(B). It has been noted that:

[T]he distinguishing factor between those services that are not covered under the Act, such as mapping, and those that are covered, such as verifying that a cochlear implant is functioning properly, in large measure, is the level of expertise required. The maintenance and monitoring of surgically implanted devices requires the expertise of a licensed physician or an individual with specialized technical expertise beyond that typically available from school personnel. On the other hand, trained lay persons

includes “any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device . . . and includes . . . purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by such child.”¹⁰⁶

The IDEA regulations provide that “[a]ssistive technology service means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device.”¹⁰⁷ The IDEA regulations also contemplate funding for assistive technology: “Some portion” of funding “may be used . . . to support the use of technology . . . to maximize accessibility to the general education curriculum for children with disabilities.”¹⁰⁸

The 1991 amendments to the IDEA added specific references to assistive technology, which noted that the technological development and improvement in assistive technology “provided new opportunities for children with many disabilities to participate in educational programs” and facilitated “greater independence and productivity.”¹⁰⁹ An amendment was also necessary to clarify confusion regarding terminology related to technology programs and services and “the broad range of assistive technology devices and related services that are available.”¹¹⁰ However, the regulations do

or nurses can routinely check an externally worn processor connected with a surgically implanted device to determine if the batteries are charged and the external processor is operating.

Assistance to States for the Education of Children with Disabilities and Preschool Grants for Children with Disabilities, 71 Fed. Reg. 46,540, 46,571 (Aug. 14, 2006) (to be codified at 34 C.F.R. pts. 300, 301).

106. 20 U.S.C. § 1401(2)(B).

107. *Id.* § 1401(1)(a); see 34 C.F.R. § 300.6 (2022). Assistive technology service includes:

- a. The evaluation of the needs of such child, including a functional evaluation of the child in the child’s customary environment;
- b. Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by such child;
- c. Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- d. Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- e. Training or technical assistance for such child, or, where appropriate, the family of such child; and
- f. Training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of such child.

34 C.F.R. § 300.6 (2022).

108. 20 U.S.C. § 1411(e)(2)(c)(v).

109. H.R. REP. NO. 101-544, at 8 (1990).

110. *Id.*

not include specific criteria for determining when assistive technology is required to provide a FAPE.

The IDEA requires the IEP team to consider the need for assistive technology at a child's annual IEP meeting.¹¹¹ If the IEP team declines to recommend an assistive technology evaluation, parents have the right to request an independent assistive technology evaluation at the school's expense.¹¹² A child's IEP is required to be developed in accordance with the FAPE standard.

B. *The Supreme Court's FAPE Standard*

The Supreme Court initially addressed the FAPE standard about 40 years ago in *Board of Education v. Rowley*. *Rowley* involved a dispute over whether a school district was required to provide a child with a hearing loss with a sign-language interpreter in all of her classes.¹¹³ Based on its determination that using an FM system¹¹⁴ and working with a tutor and a speech therapist were sufficient to meet the FAPE standard, the school district denied the parents' request, arguing that the IDEA did not create individual rights.¹¹⁵ The district court and the Second Circuit disagreed with the school district and interpreted FAPE to require school districts to bring the child's "educational opportunity up to the level of the educational opportunity being offered to her non-[disabled] peers."¹¹⁶

The Supreme Court rejected the "equal opportunity" standard applied by the lower courts, finding that FAPE was "too complex to

111. 20 U.S.C. § 1414(3)(B)(iv)–(v). The IDEA provides: [T]he IEP Team shall . . . consider the communication needs of the child and, in the case of a child who is deaf or hard of hearing, consider the child's language and communication needs, opportunities for direct communications with peers and professional personnel in the child's language and communication mode, academic level, and full range of needs . . . and consider whether the child needs assistive technology devices and services.

Id.

112. *See* 20 U.S.C. § 1415(i).

113. *Bd. of Educ. v. Rowley*, 458 U.S. 176, 184–85 (1982).

114. Madeleine Burry, *FM Systems for People with Hearing Loss*, HEALTHY HEARING (June 18, 2022), <https://bit.ly/3OIbHsa> [<https://perma.cc/3Z2W-SPSV>] (stating that an FM amplification system consists of a microphone worn by the teacher, which works with the amplification system in the student's personal hearing aid, to amplify the teacher's voice).

115. *Rowley*, 458 U.S. at 184–85.

116. *Id.* at 186 (quoting *Rowley v. Bd. of Educ.*, 483 F. Supp. 528, 535 (S.D.N.Y. 1980) (ruling that in order to meet the FAPE standard, children should be provided with an "opportunity to achieve [their] full potential commensurate with the opportunity provided to other children"); *Rowley v. Bd. of Educ.*, 632 F.2d 945, 948 (2d Cir. 1980).

be captured by the word ‘equal’ whether one is speaking of opportunities or services” and would require courts to make “impossible measurements and comparisons.”¹¹⁷ However, the Court also made clear that the IDEA “guarantees a substantively adequate program of education to all eligible children.”¹¹⁸ In interpreting the IDEA’s FAPE mandate, the Court endeavored to establish a substantive standard consistent with the legislative intent that special education services are “not guaranteed to produce any particular outcome.”¹¹⁹ Rather, “the intent of the Act was to open the door of public education to [children with disabilities] on appropriate terms [rather] than to guarantee any particular level of education once inside.”¹²⁰ The Court further concluded that the “‘basic floor of opportunity’ provided by the Act consists of access to specialized instruction and related services which are individually designed to provide educational benefit to the . . . child.”¹²¹ Instead of developing a test for determining what is required to provide adequate “educational benefits,” the Court developed a two-part test: “First, has the [school] complied with the procedures of the Act? And second, is the individualized educational program developed through the Act’s procedures reasonably calculated to enable the child to receive educational benefits?”¹²²

Thirty-five years later, the Court revisited the FAPE standard in *Endrew F. v. Douglas County School District* to clarify confusion by the district courts in applying the standard established in *Rowley*.¹²³ *Endrew F.* involved a dispute about the school district’s obligation to reimburse Endrew’s parents for tuition at a private school that Endrew attended because the public school was not able to provide him with appropriate services. Endrew’s parents argued that private placement was necessary because the school district refused to adjust his public school IEP, and, as a result, his “academic and functional progress had essentially stalled.”¹²⁴ To qualify for reimbursement, Endrew’s parents were required to prove “that the school district had not provided Endrew a FAPE in a timely man-

117. *Id.* at 199.

118. *Endrew F. v. Douglas Cnty. Sch. Dist.* RE-1, 137 S. Ct. 988, 995 (2017) (citing *Rowley*, 458 U.S. at 200–02, 207).

119. *Rowley*, 458 U.S. at 192.

120. *Id.*

121. *Id.* at 201.

122. *Id.* at 204.

123. Terrye Conroy & Mitchell L. Yell, *Free Appropriate Public Education After Endrew F. v. Douglas County School District*, 35 *TOURO L. REV.* 101, 107–08 (2017) (noting the difference among the circuit courts as to what would satisfy the Supreme Court’s FAPE standard).

124. *Endrew F. v. Douglas Cnty. Sch. Dist.* RE-1, 137 S. Ct. 988, 996 (2017).

ner prior to his enrollment at the private school.”¹²⁵ Despite evidence presented by the parents that Andrew did “much better” at the private school, the administrative law judge, the district court, and the circuit court denied reimbursement, finding that Andrew’s previous IEPs at the public school “had enabled him to make . . . progress,” which was all that was required.¹²⁶

In reviewing the case, the Supreme Court noted that “Congress (despite several intervening amendments to the IDEA) ha[d] not materially changed the statutory definition of a FAPE since *Rowley* was decided” and reiterated the *Rowley* Court’s finding that the IDEA does not require a “an opportunity to understand and participate in the classroom that was substantially equal to that given her non-[disabled] classmates.”¹²⁷ Rather, “a FAPE education [is] one that enables students with disabilities to make ‘meaningful progress.’”¹²⁸ In developing a standard, the Court considered the “essential function of an IEP,” which “is to set out a plan for pursuing academic and functional advancement”¹²⁹ and that “a substantive standard not focused on student progress would do little to remedy the pervasive and tragic academic stagnation that prompted Congress to act.”¹³⁰ The Court settled on a standard that is currently applied today: “To meet its substantive obligation under the IDEA, a school must offer an IEP reasonably calculated to enable a child to make progress appropriate in light of the child’s circumstances.”¹³¹ The Court did not specify how to define appropriate progress.¹³²

What has emerged from the Court’s decision in *Endrew F.* is a general standard with “no ‘bright-line rule’ determining ‘what “appropriate” progress’ means; rather, ‘the adequacy of the given IEP turns on the unique circumstances of the child for whom it was created.’”¹³³ In determining what is appropriate and adequate, courts

125. *Id.* at 997.

126. *Id.*

127. *Id.* at 1001.

128. *Id.* at 999, 1001.

129. *Id.*

130. *Id.*

131. *Id.* at 999.

132. *See id.* at 1001. The Supreme Court remanded the case to the Tenth Circuit, which remanded the case to the district court to consider its ruling in light of the new standard. *See* *Endrew F. v. Douglas Cnty. Sch. Dist.* RE-1, 694 F. App’x 654, 655 (10th Cir. 2017).

