

# 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

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## TABLE OF CONTENTS

I.	Introduction.....	183
II.	Background.....	186
	A. Legal Protections of Public Education .....	187
	B. Federal Protections for Students with Disabilities.....	190
	C. Identifying How High-Poverty Classrooms Affect Students with Disabilities .....	194
III.	Analysis.....	195
	A. Benefits of Access to Technically Innovative Tools in the Classroom.....	197
	B. Benefits of Access to Technically Innovative Tools for Students with Disabilities .....	198
	C. High-Poverty Classrooms Display the Failings of Current Regulations.....	201
IV.	Recommendation .....	204
V.	Conclusion .....	208

## I. INTRODUCTION

Puritan settlers established the first public school in the United States in

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Boston, Massachusetts in 1635.<sup>1</sup> The mission of this school was simple: to provide an education to boys<sup>2</sup> of all socio-economic levels, completely free of charge.<sup>3</sup> This commitment to educating all children at no direct cost to their family has permeated the mindset of this nation since its inception<sup>4</sup> and serves as the basis for the establishment of the U.S. public school system.<sup>5</sup> Unfortunately, implementation of this idyllic notion of educational equity is a daily struggle facing law and policy makers.<sup>6</sup>

Financial disparity across communities has resulted in an inequity of resource distribution in public elementary and secondary school systems in the United States.<sup>7</sup> Public schools in wealthy communities benefit from the government revenue earned from relatively high neighborhood property taxes, which are allocated toward education.<sup>8</sup> On the other end of the economic spectrum, public schools in poor communities struggle to meet costs for even the most basic classroom needs.<sup>9</sup> Further, as society, and the field of education, constantly evolves with technical innovation,<sup>10</sup> teachers and school

1. *First Public School Site and Ben Franklin Statue*, CITY OF BOSTON.GOV, <http://www.cityofboston.gov/freedomtrail/firstpublic.asp> (last visited Mar. 7, 2016).

2. See Stephani Kermes, "To Make Them Fit Wives for Educated Men"? 19<sup>th</sup>-Century Education of Boston Girls, BOS. HIST. SOC'Y 1 (2004), [http://www.bostonhistory.org/pdf/Kermes%20article\\_final.pdf](http://www.bostonhistory.org/pdf/Kermes%20article_final.pdf) (explaining the process that led to coeducational primary schools in Boston. While the original public school was intended only to provide an education to boys, in 1789, "Boston public primary schools became coeducational.").

3. *First Public School*, *supra* note 2.

4. See ELLWOOD P. CUBBERLEY, PUBLIC EDUCATION IN THE UNITED STATES: A STUDY AND INTERPRETATION OF AMERICAN EDUCATIONAL HISTORY 118–19 (1919) (describing the historical trajectory that resulted in the establishment of the public school system in the U.S.).

5. *Id.* (stating that "by 1850 it may be said that the question of providing a common-school education for all children at public expense had been settled, in principle at least, in every Northern State.").

6. See generally John Podesta & Cynthia Brown, *Introduction to PHYLLIS MCCLURE ET AL., CTR. FOR AM. PROGRESS, ENSURING EQUAL OPPORTUNITY IN PUBLIC EDUCATION: HOW LOCAL SCHOOL DISTRICT FUNDING PRACTICES HURT DISADVANTAGED STUDENTS AND WHAT FEDERAL POLICY CAN DO ABOUT IT 1* (2008) (explaining how the, "language in Title I of the Elementary and Secondary Education Act of 1965, the so-called 'comparability provision,' which was supposed to promote equality of education but indeed does not."); Valerie Strauss, *America's School Funding Problems, State By State*, WASH. POST (Feb. 5, 2014), <http://www.washingtonpost.com/blogs/answer-sheet/wp/2014/02/05/americas-school-funding-problems-state-by-state/> (describing funding disparities across public education in the United States that result in inequitable education for students in varying regions); Andrew Ujifusa, *Exit Strategy: State Lawmakers Consider Dropping Common Core*, EDUC. WEEK (Sept. 16, 2015), <http://www.edweek.org/ew/section/multimedia/anti-cc-bill.html> (tracking state legislative efforts across the nation relating to the Common Core State Standards utilized in schools).

7. See Bruce D. Baker, Danielle Farrie & David G. Sciarra, *School Funding in Most States Unfair: Inequitable Funding Systems Shortchanging Nation's Students*, EDUC. LAW CTR. (June 8, 2015), <http://www.schoolfundingfairness.org/> (describing how "[p]ublic school funding in most states continues to be unfair and inequitable, shortchanging the nation's 49 million school public school students, especially those living in poverty, out of the educational opportunities they need to succeed.").