133. A.R. *ex rel.* M.R. v. Katonah Lewisboro Union Free Sch. Dist., No. 18-CV-9938 (KMK), 2019 WL 6251196, at *9 (S.D.N.Y. Nov. 21, 2019) (quoting *Endrew F.*, 137 S. Ct. at 1001; and then citing *S.C. v. Katonah-Lewisboro Cent. Sch. Dist.*, 175 F. Supp. 3d 237, 250 (S.D.N.Y. 2016)). The district judge reversed his original decision and ordered the school district to reimburse Andrew’s tuition and

tend to balance whether the IEP provides for merely “de minimis progress from year to year,”¹³⁴ which would be insufficient, and whether the IEP would “maximize [the child’s] potential,” which is more than the IDEA requires.¹³⁵

Despite the new standard established in *Endrew F.*, many lower courts have continued to apply the same analysis they applied before the decision.¹³⁶ When reviewing challenges to the child’s IEP, courts require the child’s parent or guardian to show that the school district “failed to devise a plan ‘that is likely to produce progress, not regression,’ and ‘afford the student with an opportunity greater than mere trivial advancement.’”¹³⁷ Additionally, courts have determined that school districts are not required to provide children with disabilities with “the best possible education” and the law does not “mandate ‘equality’” or that schools provide “the same education to students with disabilities as provided to students without disabilities.”¹³⁸ Rather, services provided to the child are appropriate if they provide “significant learning” and confer “meaningful benefit”;¹³⁹ courts are not required to order services to “maximize each child’s potential.”¹⁴⁰

related expenses. See *Endrew F. v. Douglas Cnty. Sch. Dist.* RE 1, 290 F. Supp. 3d 1175, 1186 (D. Colo. 2018).

134. *Endrew F.*, 137 S. Ct. at 1001.

135. See *Bd. of Educ. v. Rowley*, 458 U.S. 176, 199 (1982).

136. See, e.g., *K.D. v. Downingtown Area Sch. Dist.*, 904 F.3d 248, 254 (3d Cir. 2018) (citation omitted) (“*Endrew F.* did not overrule Third Circuit precedent. . . . The Supreme Court rejected the Tenth Circuit’s standard, not ours. On the contrary, *Endrew F.*’s language parallels that of our precedents.”). For a detailed analysis of the decisions after *Endrew F.*, see Conroy & Yell, *supra* note 123. See also Mark C. Weber, *Endrew F. Clairvoyance*, 35 *TOURO L. REV.* 591, 592 (2019) (noting that “[a] number of Second Circuit cases . . . employ language about appropriate education that is similar to what the Supreme Court rejected in *Endrew F.* and reach outcomes that could well come out differently under *Endrew F.*’s interpretation of the law”); see generally Zirkel, *supra* note 6; Richard D. Marsico, *From Rowley to Endrew F.: The Evolution of a Free Appropriate Public Education for Children with Disabilities*, 63 *N.Y.L. SCH. L. REV.* 29 (2019); Perry A. Zirkel, *The Aftermath of Endrew F.: An Outcomes Analysis Two Years Later*, 352 *EDUC. L. REP.* 448 (2019).

137. *A.R. ex rel. M.R.*, 2019 WL 6251196, at *11 (noting that “[p]rogress under a prior IEP or a set of IEPs may be considered when determining whether a subsequent IEP is appropriate” (citing *H.C. ex rel. M.C. v. Katonah-Lewisboro Union Free Sch. Dist.*, No. 09 Civ. 10563(PED), 2012 WL 2708394, at *11, *13 (S.D.N.Y. May 4, 2012))).

138. *Rowley*, 458 U.S. at 192, 201.

139. *G.A. v. River Vale Bd. of Educ.*, No. 11-3801 (FSH), 2013 WL 5305230, at *11 (D.N.J. Sept. 18, 2013) (quoting *Ridgewood Bd. of Educ. v. N.E.*, 172 F.3d 238, 247 (3d Cir. 1999)).

140. *D.H. v. Poway Unified Sch. Dist.*, No. 09cv2621-L(NLS), 2011 WL 883003, at *5 (S.D. Cal. Mar. 14, 2011) (quoting *Rowley*, 458 U.S. at 198).

Many scholars have analyzed the potential implications of the Court's decision in *Endrew F.*¹⁴¹ Dr. Perry A. Zirkel noted that the “future effect of [the decision] remains predictably unpredictable” and “has thus far proven to be far from a ‘game changer.’”¹⁴² The standard also “added to the imprecision by defining substantive *appropriateness* circularly with what is circumstantially *appropriate*.”¹⁴³

[A]nchoring this standard directly and by analogy to academic advancement, as measured by passing marks and promotion from grade to grade, is—as compared, for example, to federally mandated state accountability assessments—far from rigorous or ambitious in light of school policies that favor social promotion over grade retention and corresponding practices that continue the trend of grade inflation.¹⁴⁴

Other scholars have argued that the standard should focus on whether “students’ IEPs [are] based on relevant, meaningful, and individualized assessments of their needs. Additionally, students’ annual IEP goals should be challenging, appropriately ambitious, and measurable. Finally, students’ progress toward their annual goals should be monitored using database measurement systems.”¹⁴⁵

141. See, e.g., Conroy & Yell, *supra* note 123; Michael S. Morgan, Comment, *Paved with Good Intentions: How Endrew F. Could Affect Struggling School Districts*, 49 SETON HALL L. REV. 777 (2018); Weber, *supra* note 136; Alyssa Iuliano, Note, *Endrew F. v. Douglas County School District: The Supreme Court’s Elusive Attempt to Close the Gap Between Some Educational Benefit and Meaningful Educational Benefit*, 35 Touro L. REV. 261 (2019) (arguing for a bright-line rule); Cowin, *supra* note 30, at 592 (arguing that “requiring the use of a more demanding standard to evaluate IEPs will lead to greater inclusion of students with disabilities in general education classrooms, force school districts to allocate more resources to special education, and cause decreased enrollment of students with disabilities in charter schools”); Perry A. Zirkel, *The Aftermath of Endrew F. One Year Later: An Updated Outcomes Analysis*, 352 EDUC. L. REP. 448, 454 (2018) (noting that an analysis of cases one year after *Endrew F.* revealed that the net effect of the new standard has been “close to negligible”).

142. Zirkel, *supra* note 6, at 594 (noting that the “net effect on outcomes in the several cases in the period after *Endrew F.* that provide both a pre- and post-outcome, has been either neutral or very slightly in the [school] district’s favor”).

143. Perry A. Zirkel, *The Supreme Court’s Decision in Endrew F. v. Douglas County School District RE-1: A Meaningful Raising of the Bar?*, 341 EDUC. L. REP. 545, 551 (2017); see Raj, *supra* note 25, at 417 (noting that courts place more value in the first part of the standard—whether the IEP is reasonably calculated—and fail to adequately scrutinize the second part).

144. Zirkel, *supra* note 143, at 551.

145. Conroy & Yell, *supra* note 123, at 136. Some have noted that the Court’s decision will:

[H]elp assure that judicial review is meaningful and does not stop just because a school district asserts that a particular choice as to level of ser-

Dr. Amy June Rowley, the plaintiff in *Board of Education v. Rowley*,¹⁴⁶ noted the impact of the Court's *Endrew F.* decision:

Endrew F. has the potential to raise the bar for special education quite a bit, but it won't happen automatically. It's up to people to advocate for special education, to raise the bar and hold it strong and high for all deaf children, for children with all disabilities, so all of them can reach their potential.¹⁴⁷

Dr. Rowley's comments highlight the potential impact yet uncertainty of the Supreme Court's "reasonably calculated standard" and the burden it often places on parents who challenge school district decisions. The IDEA provides for parent involvement in the development of their child's education program, but "the existence of a level playing field between parents and school district personnel is uncertain" as parents, who bear the burden of proof when challenging an IEP, do not have the same access to educational professionals, evidence, and resources that are available to school districts.¹⁴⁸ Obtaining evidence to support the need for special education services necessary for the child to progress academically can be particularly challenging for parents who do not have the financial means to retain experts and attorneys who can assist them.¹⁴⁹

IV. LEGAL AND FINANCIAL BARRIERS TO ACCESS TO ASSISTIVE TECHNOLOGY

A general standard can be an effective approach to evaluating a child's specific needs and what is "appropriate" progress. However, a FAPE standard focused primarily on "progress,"¹⁵⁰ mea-

vices or methodology is "its call" . . . because the Court clarified that courts should require school districts to provide a cogent and responsive explanation for their decisions.

Terry Jean Seligmann, *Flags on the Play: The Supreme Court Takes the Field to Enforce the Rights of Students with Disabilities*, 46 J.L. & EDUC. 479, 490 (2017); see *Endrew F. v. Douglas Cnty. Sch. Dist.* RE-1, 137 S. Ct. 988, 1000–02 (2017).

146. Amy Rowley is now a professor at California State University. *Amy June Rowley*, CAL. ST. E. BAY, <https://bit.ly/3ArCYdX> [<https://perma.cc/3SRN-DTXX>] (last visited Aug. 17, 2022).

147. Amy June Rowley, *Address by Amy June Rowley, Ph.D., Professor, California State University, East Bay*, 63 N.Y.L. SCH. L. REV. 21, 27 (2019).

148. Conroy & Yell, *supra* note 123, at 135; see *Schaffer v. Weast*, 546 U.S. 49, 51 (2005) (holding that the party that initiates the administrative process—typically the parent—bears the burden of proof).