8. See DAPHNE A. KENYON, LINCOLN INST. OF LAND POLICY, *THE PROPERTY TAX-SCHOOL FUNDING DILEMMA 2* (2007) (stating that "nearly half of all property tax revenue [is] used for public elementary and secondary education.").

9. See, e.g., Bruce D. Baker & Sean P. Corcoran, *The Stealth Inequities of School Funding How State and Local School Finance Systems Perpetuate Inequitable Student Spending*, CTR. FOR AM. PROGRESS (Sept. 19, 2012), <https://www.americanprogress.org/issues/education/report/2012/09/19/38189/the-stealth-inequities-of-school-funding/> (stating that "[t]he sad reality is that gross funding inequities continue to exist in this country, and too often the schools serving students with the greatest needs receive the fewest resources.").

10. See e.g., Matt Richtel, *Technology Changing How Students Learn, Teachers Say*, N.Y. TIMES (Nov. 1, 2012), <http://www.nytimes.com/2012/11/01/education/technology-is-changing-how-students-learn-teachers->

administrators face ongoing challenges in providing an adequate education to all children to ensure that every student is prepared for life post-graduation.<sup>11</sup> Underfunded public schools are unable to keep up with constant changes in technology, leaving students enrolled in these schools at an educational disadvantage to their wealthier peers.<sup>12</sup> While such a disparity affects all students, the disparity in academic achievement across economic levels is particularly pronounced for students with disabilities.<sup>13</sup>

There are challenges posed by technical advancement in public education as they affect students with disabilities in high-poverty communities. The U.S. federal government has found that:

[a]s technology has come to play an increasingly important role in the lives of all persons in the United States . . . its impact upon the lives of individuals with disabilities in the United States has been comparable to its impact upon the remainder of the citizens of the United States. Any development in mainstream technology will have profound implications for individuals with disabilities in the United States.<sup>14</sup>

While Congress has implemented federal initiatives with the intention of ensuring equal access to technology for students with disabilities in public schools,<sup>15</sup> this Note contends that current policies and practices insufficiently address the root causes of the disparity in access. In particular, as a significant factor in school access to technical innovation is the school's access to funding,<sup>16</sup> the inconsistencies in implementation of current regulations across economically disparate communities are examined.

Part II explains the historical trajectory of public education in the United States, and the federal regulations established to ensure all students are

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say.html (summarizing findings from two studies on the effects of media use and technology on student learning).

11. See RICHARD J. NOETH & BORIS B. VOLKOV, ACT OFFICE OF POLICY RESEARCH, EVALUATING THE EFFECTIVENESS OF TECHNOLOGY IN OUR SCHOOLS 2 (2004) (stating that “providing access [does not] imply that all teachers and students will make optimal use of the technology. Technology may mean little without appropriate objectives and goals for its use, structures for its application, trained and skillful deliverers, and clearly envisioned plans for evaluating its effectiveness.”).

12. See, e.g., Nick Pandolfo, *As Some Schools Plunge into Technology, Poor Schools are Left Behind*, HECHINGER REP. (Jan. 24, 2012), <http://hechingerreport.org/as-some-schools-plunge-into-technology-poor-schools-are-left-behind/> (discussing the “digital divide” between students in high and low-income schools, and how a lack of access to technology is resulting in a deficit for children in poor schools).

13. See The Understood Team, *Assistive Technology: What It Is and How It Works*, UNDERSTOOD (Jessica Millstone ed., June 1, 2014), <https://www.understood.org/en/school-learning/assistive-technology/assistive-technologies-basics/assistive-technology-what-it-is-and-how-it-works> (discussing that assistive technology can be critical to helping students become more independent in school and later in life).

14. Assistive Technology Act of 2004, 29 U.S.C. § 3001(a)(4) (2012).

15. See *id.* § 3001(b)(1) (“The purposes of this chapter are . . . to support State efforts to improve the provision of assistive technology to individuals with disabilities through comprehensive statewide programs of technology-related assistance, for individuals with disabilities of all ages . . . .”); Individuals with Disabilities Education Act, 20 U.S.C. § 1400(c)(5)(H) (2012) (“Almost 30 years of research 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.”).

16. See Baker, Farrie & Sciarra, *supra* note 7 (noting the link between school funding and essential resources, which would include new learning technology).

guaranteed the right to a free appropriate public education. This section discusses federal laws established to protect the right to an education, and, in particular, discusses laws established to ensure assistive technology is available to all students with disabilities in the classroom. Additionally, this section defines high-poverty communities and how residual effects of poverty in these communities have created a dichotomous system of public education in the U.S. Part III considers the necessity of access to technically innovative tools in the classroom for students with disabilities. This section examines the disparity in access to assistive technology tools across communities, and the effects of such a disparity on students with disabilities both inside and out of the classroom.

The purpose of this Note is to evaluate current federal regulations and oversight, and examine whether current methods are successful in ensuring that students with disabilities have equitable access to much needed assistive technology tools. Part IV specifically addresses failings in enacted federal regulations, and proposes modifications to these regulations and implementation strategies. Proposed changes are intended to assist in accomplishing the goal of providing truly equal access to technology, particularly assistive technology, for all students in all public elementary and secondary schools.

## II. BACKGROUND

The relationship between the United States' legal system and public elementary and secondary education system began concurrently with the establishment of the nation's governmental structure in the late eighteenth century.<sup>17</sup> This section discusses the chronology of that relationship, paying special attention to the debate surrounding whether the right to an education is considered a "fundamental right" guaranteed to all citizens of the United States.<sup>18</sup> Part of this historical trajectory includes several federal regulations enacted with the intention of fairly regulating the U.S. education system, particularly for students with disabilities.<sup>19</sup> These regulations, and their implications on students, both with and without disabilities, in the classroom are discussed in this section. This Note emphasizes an analysis of the ways in which current federal regulations are inadequate in providing technological access in the public education system for students with disabilities in high-

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17. Michael Salerno, Note, *Reading Is Fundamental: Why the No Child Left Behind Act Necessitates Recognition of a Fundamental Right to Education*, 5 CARDOZO PUB. L. POL'Y & ETHICS J. 509, 514 (2007) ("[I]n the Ordinance of 1787, one of the Founders' first actions in Congress was to declare that 'knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged.'").

18. Compare *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1 (1973) (holding that education is not a fundamental right, and therefore the state of Texas need not utilize the strict scrutiny standard for evaluation of a law requiring communities to fund public schools based upon property taxes); with *Hornbeck v. Somerset Cnty. Bd. of Educ.*, 458 A.2d 758, 761 (Md. 1983) (holding that Maryland had a legitimate state interest in preserving local control over education and therefore a financing system overseen by the state to ensure equality among income levels was appropriate).

19. See, e.g., 20 U.S.C. § 1400(d) (2012) (indicating that the purpose of this federal legislation is, "to ensure all children with disabilities have available to them a free appropriate public education.").

poverty schools. As such, this section narrows the scope of this Note's evaluation through a definition of high-poverty classrooms, and briefly examines the communities in which these schools exist.

#### A. *Legal Protections of Public Education*

A right to an education for all citizens is not directly mentioned in the United States Constitution, the Constitution's Amendments, or in the Articles of Confederation.<sup>20</sup> This omission was not a mere oversight by the Founding Fathers, as they themselves noted the importance of education in both personal correspondence and official Congressional actions.<sup>21</sup> Despite its evident importance to the Founders, the complete omission of a direct expression of the right to an education from the nation's founding documents has resulted in ambiguity and debate over whether the right to an education is a fundamental right,<sup>22</sup> akin to the right to freedom of speech or religion,<sup>23</sup> that is afforded to all citizens.<sup>24</sup> Over the past fifty years, education's omission from relevant governing legislation has made it the burden of the courts to resolve this dispute.<sup>25</sup>

This controversy holds particular weight because rights recognized as fundamental are afforded "great Constitutional protection under the Fourteenth Amendment Due Process and Equal Protection Clauses."<sup>26</sup> Fundamental rights are "contemplated by the federal Constitution as 'implicit in the concept of ordered liberty.'"<sup>27</sup> A fundamental right need not be a right that is important, or even necessary, to sustain life; for example, citizens of the U.S. do not have

20. See U.S. CONST. art. I–VII (discussing the rights of the people of the U.S., and not including a mention of education); U.S. CONST. amend. I–XXVII (enumerating additional rights of the people, and not mentioning education); ARTICLES OF CONFEDERATION of 1781, art. I–XIII (neglecting to mention education as a basic right).

21. Salerno, *supra* note 17, at 514 ("In a letter from Thomas Jefferson to George Washington, Jefferson stated, '[e]stablish the law for educating the common people. This it is the business of the state to effect and on a general plan.' Additionally, in the Ordinance of 1787, one of the Founders' first actions in Congress was to declare that 'knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged.'").