149. Claire Raj & Emily Suski, *Endrew F.'s Unintended Consequences*, 46 J.L. & EDUC. 499, 525 (2017).

150. 28 U.S.C. § 1401(29); see Conroy & Yell, *supra* note 123, at 128 (noting that there was "definitely a focus on the circumstances or unique circumstances of

sured by a child's ability to advance from year to year, does not allow for adequate consideration of the unique and long-term benefit additional services, such as assistive technology, can provide toward progress and the achievement of the goals identified in the child's IEP. For example, a child with hearing loss may progress from grade to grade with assistance from time with a tutor or a speech therapist, but assistive technology, such as an individual hearing aid, is certain to address the child's language and communication needs in a way that has the potential to increase the child's participation in the classroom and enable the child to improve academically. Under a standard that measures general "progress," school districts can easily justify denying requests for assistive technology on grounds that such services are not "necessary."¹⁵¹ Additionally, school districts often make recommendations and determinations based on resources but "[s]ervices must be based on individual needs rather than available resources."¹⁵²

After the *Andrew F.* decision, the Office of Special Education and Rehabilitation Services ("OSERS") issued guidance on the *Andrew F.* decision and sought to explain the "reasonably calculated standard":

The "reasonably calculated" standard recognizes that developing an appropriate IEP requires a prospective judgment by the IEP Team. Generally, this means that school personnel will make decisions that are informed by their own expertise, the progress of the child, the child's potential for growth, and the views of the child's parents. IEP Team members should consider how special education and related services, if any, have been provided to the child in the past, including the effectiveness of specific instructional strategies and supports and services with the student. In

the child, although some courts substituted 'potential' or 'disability' for 'circumstances'").

151. FAPE requires states to provide "specially designed instruction" and "such . . . supportive services . . . as may be required to assist a [child with a disability] to benefit from special education." 20 U.S.C. § 1401(17); see *J.C. v. New Fairfield Bd. of Educ.*, No. 3:08-cv-1591 (VLB), 2011 WL 1322563, at *18 (D. Conn. Mar. 31, 2011) (quoting *High v. Exeter Twp. Sch. Dist.*, No. 09-2202, 2010 WL 363832, at *5 (E.D. Pa. Feb. 1, 2010)); *Bd. of Educ. of Murphysboro v. Ill. State Bd. of Educ.*, 41 F.3d 1162, 1166 (7th Cir. 1994) ("Once the school district has met [the FAPE] requirements, the courts cannot require more; the purpose of the IDEA is to open the door of public education to [disabled] children, not to educate a [disabled] child to his [or her] highest potential."); see also Raj, *supra* note 25, at 441 ("[I]n high-poverty schools with diminished levels of grade level achievement, students with disabilities are unable to leverage grade level standards for improved outcomes. In short, rather than raising the bar, the FAPE standard aligns with a lowered standard reflecting the depressed level of achievement in these schools.").

152. JOHNSON ET AL., *supra* note 95, at 3.

determining whether an IEP is reasonably calculated to enable a child to make progress, the IEP Team should consider the child's previous rate of academic growth, whether the child is on track to achieve or exceed grade-level proficiency, any behaviors interfering with the child's progress, and additional information and input provided by the child's parents. As stated by the Court, "any review of an IEP must consider whether the IEP is reasonably calculated to ensure such progress, not whether it would be considered ideal."¹⁵³

The OSERS also noted that the Supreme Court "emphasized the individualized decision-making required in the IEP process and the need to ensure that every child should have the chance to meet challenging objectives" with "careful consideration" given "to the child's present levels of achievement, disability, and potential for growth."¹⁵⁴ The Court's emphasis on "progress" rather than whether the special education service would be "ideal" results in a restrictive view of the FAPE mandate and a legal barrier to access to special education services that may be vital to a child's academic development.

A. *Applying the FAPE Standard to Requests for Hearing Aids and Other Assistive Technology*

Despite that Congress expressly contemplated assistive technology as "one of the *essential* pieces to consider when developing an [individual education program (IEP)]" for a child with a disability,¹⁵⁵ educational agencies often fail to meaningfully consider assis-

153. U.S. DEP'T OF EDUC., QUESTIONS AND ANSWERS (Q&A) ON U.S. SUPREME COURT CASE DECISION *ENDREW F. V. DOUGLAS COUNTY SCHOOL DISTRICT RE-1 5* (2017), <https://bit.ly/2ET3deZ> [<https://perma.cc/S66X-VHZF>] (quoting *Endrew F. v. Douglas Cnty. Sch. Dist. RE-1*, 137 S. Ct. 988, 999 (2017)).

154. *Id.* at 6.

155. Alexandra Abend, Note, *Achieving the Promise of Assistive Technology: Why Assistive Technology Evaluations Are Essential for Compliance with the Individuals with Disabilities Education Act*, 38 *CARDOZO L. REV.* 1171, 1194 (2017); see 20 U.S.C. § 1414(d)(2)(A) (requiring that "[a]t the beginning of each school year, each local educational agency, or other State agency, as the case may be, shall have in effect, for each child with a disability in its jurisdiction, an individualized education program as defined in paragraph (1)(A)"). The IEP is prepared at a meeting with a representative from the school district, the child's teacher, and the child's parent(s) or guardian(s), and is a written document including:

(A) a statement of the present levels of educational performance of such child, (B) a statement of annual goals, including short-term instructional objectives, (C) a statement of the specific educational services to be provided to such child, and the extent to which such child will be able to participate in regular educational programs, (D) the projected date for initiation and anticipated duration of such services, and (E) appropriate objective criteria and evaluation procedures and schedules for determin-

tive technology in crafting student IEPs.¹⁵⁶ Courts tend to apply the “reasonably calculated to make progress in light of the child’s circumstances” standard with an emphasis on whether the child has made “progress” and less on what services should be provided based on the nature of the child’s disability and the unique impact assistive technology can have on the child’s academic and social development.¹⁵⁷ As a result, school districts deny requests for assistive technology devices related to hearing disabilities when the child is making “progress” with the use of other special education services, and therefore, assistive technology is not required.¹⁵⁸

Courts have found that “passing grades and advancement from year to year are factors that indicate a child is receiving meaningful educational benefit.”¹⁵⁹ For example, in *Mr. and Mrs. G. v. Canton School District*,¹⁶⁰ the court determined that an assistive technology evaluation was not required, despite the recommendation of two doctors, because “although assistive technology will almost always be beneficial, a school is only required to provide it if the technology is necessary . . . and the failure to provide assistive technology denies a student FAPE only if the student could not obtain a meaningful benefit without such technology.”¹⁶¹ Similarly, school dis-

ing, on at least an annual basis, whether instructional objectives are being achieved.

20 U.S.C. § 1401(19). The IEP is reviewed annually. *See* 20 U.S.C. § 1415(a)(5). 156. *Abend, supra* note 155, at 1174.

157. *See, e.g., Mr. & Mrs. G. ex rel. S.G. v. Canton Bd. of Educ.*, No. 3:17-cv-2161 (MPS), 2019 WL 1118094, at *10 (D. Conn. Mar. 11, 2019).

[T]he first inquiry in consideration whether assistive technology should be included in a student’s IEP is: “Is the student making adequate progress on IEP goals/objectives through task modifications or accommodations, skill remediation and/or other interventions?” If so, the PPT need not take any further steps in this regard; including performing an assistive technology evaluation.

Id.

158. *Id.*

159. *Hous. Indep. Sch. Dist. v. V.P. ex rel. Juan P.*, 582 F.3d 576, 590 (5th Cir. 2009).

160. *Mr. & Mrs. G. ex rel. S.G.*, 2019 WL 1118094, at *10.

161. *Id.*; *see D.H. v. Poway Unified Sch. Dist.*, No. 09cv2621-L(NLS), 2011 WL 883003, at *7 (S.D. Cal. Mar. 14, 2011) (denying parent’s request for computer-assisted real-time captioning (CART) for their hearing-impaired child, despite that “the CART service would make it easier for Plaintiff to follow the lectures and class discussions by capturing more words than she does without it” on the grounds that “the IDEA does not require States to ‘maximize each child’s potential commensurate with the opportunity provided other children’”). *But see Bd. of Educ. of Paxton-Buckley-Loda Unit Sch. Dist. No. 10 v. Jeff S. ex rel. Alec S.*, 184 F. Supp. 2d 790, 804 (C.D. Ill. 2002) (affirming the hearing officer’s decision ordering the school district to provide auditory verbal therapy, which included mapping the child’s implant system, to a child with a cochlear implant and to pay the cost of the services).

tricts routinely deny requests to fund other hearing-related services, such as cochlear implant “mapping” services.¹⁶²

Courts have denied requests for hearing aids on similar grounds. For example, in *G.A. v. River Vale Board of Education*,¹⁶³ the court denied the parents’ request for reimbursement for a personal ear-level hearing aid, finding that the desk-level hearing aid recommended by the school district, which consists of an FM speaker on the student’s desk that amplifies the teacher’s voice, was sufficient to provide the child with a “meaningful benefit.”¹⁶⁴ Finding that the ear-level hearing aid would only serve to “maximize[]” the child’s educational benefit, which is not required by the IDEA, the parents failed to demonstrate that the desk-level hearing aid would not provide a meaningful benefit.¹⁶⁵

Parents who have been dissatisfied with the scope of services provided to their child have placed their child in private school and sought reimbursement from the school district for the cost of private school tuition. In *Houston Independent School District v. V.P. ex rel. Juan P.*,¹⁶⁶ the district court awarded the parents of a child with auditory and speech impairments reimbursement for the cost of tuition at a private school based on its finding that the school district “failed to provide [the child] with a free appropriate education, failed to develop educationally beneficial IEPs, and failed to consider an appropriate placement” for the child.¹⁶⁷ In reviewing the decision on reimbursement, the Fifth Circuit analyzed whether the “(1) IEP calling for placement in a public school was inappropriate under the IDEA, and (2) the private school placement . . . was proper under the Act.”¹⁶⁸ To determine whether the IEP was “reasonably calculated to provide a meaningful educational benefit under the IDEA,” the court applied a factor-based analysis considering “whether: (1) ‘the program is individualized on the basis of the student’s assessment and performance; (2) the program is ad-

162. 34 C.F.R. § 300.34(b)(1) (2022).

163. See *G.A. v. River Vale Bd. of Educ.*, No. 11-3801 (FSH), 2013 WL 5305230 (D.N.J. Sept. 18, 2013).

164. *Id.* at *34. Requests for “mapping services” that supplement cochlear implants have also been denied on similar grounds, finding that the language of the IDEA was “ambiguous” as to whether the medical device exception covered cochlear implant mapping. See, e.g., *Petit v. U.S. Dep’t of Educ.*, 675 F.3d 769, 782 (D.C. Cir. 2012).

165. *G.A.*, 2013 WL 5305230, at *34.

166. *Hous. Indep. Sch. Dist. v. V.P. ex rel. Juan P.*, 582 F.3d 576 (5th Cir. 2009).

167. *Id.* at 582.

168. *Id.* (citing *Cypress-Fairbanks Indep. Sch. Dist. v. Michael F.*, 118 F.3d 245, 248 (5th Cir. 1997)).

ministered in the least restrictive environment; (3) the services are provided in a coordinated and collaborative manner by the key “stakeholders”; and (4) positive academic and non-academic benefits are demonstrated.”¹⁶⁹ The court upheld the decision on reimbursement.¹⁷⁰ In reviewing the first factor, the court agreed with the district court that the child’s IEP was insufficiently individualized because “more than a year after [the child’s] IEP Committee recommended an audiological evaluation, the evaluation still had not been completed; [the child’s] IEPs were not specific enough with regard to [the child’s] auditory-processing or audiological deficiencies, . . . did not integrate special education sessions with a teacher for hearing impaired students” in a timely manner, and “did not address problems that developed with [the child’s] FM loop system.”¹⁷¹ In reviewing the fourth and “perhaps one of the most critical factors,” the court noted that “[p]assing grades and advancement from year to year are factors that indicate a child is receiving meaningful educational benefit,” but “such evidence should be rejected when it is found to be the product of unapproved deviations from the IEP,” which included the teacher’s modification of the curriculum to enable the child to move on to the next grade.¹⁷²

An analysis of these decisions reveals the limitations of the legal protection afforded to children with disabilities under the FAPE standard, particularly in the context of requests for assistive technology. The case law demonstrates the school representatives and institutions’ lack of understanding of the benefits of assistive technology devices and services and that a failure to provide such services “may result in students being deprived of potentially life changing resources.”¹⁷³ “[A]dvancements, awareness and availability of materials, equipment, and adaptations make the application of assistive technology an ever-evolving field, which includes new inventions, and innovate use of existing tools.”¹⁷⁴ Now, more than ever, a child’s academic development is impacted when they are

169. *Id.* at 584; *see also* D.C. v. Klein Indep. Sch. Dist., 860 F. App’x 894, 904 (5th Cir. 2021) (citation omitted) (“To demonstrate positive benefits . . . an IEP must ‘produce progress, not regression or trivial educational advancement.’ That is, the demonstrated educational benefit ‘must be meaningful.’”).

170. *Hous. Indep. Sch. Dist.*, 582 F.3d at 584.

171. *Id.*

172. *Id.* at 590.

173. Jonathan Stead, *Toward True Equality of Educational Opportunity: Unlocking the Potential of Assistive Technology Through Professional Development*, 35 RUTGERS COMPUT. & TECH. L.J. 224, 226 (2009).

174. Mechling, *supra* note 67, at 252.

unable to access technology.¹⁷⁵ Scholars have noted that even more questions are raised in the wake of the COVID-19 pandemic, during which school districts were challenged with identifying and meeting academic goals that were unachievable when education was provided virtually.¹⁷⁶ The cases also highlight the need for more specific criteria or factors to assess whether the proposed services meet the FAPE standard.

B. *Financial Barriers*

In addition to the legal barriers, children with disabilities face financial barriers to accessing assistive technology due to the high cost associated with certain devices, such as hearing aids, and the limited funding provided by school districts, government programs, such as Social Security or Medicaid, and private health insurance. Some have described this failure to ensure access to assistive technology for all as “morally and ethically unacceptable.”¹⁷⁷ The lack of funding is extremely problematic given the data on the negative consequences of untreated hearing loss.

1. *Public School Funding*

The lack of adequate funding in the public school system can be attributed to the failure of the government to fully fund the IDEA. Although the IDEA was intended to provide 40 percent of special education funding, it presently provides only 18 percent.¹⁷⁸ Full funding of the IDEA is crucial to ensuring that school districts have adequate funding for special education services, including

175. Miksis, *supra* note 24, at 198 (citing Sarah Garland, *Why It's So Hard to Close the Digital Divide in High-Poverty Schools*, NBC NEWS (June 17, 2014, 8:33 AM), <https://nbcnews.to/3QKops4> [<https://perma.cc/235U-4HMR>] (noting that “[f]ewer than 20 percent of teachers say their school’s Internet connection meets their teaching needs”)).

176. For a discussion of the impact of the COVID-19 pandemic on children with disabilities, see Kevin P. Shields & Jennifer Swanson, *A Transformative Year for Students with Disabilities*, 58 HOUS. LAW., May/June 2021, at 22; Thomas A. Mayes, *The Long, Cold Shadow of Before: Special Education During and After COVID-19*, 30 S. CAL. REV. L. & SOC. JUST. 89 (2021).

177. *Hearing Aid Legislation*, NAT’L TECH. RES. CTR. (June 5, 2017), <https://bit.ly/3tV2aFO> [<https://perma.cc/X4VK-N8JK>].

178. Rachel B. Hitch, *Flags on the Play?: We’re on the Same Team!*, 48 J.L. & EDUC. 87, 93 (2017); Stead, *supra* note 173, at 249; *see also* COLKER, *supra* note 23, at 15 (noting that “federal underfunding of special education has exacerbated an inequitable allocation of education resources”); Nussbaum, *Foreword*, *supra* note 20, at 76; *IDEA Full Funding: Why Should Congress Invest in Special Education?*, NAT’L CTR. FOR LEARNING DISABILITIES, <https://bit.ly/3K9J067> [<https://perma.cc/N4Y5-L6KK>] (last visited Aug. 18, 2022) (noting that “the IDEA state grant program was only funded at around \$12 billion in 2017” and that “[t]he federal government is only covering 14.6% of the additional cost”).

assistive technology devices.¹⁷⁹ Fully funding the IDEA would also provide a valuable long-term investment, consistent with a study of the economic effects of increasing funding of early childhood education,¹⁸⁰ which found that “for every one dollar invested in early education, there was an eight-dollar return.”¹⁸¹

Additionally, disparities exist in public school funding across the nation and across school districts within the state. Access issues are particularly prevalent in “high-poverty classrooms” that receive disparate and inadequate funding to provide children with disabilities with appropriate services for their educational needs.¹⁸² The Court’s decision in *San Antonio Independent School District v. Rodriguez* highlights the disparities in public school funding. In San Antonio, the per-pupil spending in a poor school district was two-thirds less than the per-pupil spending in another predominantly white and affluent neighborhood.¹⁸³ Additionally, “[p]ublic schools in wealthy communities benefit from the government revenue earned from relatively high neighborhood property taxes, which are allocated toward education.” In contrast, “public schools in poor communities struggle to meet costs for even the most basic classroom needs.”¹⁸⁴ As a result, “[u]nderfunded public schools are unable to keep up with constant changes in technology, leaving students”—particularly students with disabilities—who are “enrolled in these schools at an educational disadvantage to their wealthier peers.”¹⁸⁵

In 2014, the Department of Education acknowledged the disparities in access to educational resources,¹⁸⁶ noting the difference in access to technology between “high-poverty schools that are heavily populated with students of color and more affluent schools serving fewer students of color.”¹⁸⁷ These disparities are even more

179. Stead, *supra* note 173, at 249.

180. *Id.* at 251.

181. *Id.*

182. Miksis, *supra* note 24, at 190, 195.

183. See Michael Heise, *The Story of San Antonio Independent School Dist. v. Rodriguez: School Finance, Local Control, and Constitutional Limits*, CORNELL L. FAC. PUBL’NS, Sept. 2, 2007, at 2; Raj, *supra* note 25, at 427–28 (estimating that “low-income students need at least 40% more school resources than their peers to receive an adequate education—and those estimates are even higher for students attending schools in concentrated poverty”).

184. Miksis, *supra* note 24, at 184.

185. *Id.* at 185.

186. Catherine E. Lhamon, Assistant Sec’y for Civ. Rts., Off. for Civ. Rts., U.S. Dep’t of Educ., *Dear Colleague Letter: Resource Comparability 2* (Oct. 1, 2014), <https://bit.ly/3Pgcvo3> [<https://perma.cc/2HA6-7BV3>].