22. A "fundamental right" under the U.S. Constitution's Fourteenth Amendment indicates that all citizens have been granted this right, and no one may be barred from accessing it unless the government is able to provide a compelling governmental objective for interference. Brooke Wilkins, Note, *Should Public Education be a Federal Fundamental Right?*, 2005 BYU EDUC. & L. J. 261, 265 (2005).

23. U.S. CONST. amend. I.

24. Compare *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1, 30 (1973) (holding that education is not a fundamental right, and therefore the state of Texas need not utilize the strict scrutiny standard for evaluation of a law requiring communities to fund public schools based upon property taxes); with *Hornbeck v. Somerset County Bd. of Educ.*, 458 A.2d 758, 788 (1983) (holding that Maryland "preserving and promoting local control over education is . . . a legitimate state interest" and therefore a financing system overseen by the state to ensure equality among income levels was appropriate).

25. See Randal S. Jeffrey, *Equal Protection in State Courts: The New Economic Equality Rights*, 17 LAW & INEQ. 239, 270–71 (1999) (stating that "[i]n contrast to the U.S. Supreme Court, some state courts have held that education is a fundamental right under state law. In particular, the courts in fifteen states . . . have held that a state funded education is a fundamental right or interest under their state constitutions. However, the courts in six states . . . have held that a state funded education is not a fundamental right under their state constitutions.").

26. Wilkins, *supra* note 22, at 265.

27. *Kicklighter v. Evans County Sch. Dist.*, 968 F. Supp. 712, 716 (S.D.Ga. 1997), quoting *McKinney v. Pate*, 20 F.3d 1550, 1556 (11th Cir. 1994), cert. denied, 513 U.S. 1110 (1995).

the right to receive food from the government.<sup>28</sup> Instead, a fundamental right must simply be one that “lies at the base of all of our civil and political institutions.”<sup>29</sup> Categorizing a right as fundamental permits the government to meticulously scrutinize and modify the processes used to convey the right to citizens.<sup>30</sup> Specifically, the government must provide a compelling reason that survives the toughest judicial examination, a strict scrutiny test, or an examination of whether the right is narrowly tailored to a compelling government interest, in order to justify limitation of any right deemed fundamental.<sup>31</sup>

Education’s potential classification as a fundamental right was most publically first brought to the U.S. Supreme Court in *Brown v. Board of Education*.<sup>32</sup> The Court in *Brown* stated that “[e]ducation is perhaps the most important function of state and local governments . . . [s]uch an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms.”<sup>33</sup> The historic significance of this holding is evident in both the national legal and social implications of the decision.<sup>34</sup> Significantly, the Court’s language on the importance of education remains undisputed by any future holdings.<sup>35</sup> *Brown*’s holding made meaningful progress by eliminating race based discrimination in schools and by detailing the Court’s view of education as a vital public service, but the Court in *Brown* notably remained silent on the issue of discrimination in education on any basis other than race.<sup>36</sup> By remaining silent on all other potential types of discrimination, the Court demonstrated their lack of obligation to address these issues, thus leaving open the question of whether education is protected as a fundamental right that is subject to a strict scrutiny test<sup>37</sup> under the Fourteenth Amendment after the *Brown* decision.<sup>38</sup>

In 1973, the U.S. Supreme Court addressed this lingering question, and held that no United States citizen has a fundamental right to an education under

28. Wilkins, *supra* note 22, at 263.

29. *Id.*

30. *Id.*

31. See Jeffrey, *supra* note 25, at 266 (stating that “to trigger strict scrutiny, challenged state action must directly burden a fundamental right.”).

32. *Brown v. Bd. of Educ. of Topeka, Shawnee Cnty., Kan.*, 347 U.S. 483, 493 (1954) *supplemented sub nom.* *Brown v. Bd. of Educ. of Topeka, Kan.*, 349 U.S. 294 (1955).

33. *Id.*

34. See 4-10A EDUC. LAW § 10A.01[1] (2014) (stating that “[t]he significance of *Brown* rests, in part, on the Supreme Court’s reversal of years of constitutional history . . . . But as important—perhaps more important—is that *Brown* ushered in a new era of broader educational opportunity.”).

35. See, e.g., *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1, 30 (1973) (stating that “[n]othing this Court holds today in any way detracts from our historic dedication to public education”).

36. Barbara Debelius-Enemark, *Recent Education Funding Decisions in the Nation and Their Effect on South Dakota*, 36 S.D. L. REV. 663, 663 (1991) (“It was once thought that the *Brown* decision might provide precedent for striking down educational funding systems that discriminate on the basis of wealth. That aspiration soon faded, however, when the Court . . . declared that *Brown* referred only to discrimination on the basis of race, not wealth.”).