187. *Id.* at 4.

pronounced with respect to access to assistive technology devices for students of color with disabilities.¹⁸⁸

The Department of Education updated its 2014 Dear Colleague letter to “provide some examples of how funds from . . . [the] IDEA may support the use of technology to improve instruction and student outcomes.”¹⁸⁹ The examples include:

- (1) improving and personalizing professional learning and other supports for educators;
- (2) increasing access to high quality digital content and resources for students;
- (3) facilitating educator collaboration and communication; and
- (4) providing devices for students to access digital learning resources.¹⁹⁰

Inadequate funding is particularly problematic for children who benefit from high-cost assistive technology devices, such as hearing aids. According to the Centers for Disease Control, “the overall lifetime medical, educational, and occupational costs due to deafness for children born in 2000 is estimated to be \$2.1 billion.”¹⁹¹

In a study conducted by Dr. Jason Mouzakes and Tyler Ostrowski on the financial distress experienced by pediatric hearing aid users in New York, most families reported experiencing financial distress related to purchasing hearing aids for their children and “47.2 percent did not receive any reimbursement from primary or secondary insurers.”¹⁹² This has been a long-standing problem. In a report issued in 1988 by the Commission on the Education of the Deaf, the Commission recommended greater funding and accessi-

188. Miksis, *supra* note 24, at 185; Raj, *supra* note 25, at 412–14.

189. Richard Culatta, Dir., Off. of Educ. Tech., U.S. Dep’t of Educ., *Dear Colleague Letter: Examples of Leveraging ESEA and IDEA Funds for Digital Teaching and Learning* 1 (Nov. 19, 2014), <https://bit.ly/3Ir15vu> [<https://perma.cc/TT28-UJQV>].

190. *Id.* “Funds reserved under subparagraph (A) may be used to carry out the following activities: . . . To support the use of technology, including technology with universal design principles and assistive technology devices, to maximize accessibility to the general education curriculum for children with disabilities.” 20 U.S.C. § 1411(e)(2)(C)(v).

191. Matthew L. Bush et al., *Disparities in Access to Pediatric Hearing Health Care*, 25 CURRENT OP. OTOLARYNGOLOGY & HEAD & NECK SURGERY 359, 359 (2017) (citing Ctrs. for Disease Control & Prevention, *Economic Costs Associated with Mental Retardation, Cerebral Palsy, Hearing Loss, and Vision Impairment—United States, 2003*, 53 MORBIDITY & MORTALITY WKLY. REP. 57, 57 (2004)).

192. Ostrowski & Mouzakes, *supra* note 1, at 2, 4; see *Insurance Coverage and Medicare Reimbursement for Hearing Aids, Cochlear Implants and Other Hearing Assistive Devices*, A. G. BELL ASS’N, <https://bit.ly/3excuPE> [<https://perma.cc/NW7S-JQXY>] (last visited Sept. 8, 2022).

bility to technology for deaf students.¹⁹³ Experts have reported that “by the time a child with hearing loss graduates from high school, more than \$400,000 per child can be saved in special education costs if the child is identified early and given appropriate educational, medical, and audiological services.”¹⁹⁴

2. Health Insurance

In addition to the lack of public school funding for hearing aids and other assistive technology, health insurance coverage for hearing aids is also limited. While some children are eligible for funding through government programs, such as Medicaid, those who are not eligible for government funding are left with private insurance, which often excludes, or substantially limits, coverage.¹⁹⁵ Lack of reimbursement from private insurance carriers presents challenges for families with lower socioeconomic status, and the lack of funding can deter families from acquiring and/or maintaining hearing aids for their children. An inability to access the required technology can result in educational and social developmental issues, including language acquisition, cognitive development, and developed communication.¹⁹⁶

a. Government Funding

Medicaid is a joint federal and state program intended to provide funding to individuals and families with income below the poverty line.¹⁹⁷ Medicaid is administered by each state pursuant to the Medicaid Act,¹⁹⁸ which gives states considerable leeway in determining their own Medicaid plan. However, to receive funding from the federal government, each state’s plan must be approved by the Department of Health and Human Services (HHS).¹⁹⁹ The Act also provides that state plans must establish “reasonable standards for determining eligibility and the extent of medical assistance” to be provided,²⁰⁰ which are based on medical and financial need. The Medicaid Act requires that all states cover certain individuals who

193. See COMM’N ON EDUC. OF THE DEAF, TOWARD EQUALITY: EDUCATION OF THE DEAF xxii (1988), <https://bit.ly/3uEvFw1> [<https://perma.cc/SZF7-HJV8>].

194. Karl R. White & Antonia B. Maxon, *Universal Screening for Infant Hearing Impairment: Simple, Beneficial and Presently Justified*, 32 INT’L J. PEDIATRIC OTORHINOLARYNGOLOGY 201 (1995).

195. A list of mandatory eligible individuals can be found at *List of Medicaid Eligibility Groups*, *supra* note 27.

196. Ostrowski & Mouzakes, *supra* note 1, at 2.

197. *List of Medicaid Eligibility Groups*, *supra* note 27.

198. 42 U.S.C. § 1396.

199. *Id.* § 1396-1.

200. *Id.* § 1396a(a)(17).

fall within the mandatory eligibility groups.²⁰¹ Included in this group are individuals or households whose income is 100 percent or less than the Federal Poverty Level (FPL), which is determined by HHS each year.²⁰² Additionally, although some children are enrolled in the Medicaid and [Children’s Health Insurance Program] (CHIP programs), access to hearing aids remains limited due to “low reimbursement rates in many states, coverage restrictions and limits, . . . restrictions caused by definitions of medical necessity and difficulties experienced by providers in obtaining timely authorization and reimbursement.”²⁰³

In order to request an assistive technology device under Medicaid, an individual must obtain medical documentation confirming that the device is necessary.²⁰⁴ Additionally, funding depends on “decisions made by individual states . . . availability of funds, and individualized assessments of need and potential.”²⁰⁵ For certain assistive devices, such as hearing aids, coverage depends on the age of the individual.²⁰⁶ The federal government requires state Medicaid programs to provide certain “services” for eligible children through the Early and Periodic Screening, Diagnosis and Treatment (“EPSDT”) program.²⁰⁷ These “services” “shall at a minimum include diagnosis and treatment for defects in hearing, including hearing aids.”²⁰⁸ The statute further requires that such services be provided “at intervals which meet reasonable standards of medical practice, as determined by the State after consultation with recognized medical organizations involved in child health care” and “at such other intervals, indicated as medically necessary, to determine the existence of a suspected illness or condition.”²⁰⁹

201. *List of Medicaid Eligibility Groups*, *supra* note 27.

202. 42 U.S.C. §§ 1396a(a)(10)(A)(ii)(X), (a)(10)(A)(ii)(X)(m)(1)(B), (a)(10)(A)(ii)(X)(m)(2)(A).

203. Stephanie J. Limb et al., *Ensuring Financial Access to Hearing Aids for Infants and Young Children*, 126 *PEDIATRICS* S43, S44–45 (2010). It should be noted that the Medicare statute explicitly excludes coverage of “routine physical checkups, eyeglasses . . . [and] hearing aids or examinations.” 42 U.S.C. § 1395y(a)(7).

204. 42 U.S.C. § 1395m(j)(2)(B); *see also* *Weaver v. Reagan*, 886 F.2d 194, 200 (8th Cir. 1989) (finding “[t]he Medicaid statute and regulatory scheme create a presumption in favor of the medical judgment of the attending physician in determining the medical necessity of treatment”).

205. Miksis, *supra* note 24, at 202–03 (citing FAMILY CTR. ON TECH. & DISABILITY, *FAMILY INFORMATION GUIDE TO ASSISTIVE TECHNOLOGY* 20 (2005), <https://bit.ly/3yniroo> [<https://perma.cc/6NV2-S6HZ>]).

206. *List of Medicaid Eligibility Groups*, *supra* note 27.

207. 42 U.S.C. § 1396d(r).

208. *Id.* § 1396d(r)(4)(B).

209. *Id.* § 1396d(r)(4)(i)–(ii).

The Affordable Care Act (ACA) requires that each state establish a Health Benefit Exchange (HBE) to facilitate the purchase of qualified healthcare plans.²¹⁰ To be considered a qualified health plan, the plan must at a minimum include the Essential Health Benefits (“EHBs”) outlined by the ACA.²¹¹ Hearing services are not included in the EHBs.²¹² However, the statute provides that “a State may require that a qualified health plan offered in such State offer benefits in addition to the essential health benefits,” states “must assume cost,”²¹³ and “[n]othing in this title shall be construed to prohibit a health plan from providing benefits in excess of the essential health benefits described in this subsection.”²¹⁴ Additionally, the ACA expands Medicaid eligibility for children by mandating that all children 133 percent or lower than the FPL are eligible for Medicaid.²¹⁵ Accordingly, states must provide certain “services” to Medicaid-eligible children, including “hearing services,” which include “appropriate screening, diagnostic, and treatment, including hearing aids.”²¹⁶ As noted by Professor Mary Helen McNeal, although “[t]he ACA does not alter basic Medicaid coverage policies nor eliminate the statutory exclusion of coverage of hearing aids,” the ACA “offers an exciting opportunity for such hearing aid advocacy.”²¹⁷

b. Private Health Insurance

Most private insurance plans are not required to cover the cost of hearing aids.²¹⁸ To date, only 24 states have successfully enacted legislation requiring insurance coverage for hearing aids for children.²¹⁹ Recent efforts to pass state legislation are often met with

210. *Id.* § 18021(a)(1).

211. *Id.* § 18022(b)(1). These include “ambulatory patient services, emergency services, hospitalization, maternity and newborn care, mental health and substance use disorder services, . . . prescription drugs, rehabilitative services, laboratory services, preventive and wellness services and pediatric services, including oral and vision care.” *Id.*

212. *See id.*

213. *Id.* § 18031(d)(3)(B)(i)–(ii).

214. *Id.* § 18022(b)(5). For example, Hawaii has added hearing aids to its list of expanded EHB. *PPACA Essential Health Benefits—Benchmark Benefits Package*, HAW. DEP’T OF COM. & CONSUMER AFFS. 5, <https://bit.ly/3NWGrVa> [<https://perma.cc/6QZK-HBRA>] (last visited Aug. 18, 2022).

215. 42 C.F.R. § 435.118(c) (2022).

216. *Medicaid*, HEARING LOSS ASS’N AM., <https://bit.ly/3AAvYff> [<https://perma.cc/8WKR-YBJU>] (last visited Aug. 18, 2022).

217. Mary Helen McNeal, *Say What? The Affordable Care Act, Medicare, and Hearing Aids*, 53 HARV. J. LEGIS. 622, 624 (2016) (exploring the ACA provisions as a path to authorizing coverage for hearing aids).

218. Williams, *supra* note 1, at 133.

219. *Id.*

challenges by the health insurance industry.²²⁰ Objections to legislative mandates from state legislators are based on concerns that the “expense of a new mandate might be passed along in the form of higher monthly premiums, or it might be passed along in the form of less generous coverage for other expenses.”²²¹ In 2009, the authors of the report issued by the Council for Affordable Health Insurance made this statement against mandatory insurance coverage:

Mandating benefits is like saying to someone in the market for a new car, if you can’t afford a Cadillac loaded with options, you have to walk. Having that Cadillac would be nice, as would having a health insurance policy that covers everything one might want. But drivers with less money can find many other affordable car options; whereas when the price of health insurance soars, few other options exist.²²²

Those who oppose coverage for hearing aids fail to recognize the significant and unique long-term impact on persons with hearing disabilities. As the research shows, children with uncorrected hearing loss “are at risk for delays in speech-language development, cognition, and behavioral problems that can affect functioning at school.”²²³ Because of the high cost of certain assistive technology devices,²²⁴ such as hearing aids, lack of funding can determine whether a child will be able to acquire the technology they need to manage their disability and develop academically. In a recent study analyzing hearing aid reimbursement and financial distress experienced by a group of pediatric patients and their families in New York, several families reported significant financial distress related to acquiring hearing aids, including guilt associated with redirecting finances intended to be used for other family necessities.²²⁵

220. *See id.* at 135–36.

221. *Id.* (quoting Kevin D. Williamson, *Mandates Are Government Benefits in Disguise*, NAT’L REV. (Mar. 14, 2017, 6:10 PM), <https://bit.ly/3avQC5x> [<https://perma.cc/UK52-3R9P>]). Representative Rodney Anderson stated, “[I]f we are going to use government, then, by all means, let’s use government in the most honest, transparent, and straightforward way we can. Forget the insurance mandate and just write the check.” *Id.* But should that argument apply to all state insurance mandates, e.g., mammograms?

222. Williams, *supra* note 1, at 138 (quoting Victoria Craig Bunce & JP Wieske, *Health Insurance Mandates in the States 2009*, COUNCIL FOR AFFORDABLE HEALTH INS. (2009), <https://bit.ly/3SYNERB> [<https://perma.cc/8C5L-NPP4>]).

223. *Id.* at 139.

224. Karen Weintraub, *Why Are Hearing Aids So Expensive?*, N.Y. TIMES (Oct. 20, 2017), <https://nyti.ms/3bRUHRM> [<https://perma.cc/S6LT-3DSC>] (noting that hearing aids cost between \$900–3,500).

225. Ostrowski & Mouzakes, *supra* note 1, at 7.

Of the 24 states that have enacted legislation requiring coverage for hearing aids, all provide coverage for children.²²⁶ For example, Illinois enacted legislation requiring insurers to cover hearing aids every 3 years for children under age 18.²²⁷ States that have enacted similar legislation note that providing greater access can have long-term cost benefits. As noted by Georgia Senator P.K. Martin, “[p]roviding hearing aids to children with hearing loss will reduce the costs borne by this state, including special education, alternative treatments that would otherwise be necessary if a hearing aid were not provided, and other costs associated with such hearing loss.”²²⁸ In New York, legislators have proposed six bills, but all have failed in committee.²²⁹

States may also consider Pennsylvania’s approach. In Pennsylvania, “Medical Assistance (MA)” provides coverage for hearing aids for children under age 21 who have a diagnosed hearing loss.²³⁰ To receive the benefit, children must receive a diagnosis and medical clearance from a medical provider.

226. ARK. CODE ANN. § 23-79-1401 (2022); COLO. REV. STAT. § 10-16-104 (2022); CONN. GEN. STAT. § 38a-490b (2021); DEL. CODE ANN. tit. 18, § 3357 (2022); GA. CODE ANN. § 33-24-59.21 (2022); 215 ILL. COMP. STAT. 5 / 356z.30 (2022); KY. REV. STAT. ANN. § 304.17A-132 (West 2022); LA. STAT. ANN. § 22:1038 (2021); ME. REV. STAT. ANN. tit. 24-A, § 33-2762 (West 2022); MD. CODE ANN., INS. § 15-838 (West 2022); MASS. GEN. LAWS ch. 32A, § 23 (2022); MINN. STAT. § 62Q.675 (2022); MO. REV. STAT. § 376.1220 (2021); N.H. REV. STAT. ANN. §§ 415:6-p, 415:18-u (2022); N.J. STAT. ANN. § 17:48-6gg (West 2022); N.M. STAT. ANN. § 13-7-10 (2022); N.C. GEN. STAT. § 58-3-285 (2022); OKLA. STAT. tit. 36, § 6060.7 (2022); OR. REV. STAT. § 743A.141 (2022); 27 R.I. GEN. LAWS § 27-18-60 (2022); TENN. CODE ANN. § 56-7-2368 (2022); TEX. INS. CODE ANN. § 1367.251–1367.253 (West 2021); VA. CODE ANN. § 38.2-3418.20 (2022); WIS. STAT. §§ 609.86, 632.895(16) (2022).

227. *New Law Helps Children Under 18 Gain Access to Hearing Aids*, N. ILL. UNIV. NEWSROOM (Aug. 31, 2018), <https://bit.ly/3NXhzMY> [<https://perma.cc/CML6-RNH3>].

228. Williams, *supra* note 1, at 140 (citing GA. CODE ANN. § 33-24-59.21).

229. See A.B. 1002, 2021 Gen. Assemb., Reg. Sess. (N.Y. 2021); A.B. 2056, 2021 Gen. Assemb., Reg. Sess. (N.Y. 2021); A.B. 3959, 2021 Gen. Assemb., Reg. Sess. (N.Y. 2021); A.B. 5035A, 2021 Gen. Assemb., Reg. Sess. (N.Y. 2021); A.B. 7861, 2021 Gen. Assemb., Reg. Sess. (N.Y. 2021); S.B. 432, 2021 Gen. Assemb., Reg. Sess. (N.Y. 2021). Recently, a bill was proposed by Senator Persaud. See S.B. 533B, 2021 Gen. Assemb., Reg. Sess. (N.Y. 2021).

230. See *Medical Assistance General Eligibility Requirements*, PA. DEP’T HUM. RES., <https://bit.ly/3O1fjo6> [<https://perma.cc/936B-9BE8>] (last visited Aug. 18, 2022). PA also covers the cost of earmolds, hearing aid batteries, hearing aid repair services, and other professional services related to programming hearing aids. See *Hearing and Speech Program Guidelines*, PA. DEP’T HEALTH, <https://bit.ly/3AajEjW> [<https://perma.cc/YM8L-HJA8>] (last visited Aug. 21, 2022).

V. POSSIBLE SOLUTIONS & RECOMMENDATIONS

To address the financial barriers to access to hearing aids, more states should mandate coverage through Medicaid programs and private health insurance. The research clearly supports funding hearing aids as an essential health-related tool, similar to other medical devices that are covered. If mandating private insurance coverage is not possible, parents of children who are hard of hearing should have viable options for funding through the public school system. One way to increase access to hearing aids is to expand the courts' interpretation of the Supreme Court's FAPE standard to view "progress" with a more modern view that embraces the academic capability of members of the disability community²³¹ and seeks to improve educational results for children with disabilities, as contemplated by Congress.²³² An approach modeled on the "capabilities approach" pioneered by Professor Martha C. Nussbaum and Amartya Sen²³³ would require school districts to focus on what services would enable the child to perform to their full capacity and make progress toward her academic and social goals. Particularly now, when more technology is available to enhance the learning experience for students with disabilities, progress should be viewed as whether the special education service or assistive technology device will increase the likelihood of improving the student's academic performance. "[R]esearch and experience has demonstrated that the education of children with disabilities can be made more effective by . . . supporting the development and use of technology, including assistive technology devices and assistive technology services, to maximize accessibility for children with disabilities."²³⁴ For children with hearing loss, access to a hearing aid is certain to increase their academic performance.²³⁵ Another option

231. See Nussbaum, *Foreword*, *supra* note 20; Nussbaum, *Capabilities and Human Rights*, *supra* note 20.

232. See 20 U.S.C. § 1400(c)(1).

Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities.