37. A “strict scrutiny” test in this context indicates the government must provide a *compelling* governmental interest to interfere with a citizen’s right. Jeffrey, *supra* note 25, at 266.

38. *Rodriguez*, 411 U.S. at 30 (“[T]he importance of” education “does not determine whether it must be regarded as fundamental for purposes of examination under the Equal Protection Clause.”).

federal law in *San Antonio Independent School District v. Rodriguez*.<sup>39</sup> Justice Powell wrote in the majority opinion of *Rodriguez* that:

[n]othing this Court holds today in any way detracts from our historic dedication to public education . . . [b]ut the importance of a service performed by the State does not determine whether it must be regarded as fundamental for purposes of examination under the Equal Protection Clause.<sup>40</sup>

The *Rodriguez* Court premised its holding on the finding that state and local governments are better able to monitor the financing schemes for local educational systems than the federal government.<sup>41</sup> While every child's right to access an equal education is consistently touted as a stand-alone founding principle of this nation, implementation of public education systems is, in large part, premised on funding schematics.<sup>42</sup> The *Rodriguez* holding has not been overturned to date, making this decision "good law" in the eyes of the federal court system.<sup>43</sup> Subsequent to the decision, however, the Supreme Court has interpreted the seemingly narrow and negative holding to broaden the protections of the public education system.

In 1982 in *Plyler v. Doe*, the Supreme Court analyzed the application of a provision of the Texas Educational Code withholding funding from schools that provided a public education to undocumented Mexican children.<sup>44</sup> The Court found the provision unconstitutional under the Equal Protection Clause, specifically noting that education is not "merely some governmental 'benefit' indistinguishable from other forms of social welfare legislation."<sup>45</sup> The Court continued this explanation by stating, "education has a fundamental role in maintaining the fabric of our society. We cannot ignore the significant social costs borne by our Nation when select groups are denied the means to absorb the values and skills upon which our social order rests."<sup>46</sup> This language is clearly indicative of the Court's ongoing support of the importance of the provision of an equal education for all children, despite this right's continued omission in being categorized as a fundamental right.

Regardless of language found within subsequent decisions that imply the Court's support of education as a fundamental right, the *Rodriguez* holding is still "good law," and frequently serves as the basis of arguments utilized by advocates seeking to advance the cause *against* classifying education as a fundamental right.<sup>47</sup> Despite these negative implications of the holding, it is

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39. *Id.* at 1.

40. *Id.* at 30–31.

41. *Id.* at 40–43 (stating that "the Justices of this Court lack both the expertise and the familiarity with local problems so necessary to the making of wise decisions with respect to the raising and disposition of public revenues.").

42. *Id.* at 30 ("[n]othing this Court holds today in any way detracts from our historic dedication to public education . . . that 'the grave significance of education both to the individual and to our society' cannot be doubted.").

43. *Id.* at 1.

44. *Plyler v. Doe*, 457 U.S. 202, 206 (1982).

45. *Id.* at 221.

46. *Id.*

47. *Rodriguez*, 411 U.S. at 41 ("No scheme of taxation, whether the tax is imposed on property,

significant that the Court in *Rodriguez* left the power to regulate the education system in the hands of the states.<sup>48</sup> In response to the *Rodriguez* decision, state and local governments (with rare exceptions, such as Texas in *Plyler*<sup>49</sup>) have enacted laws that work to ensure all children have access to a public education.<sup>50</sup> As a result of these efforts, a majority of state courts currently recognize education as a fundamental right in their jurisdictions.<sup>51</sup> Further, without specifically addressing whether education is a fundamental right, the federal government has passed laws that, through their implementation, guarantee access to a public education for all children.<sup>52</sup>

Scholars continue to raise arguments that education should be considered a fundamental right under varying Constitutional provisions, such as the Privileges and Immunities, or Citizenship Clauses.<sup>53</sup> Until a legislative measure is passed that categorizes education as a fundamental right, new theories for education's inclusion in this elusive list of protections will undoubtedly continue to abound. What is currently important, however, is that though current federal legal precedent is still the *Rodriguez* holding, in practice, the nation has demonstrated a recognition of the right to an education for all students.<sup>54</sup>

### B. Federal Protections for Students with Disabilities

This Note specifically addresses a right to a public education as it is extended to students with disabilities. A student with a disability, as defined in the Individuals with Disabilities Education Act (IDEA), is a child:

with intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments

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income, or purchases of goods and services, has yet been devised which is free of all discriminatory impact. In such a complex arena in which no perfect alternatives exist, the Court does well not to impose too rigorous a standard of scrutiny lest all local fiscal schemes become subjects of criticism under the Equal Protection Clause.”).