Id.

233. For more on the "capabilities approach," see Nussbaum, *Capabilities and Human Rights*, *supra* note 20.

234. 20 U.S.C. §§ 1400(c)(5), (c)(5)(H).

235. Laura L. Acosta, *Professor Shows that Hearing Aids Improve Memory, Speech*, UTEP CAMPUS NEWSFEED (Nov. 23, 2015, 9:02 AM) <https://bit.ly/3dFpC4N> [<https://perma.cc/8UGN-VS92>]; Robyn M. Cox et. al, *Impact of Hearing*

is to utilize the IDEA's private placement reimbursement model to facilitate reimbursement for privately purchased assistive technology devices if children are ineligible for funding through government or private insurance.

A. *Insurance Mandates*

Based on the clear medical research supporting the academic and social benefits of hearing aids for children with hearing loss²³⁶ and the negative impact on a child's academic and social development if their hearing loss is left untreated, efforts to mandate insurance coverage should be increased. Many have advocated for increased insurance coverage, including the Children's Audiology Financing Workgroup, which was established by the National Center for Hearing Assessment and Management to evaluate the need for assistive technology.²³⁷ The Workgroup suggested "the passage of private health insurance legislative mandates to require coverage of appropriate digital hearing aids and related professional services for infants and young children."²³⁸

States that have mandated insurance coverage, such as Georgia, require insurance policies to provide coverage for up to \$3,000 per ear every 48 months for covered individuals who are 18 years old or younger.²³⁹ Other states, such as Connecticut, require coverage for one hearing aid per ear within a two-year period, regardless of cost.²⁴⁰ New York, which has proposed various bills in the past, recently proposed a bill to require "coverage for hearing aids for children under the age of eighteen."²⁴¹

Aid Technology on Outcomes in Daily Life I: The Patients' Perspective, 37 EAR & HEARING e224 (2016); Ostrowski & Mouzakes, *supra* note 1, at 6.

236. See Ostrowski & Mouzakes, *supra* note 1. Benefits include the ability to "acquire language, develop speech, and foster effective socialization." *Id.* at 7.

237. Limb et al., *supra* note 203, at S43. The working group made the following additional recommendations:

- (1) [C]larify that the definition of assistive technology . . . includes not only analog hearing aids but also digital hearing aids with appropriate features as needed by young children with hearing loss;
- (2) clarify for both state Medicaid and Children's Health Insurance Programs that digital hearing aids are almost always the medically necessary type of hearing aid required for infants and young children and should be covered under the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program; . . . and
- (4) establish hearing-aid loaner programs in every state.

Id.

238. *Id.*

239. GA. CODE ANN. § 33-24-59.21(d) (2022).

240. CONN. GEN. STAT. §§ 38a-490b, 38a-516b (2021).

241. S.B. 533B, 2021 Gen. Assemb., Reg. Sess. (N.Y. 2021).

The Food and Drug Administration recently issued a rule, effective October 2022, which would enable consumers with mild to moderate hearing loss to purchase hearing aids directly without the need for a medical prescription.²⁴² The new rule is expected to lower the cost of hearing aids;²⁴³ however, over-the-counter hearing aids are not a workable solution for children as they are intended for adults ages 18 and older who benefit from a one-size-fits-all approach.²⁴⁴ Medically prescribed hearing aids are preferable for children and those with a severe hearing loss because they are programmed, fitted, and monitored by an audiologist.²⁴⁵ Recognizing the limitation of over-the-counter hearing aids, the federal government continues its efforts to pass legislation expanding Medicare to cover the cost of hearing aids.²⁴⁶

B. *Revisiting the FAPE Standard*

The current FAPE standard is inadequate to ensure equitable and effective access to assistive technology devices because it fails to require school districts to provide assistive technology devices that will increase the likelihood of greater academic achievement. Additionally, the courts' approach to measuring "progress" as advancing from grade to grade is based on an antiquated perception of the aptitude of children with disabilities. Instead, in determining what services are "appropriate" under the FAPE standard,²⁴⁷ school districts should embrace the contributions of the members of the disability community and technology services that can contribute to long-term academic performance and improve educational results for children with disabilities, as contemplated by Congress.²⁴⁸ That is how progress should be defined. Additionally,

242. Medical Devices; Ear, Nose, and Throat Devices; Over-the-Counter Hearing Aids, 87 Fed. Reg. 50,698 (Aug. 17, 2022); *see also* Paul Waldman, *Opinion: A Rare—and Overdue—Piece of Good Health Care News*, WASH. POST (Oct. 20, 2021, 3:06 PM), <https://wapo.st/3OY4fcN> [<https://perma.cc/J34P-3WHX>].

243. Medical Devices; Ear, Nose, and Throat Devices; Over-the-Counter Hearing Aids, 87 Fed. Reg. 50,698 (Aug. 17, 2022); Paul Waldman, *Opinion: A Rare—and Overdue—Piece of Good Health Care News*, WASH. POST (Oct. 20, 2021, 3:06 PM), <https://wapo.st/3OY4fcN> [<https://perma.cc/J34P-3WHX>].

244. *FDA Issues Landmark Proposal to Improve Access to Hearing Aid Technology for Millions of Americans*, U.S. FOOD & DRUG ADMIN. (Oct. 19, 2021), <https://bit.ly/3NWcKUm> [<https://perma.cc/8DFT-6K7Y>].

245. *See id.*

246. *See, e.g.*, Build Back Better Act, H.R. 5376, 117th Cong. § 30902(b) (2021); *see also* Chamberlain & Nelson, *supra* note 3.

247. Zirkel, *supra* note 6, at 595 (noting that the "frequent references to 'appropriately ambitious,' like the holding's use of 'appropriate,' will depend on the adjudicator's perception of the individual circumstances").

248. *See* 20 U.S.C. § 1400(c)(1).

given the high cost of technology, school districts should consider the academic harm to the child if the child does not have access to assistive technology devices at school or at home.²⁴⁹

In analyzing the cases that have been decided since *Andrew F.*, Dr. Perry Zirkel noted that the Court's FAPE standard is "likely to evolve into one or more multi-factor tests."²⁵⁰ Some courts have already established a factor-based test to provide a more specific standard for determining when an IEP is reasonable.²⁵¹ Additionally, some states have enacted legislation to provide courts with greater clarity as to the needs related to certain disabilities. For example, California enacted legislation that specifically addresses special education for children with hearing loss, noting the "legislative findings that 'it is essential that hard-of-hearing and deaf children, like all children, have programs in which they have direct and appropriate access to all components of the educational process'" and "an education in which their unique communication mode is respected."²⁵² The California statute also requires the IEP team to evaluate the student's "primary language mode, 'which may include the use of spoken language with or without visual cues, or the use of sign language, or a combination of both;' . . . and '[s]ervices necessary to ensure communication-accessible academic instruction, school services, and extracurricular activities.'"²⁵³ Although the California statute does not require that any particular level of service is required,²⁵⁴ it provides specificity as to the unique benefits of assistive technology services that should be considered by the IEP team.

The FAPE standard can also be clarified by amending the IDEA regulations on assistive technology. The regulations provide that "each public agency must ensure that assistive technology or

249. See *What We Do*, *supra* note 74.

250. Zirkel, *supra* note 143, at 552.

251. See, e.g., *Hous. Indep. Sch. Dist. v. V.P. ex rel. Juan P.*, 582 F.3d 576, 584 (5th Cir. 2009) (applying the following factor-based test: "whether '(1) the program is individualized on the basis of the student's assessment and performance; (2) the program is administered in the least restrictive environment; (3) the services are provided in a coordinated and collaborative manner by the key "stakeholders"; and (4) positive academic and non-academic benefits are demonstrated""); see also Marsico, *supra* note 136, at 37–40 (noting that some circuit courts have adopted detailed tests for determining whether the IEP meets the FAPE standard).

252. *D.H. v. Poway Unified Sch. Dist.*, No. 09cv2621-L(NLS), 2011 WL 883003, at *4 (S.D. Cal. Mar. 14, 2011) (quoting CAL. EDUC. CODE §§ 56000.5(a)(2), (4), (7) (West 2022)).

253. *Id.* (alteration in original) (quoting CAL. EDUC. CODE § 56345(d)(1)–(4)).

254. See *id.*

assistive technology services, or both . . . are made available to a child with a disability if required as part of the child's . . . [s]pecial education" and the "use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP Team determines that the child needs access to those devices in order to receive FAPE."²⁵⁵ But the regulations do not provide specific guidance to school districts or courts as to when such services are "appropriate" under the standard. To provide greater clarity, the regulations should include concrete criteria such as: (1) whether assistive technology would increase the likelihood of greater improvement of academic performance; (2) consideration for the child's unique and preferred communication mode; and (3) the financial needs of the child, including the ability to obtain funding to acquire the assistive technology device. Another option is to focus on the "medical necessity" of the assistive technology device, which is a "commonly applied criterion for the distribution of hard assistive technology."²⁵⁶ However, this approach has been criticized as being too "focused on finding the least expensive technology," which "can be in conflict with an individual's needs based on quality of life considerations or the social perspective of disability."²⁵⁷

C. Reimbursement Under the IDEA

Another approach to increase access to assistive technology is to provide a mechanism for parents to seek reimbursement to cover the cost of assistive technology devices. A reimbursement framework is already available under the IDEA for children who seek reimbursement for placement in private schools when the public school is not equipped to provide a child with the services they need.²⁵⁸

Parents of children with disabilities seek private placement for a variety of reasons, including religion, perceived quality of instruc-

255. 34 C.F.R. § 300.105 (2022).

256. Cook, *supra* note 29, at 144 (citing Brenda Canning, *Funding, Ethics, and Assistive Technology: Should Medical Necessity Be the Criterion by Which Wheeled Mobility Equipment Is Justified?*, 12 TOPICS STROKE REHAB. 77 (2005)).

257. *Id.*

258. See 20 U.S.C. § 1412(a)(10)(C)(ii).

If the parents of a child with a disability, who previously received special education and related services under the authority of a public agency, enroll the child in a private . . . school without the consent of . . . the public agency, a court or a hearing officer may require the agency to reimburse the parents for the cost of that enrollment if the court or hearing officer finds that the agency had not made a free appropriate public education available to the child in a timely manner prior to that enrollment. *Id.*; see also 34 C.F.R. § 300.148(b) (2022).

tion provided at the public schools, and availability of facilities or resources to adequately accommodate the child's disability. Parents do not have a right to services in a private school under the IDEA.²⁵⁹ Rather, the IDEA contemplates placement in the public school system.²⁶⁰ As the Seventh Circuit noted, "the Amendments unambiguously show that participating states and localities have no obligation to spend their money to ensure that disabled children who have chosen to enroll in private schools will receive publicly funded special-education services generally 'comparable' to those provided to public-school children."²⁶¹ However, the IDEA "provides for placement in private schools at public expense where this is not possible."²⁶² Accordingly, courts are authorized to "order school authorities to reimburse parents for their expenditures on private special education for a child if the court ultimately determines that such placement, rather than a proposed IEP, is proper under the Act."²⁶³

Under the IDEA, parents can only recover the cost of unilaterally placing a child in private school if they can establish that the IEP in effect at the time of placement was "not reasonably calculated" to provide the child with a meaningful educational benefit, and the placement was proper under the IDEA.²⁶⁴ The Supreme Court has determined that parents are not limited to seeking reim-

259. However, state law may provide an entitlement to publicly funded services for children with disabilities in private schools. *See Bay Shore Union Free Sch. Dist. v. T. ex rel. R.*, 405 F. Supp. 2d 230 (E.D.N.Y. 2005), *vacated on jurisdictional grounds sub nom. Bay Shore Union Free Sch. Dist. v. Kain*, 485 F.3d 730 (2d Cir. 2007).

260. The IDEA regulations provide that, generally, school districts are not required to pay for private school tuition. 34 C.F.R. § 300.403(a) (2022).

261. *K.R. v. Anderson Cmty. Sch. Corp.*, 125 F.3d 1017, 1019 (7th Cir. 1997).

262. *Sch. Comm. of Burlington v. Dep't of Educ. of Mass.*, 471 U.S. 359, 369 (1985); 34 C.F.R. § 300.403(c) (2022).

If the parents of a child with a disability, who previously received special education and related services under the authority of a public agency, enroll the child in a private preschool . . . without the consent of or referral by the public agency, a court or a hearing officer may require the agency to reimburse the parents for the cost of that enrollment if the court or hearing officer finds that the agency had not made FAPE available to the child in a timely manner prior to that enrollment and that the private placement is appropriate.

34 C.F.R. § 300.403(c) (2022).

263. *Sch. Comm. of Burlington*, 471 U.S. at 369.

264. *See id.* at 373–74. The IDEA and federal regulations require that the school district, "after timely and meaningful consultation with private school representatives, conduct a thorough and complete child find process to determine the number of parentally placed children with disabilities attending private schools." U.S. DEP'T OF EDUC., QUESTIONS AND ANSWERS ON SERVING CHILDREN WITH DISABILITIES PLACED BY THEIR PARENTS IN PRIVATE SCHOOLS 1 (2011), <https://>

bursment from schools that have been approved by the State.²⁶⁵ The Supreme Court has also determined that the IDEA “authorizes reimbursement for the cost of private special-education services when a school district fails to provide a FAPE and the private-school placement is appropriate, regardless of whether the child previously received special education or related services through the public school.”²⁶⁶

A similar framework can be utilized to allow parents to seek reimbursement for assistive technology if they are unable to obtain funding from other sources, such as Medicaid or private health insurance. A request for reimbursement for assistive technology would require the parent or guardian of the child to demonstrate (1) whether the assistive technology device is necessary to provide the child with a FAPE based on the child’s individual education needs and (2) a balance of the burden on the school district and the financial needs of the child, including the child’s ability to obtain funding to acquire the assistive technology device. Consideration of the financial burden would provide for more equitable access—something that courts typically fail to consider in assessing requests for special education services.²⁶⁷ Some scholars have criticized the reimbursement model as problematic because it requires parents to incur the cost of the benefit of service “at their own financial risk.”²⁶⁸ As such, the reimbursement model would not increase access for those families who do not have the financial means to purchase hearing aids, particularly given the risk that they may not be reimbursed, unless a third-party organization was willing to provide funding until the family was able to secure reimbursement. Additionally, the process for reimbursement is “uncertain”²⁶⁹ and can result in cost-prohibitive litigation for the family.

bit.ly/3yUN0mV [https://perma.cc/ZK79-EDLE] (citing 20 U.S.C. § 1412(a)(10)(A); 34 C.F.R. § 300.130–300.144 (2006)).

265. *Tucker v. Bay Shore Union Free Sch. Dist.*, 873 F.2d 563, 568 (2d Cir. 1989); *Florence Cnty. Sch. Dist. Four v. Carter*, 510 U.S. 7, 14 (1993).

266. *Forest Grove Sch. Dist. v. T.A.*, 557 U.S. 230, 247 (2009).

267. Syed, *supra* note 29, at 505–06 (noting that “judicial evaluations of the adequacy of IEP benefits routinely proceed without so much as a mention of the social opportunity costs involved in securing students with disability access to additional educational benefits, in terms of the potential educational benefits for other students from the same resources”).

268. Eric Slepak, Note, *No Longer Left to Their Own Devices: Utilizing and Facilitating Mediation to Give Students Access to Assistive Technology*, 15 CARDOZO J. CONFLICT RESOL. 271, 280 (2013) (quoting *Sch. Comm. of Burlington*, 471 U.S. at 374) (proposing mediation as an effective process for requesting assistive technology).

269. *Id.*

Of course, even if we address the legal obstacles to access to assistive technology, funding barriers will persist unless we can increase government spending for special education. As noted by special education scholars and advocates, “[t]he Congress should provide funds for research, development, acquisition, and maintenance of technology to be used for persons who are deaf” and “should support new and existing assistive devices resources centers to provide information and instruction on the latest technological advances for persons who are deaf.”²⁷⁰ Some states²⁷¹ have taken advantage of federal government funding to plan and establish statewide programs of technology-related assistance.²⁷²

CONCLUSION

In order to facilitate greater access to assistive technology, courts should apply the FAPE standard with a broader focus on accommodating the specific learning needs of the child, acknowledging the increased use and benefit of technology in education, and increasing access to educational opportunities with a focus on removing barriers. As Justice Blackmun noted in his concurring opinion in *Rowley* almost 40 years ago, courts should consider whether services are necessary to provide the child with “an opportunity to understand and participate in the classroom that [i]s substantially equal to that given her [nondisabled] classmates.”²⁷³ In order to meet this goal within the context of requests for assistive technology, scholars have urged courts to give “primary consideration” to the preferences of the students themselves, noting the “particularly personal nature of choosing a mode of communication.”²⁷⁴ Indeed, the Supreme Court has noted that “a focus on the particular child is at the core of the IDEA” and “[t]he instruction offered

270. COMM’N ON EDUC. OF THE DEAF, *supra* note 193, at xxii. For a more detailed analysis of the disparities in public education funding, see Miksis, *supra* note 24.

271. Arkansas, Colorado, Illinois, Kentucky, Maine, Maryland, Minnesota, Nebraska, and Utah were awarded funding in 1989. Roxanne Rice, *Federal Legislation and Assistive Technology*, FUTURE REFLECTIONS, Summer 1991, <https://bit.ly/3wmWtSf> [<https://perma.cc/CR6Y-Z7T8>].

272. Assistive Technology Act of 2004, Pub. L. No. 108-364, 118 Stat. 1707, 1714–15.

273. *Bd. of Educ. v. Rowley*, 458 U.S. 176, 211 (1982) (Blackmun, J., concurring) (noting that schools are required to provide “equal access”).

274. Liliana Kim, Comment, *Not Turning a Deaf Ear: How K.M. v. Tustin Unified School District Expands the Rights of Deaf or Hard-of-Hearing Students*, 47 LOY. L.A. L. REV. 1031, 1045 (2014) (quoting Brief for United States as Amicus Curiae Supporting Appellant and Urging Remand at 23, *K.M. v. Tustin Unified Sch. Dist.*, 725 F.3d 1088 (9th Cir. 2013) (No. 11-56259)).

must be ‘*speciall*y designed’ to meet a child’s ‘*unique* needs’ through an [IEP].”²⁷⁵

To increase access to much-needed assistive technology for children with disabilities, courts should consider the benefit and unique impact of assistive technology as one of many criteria for determining whether the FAPE standard is satisfied. Additionally, states should step in and mandate coverage for hearing aids in their Medicaid programs and private insurance.

275. *Endrew F. v. Douglas Cnty. Sch. Dist. RE-1*, 137 S. Ct. 988, 999 (2017).