48. *Id.* at 1.

49. *Plyler*, 457 U.S. at 223.

50. *Historical Timeline of Public Education in the U.S.*, RACE FORWARD: CTR FOR RACIAL JUST. INNOVATION (Apr. 13, 2006), <https://www.raceforward.org/research/reports/historical-timeline-public-education-us>.

51. See Salerno, *supra* note 17, at 527–30 (discussing how at least twenty-nine state courts have ensured access to education for their citizens through broad or explicit education provisions in their constitutions, or broad interpretations of education clauses through state court decisions).

52. See Elementary and Secondary Education Act (ESEA), 20 U.S.C. § 6301 (2002) (stating that “[t]he purpose of this subchapter is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education.”); Individuals with Disabilities Education Act 20 U.S.C. § 1412 (2005) (stating that “[a] free appropriate public education is available to all children with disabilities residing in the State between the ages of 3 and 21, inclusive, including children with disabilities who have been suspended or expelled from school.”).

53. See, e.g., Goodwin Liu, *Education, Equity, and National Citizenship*, 116 YALE L.J. 330 (2006) (stating that “[t]his Article argues that the Fourteenth Amendment authorizes and obligates Congress to ensure a meaningful floor of educational opportunity throughout the nation. But instead of parsing the Equal Protection Clause, the perspective I aim to develop focuses on the Fourteenth Amendment’s opening words, the Citizenship Clause.”).

54. See Salerno, *supra* note 17, at 527–30 (discussing how at least twenty-nine state courts have ensured access to education for their citizens through broad or explicit education provisions in their constitutions, or broad interpretations of education clauses through state court decisions).

(including blindness), serious emotional disturbance (referred to in this chapter as “emotional disturbance”), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities.<sup>55</sup>

A child is identified as a student with a disability through completion of an evaluation by a State educational (or equivalent) agency.<sup>56</sup> The evaluation consists of “technically sound instruments that may assess the relative contribution of cognitive and behavioral factors, in addition to physical or developmental factors.”<sup>57</sup> In line with IDEA’s fundamental belief that no two children are identical, every child’s evaluation is different dependent on the needs of the individual.<sup>58</sup> Once an evaluation determines that a student qualifies as a student with a disability, that student is eligible for all protections afforded to individuals with disabilities under Section 504 of the Rehabilitation Act of 1973,<sup>59</sup> and IDEA.<sup>60</sup>

This Note primarily discusses IDEA’s protections for children with disabilities in the classroom.<sup>61</sup> The federal government implemented IDEA in 2005 as a protection measure because “it is in the national interest that the Federal Government have a supporting role in assisting State and local efforts to educate children with disabilities in order to improve results for such children and to ensure equal protection of the law.”<sup>62</sup> The necessity for such legislative measures to ensure equality, however, derives from the way in which individuals with disabilities have historically been categorized and treated. Education of individuals with disabilities was historically “reduced to either total exclusion from the classroom, or placement in a classroom without educational benefit until the child was old enough to drop out.”<sup>63</sup> Original federal initiatives were implemented in an effort to promote equity in the education of students with disabilities, and to ensure that students with disabilities can access the same rights as their non-disabled peers.<sup>64</sup>

Several initiatives were established prior to IDEA’s implementation, but each was found insufficient in scope and oversight.<sup>65</sup> The first federal law

55. 20 U.S.C. § 1401(3)(A)(i).

56. *See id.* § 1414(a)(1)(C) (explaining the procedures for initial eligibility determination for special education services).

57. *Id.* § 1414(b)(2)(C).

58. *Id.*

59. 29 U.S.C. § 794(a) (2014) (“No otherwise qualified individual with a disability in the United States . . . shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”).

60. *See* 20 U.S.C. § 1400(d) (stating that “[t]he purposes of this chapter are . . . to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living.”).

61. *Id.* (“[A]ll children with disabilities have available to them a free appropriate public education.”).

62. 20 U.S.C. § 1400(c)(6).

63. 161 A.L.R. Fed. 1 (Originally published in 2000).

64. *Id.*

65. *See e.g.*, Elementary and Secondary Education Act (ESEA), 20 U.S.C. § 6301 (2002) (“The purpose of this subchapter is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education.”).

enacted by Congress “[t]o remedy th[e] lack of educational opportunity for disabled children” in the United States was the Elementary and Secondary Education Act of 1965 (ESEA).<sup>66</sup> This Act included the important provision “which required funded local public school districts to meet the educational needs of educationally deprived children in economically disadvantaged locations.”<sup>67</sup> ESEA was one of several federal initiatives intended to protect the rights of individuals with disabilities, but Congress found that it failed in its effort to provide equitable educational opportunity to children with disabilities.<sup>68</sup>

Congress replaced ESEA in 1970 with the Education of the Handicapped Act (EHA), an effort to compile all of the educational programs for students with disabilities into a single act.<sup>69</sup> After “two landmark district court cases,” Congress modified EHA and passed it as the Education for All Handicapped Children Act of 1975 (EAHCA).<sup>70</sup> EAHCA notably guaranteed “the right of all disabled children to a free appropriate public education,”<sup>71</sup> framing the basis for the key provision of IDEA.<sup>72</sup> In 1990, Congress modified EAHCA to remedy its failings in providing an equitable education to all students with disabilities, and renamed the statute IDEA.<sup>73</sup>

Congress structured IDEA around the premise of ensuring “that all children with disabilities have available to them a free appropriate public education (FAPE) that emphasizes special education and related services designed to meet their unique needs.”<sup>74</sup> FAPE ensures that every child has a right to access the least restrictive classroom environment in their neighborhood school, with their peers, at no cost.<sup>75</sup> In addition, the Act provides that public schools should have access to “the development and use of technology, including assistive technology devices and assistive technology services, to maximize accessibility for children with disabilities.”<sup>76</sup>

Assistive technology is defined as any technology utilized as either an assistive technology device or service.<sup>77</sup> An assistive technology device “means any item, piece of equipment, or product system . . . that is used to increase, maintain, or improve functional capabilities of individuals with

66. Ann K. Wooster, Annotation, *What Constitutes Services That Must be Provided by Federally Assisted Schools Under the Individuals with Disabilities Education Act (IDEA)* (20 U.S.C.A. §§ 1400 et seq.), 161 A.L.R. FED. 1, 26 (2000).

67. *Id.*

68. *Id.*

69. *Id.*

70. *Id.*

71. *Id.*

72. 20 U.S.C. § 1400(d)(1)(A) (2010) (“[A]ll children with disabilities have available to them a free appropriate public education.”).

73. 20 U.S.C. § 1400(c)(4) (“[T]he implementation of [the Education for All Handicapped Children Act] has been impeded by low expectations, and an insufficient focus on applying replicable research on proven methods of teaching and learning for children with disabilities.”).

74. 20 U.S.C. § 1400(d)(1)(A).

75. *Id.*

76. 20 U.S.C. § 1400(e)(5)(H).

77. 29 U.S.C. § 3002(3) (2014) (“The term “assistive technology” means technology designed to be utilized in an assistive technology device or assistive technology service.”).

disabilities,”<sup>78</sup> while an assistive technology service “means any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device.”<sup>79</sup> Assistive technology that is required for a student with a disability to enter a classroom includes a broad spectrum of devices.<sup>80</sup> Such devices could range from a reading assistance device for a student with a visual impairment, or a pencil grip that assists with writing for a student with motor impairments.<sup>81</sup>

Additional assistive technology that is often utilized by students includes devices or services that may not be absolutely necessary<sup>82</sup> for a student to enter the classroom—for example, an iPad with a reading application that phonetically breaks apart words.<sup>83</sup> These devices and services are considered assistive technology because they provide assistance necessary for a student with a disability to fully access the curriculum in a classroom, and to reach full learning potential.<sup>84</sup> Per IDEA’s requirements, schools must provide the support and services necessary to ensure a free appropriate public education for all students with disabilities, including “special education and related services designed to meet” each individual student’s “unique needs,” in an effort to “prepare them for further education, employment, and independent living.”<sup>85</sup> IDEA does not mandate that every child is required to meet their “maximum potential” in the classroom, but courts broadly apply the federal regulations in order to ensure that every child is provided an education consisting of “access to specialized instruction and related” services.<sup>86</sup> This interpretation protects a student’s right to access the assistive technology that provides access to education intended to prepare the student to achieve their full learning potential, and ready them for life post-graduation.<sup>87</sup>

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78. 29 U.S.C. § 3002(4).

79. 29 U.S.C. § 3002(5).

80. *What are Some Types of Assistive Devices & How Are They Used?*, EUNICE KENNEDY SHRIVER NAT’L INST. CHILD HEALTH AND HUMAN DEV. (2012), [www.nichd.nih.gov/health/topics/rehabtech/conditioninfo/pages/device.aspx](http://www.nichd.nih.gov/health/topics/rehabtech/conditioninfo/pages/device.aspx) (listing a variety of different assistive technology devices and their potential uses).

81. *Id.* (“[A]ssistive devices, such as automatic page-turners, book holders, and adapted pencil grips, allow learners with disabilities to participate in educational activities.”).

82. “Absolutely necessary,” when used in this context, implies that a student may enter a classroom without the particular assistive device, but may not be able to access the full scope of educational benefits that is accessible without assistive tools to their non-disabled peers.

83. *Apps for Dyslexia and Learning Disabilities*, REGENTS OF U. OF MICH., <http://dyslexiahelp.umich.edu/tools/apps> (last visited Mar. 7, 2016).

84. *Specific Learning Disabilities*, EXCEPTIONAL LIVES, <https://sites.google.com/site/todayssped/idea/idea-categories/specific-learning-disabilities> (last visited Mar. 7, 2016) (“The purpose of these teaching and learning tools and assistive technology devices is to help people work around specific deficits rather than fixing them. They are intended to help people with learning disabilities of all ages to reach their full potential, giving them greater freedom and independence along the way.”).

85. 20 U.S.C. § 1400(d)(1)(A) (2010).

86. Robin S. Ballard, *The Expanding Understanding of Educating Students with Disabilities and the Increased Focus on Inclusion*, N.J. LAW., Dec. 2013, at 36.

87. See NAT’L CTR. FOR LEARNING DISABILITIES, *supra* note 13 (“They are intended to help people with learning disabilities of all ages to reach their full potential.”).

*C. Identifying How High-Poverty Classrooms Affect Students  
with Disabilities*

This Note analyzes the utilization and availability of assistive technology, as is defined in IDEA's provisions,<sup>88</sup> in public elementary and secondary schools in high-poverty classrooms in the United States. High-poverty classrooms are found in schools distinctively defined by the U.S. Department of Education as having the highest classification level (highest poverty rate) in school poverty measurements.<sup>89</sup> Low-poverty schools have the lowest poverty rate, followed by mid-low poverty schools, mid-high poverty schools, and, finally, high-poverty schools.<sup>90</sup> For purposes of analysis, this Note focuses on high-poverty classrooms and communities, but does not disqualify the implications of these conclusions for all students attending schools that fall within any poverty classification.

Standard practice in educational literature is to “measure poverty at the school level by the percentage of students who applied for and were found eligible for the federally sponsored free” or reduced lunch program.<sup>91</sup> A student qualifies for a *free lunch* program when the family income is at, or below, 130% of the federal poverty guideline.<sup>92</sup> A student may qualify for a *reduced lunch* program when the family income is greater than 130%, but at, or below, 185% of the federal poverty guideline.<sup>93</sup> In “high-poverty” schools, “75 percent or more of the student enrollment was eligible for free *or* reduced-price meals.”<sup>94</sup> The lowest poverty classification, “low-poverty” schools, has twenty-five percent or fewer students enrolled in free or reduced lunch programs.<sup>95</sup> In the 2007–08 school year, “there were 16,122 schools, or 17 percent of all public schools,” in the country “that were considered high-poverty schools.”<sup>96</sup>

Due to the “free-lunch method” of identification of high-poverty schools, a reasonable inference is that the majority of students attending high-poverty schools are members of low-income families.<sup>97</sup> Given the high proportion of families with children qualifying for free or reduced lunch programs within high-poverty schools, it is also reasonable to infer that high-poverty neighborhood public schools, whose students are drawn from the community directly surrounding the school, occur in greater frequency in communities with lower mean income levels.<sup>98</sup> Recent studies indicate that the rates of

88. 20 U.S.C. § 1400(c)(5)(H) (2010).

89. Susan Aud et al., *The Condition of Education 2010*, 2010-028 U.S. DEP'T EDUC., at iii (2010).

90. *Concentration of Public School Students Eligible for Free or Reduced-Price Lunch*, NAT'L CTR. FOR EDUC. STAT. (Apr. 2014), [http://nces.ed.gov/programs/coe/indicator\\_clb.asp](http://nces.ed.gov/programs/coe/indicator_clb.asp).

91. Charles Clotfelter et al., *High Poverty Schools and the Distribution of Teachers and Principals*, 85 N.C. L. REV. 1345, 1351 (2006).

92. Child Nutrition Programs—Income Eligibility Guidelines, 72 Fed. Reg. 8685, 8686 (Feb. 27, 2007).

93. *Id.*

94. Aud, *supra* note 89 (emphasis added).

95. NAT'L CTR. FOR EDUC. STAT., *supra* note 90.

96. Aud, *supra* note 89.

97. *Id.*

98. This inference is based on the premise that the majority of students attend an assigned neighborhood public school, rather than a public school of their choosing. Assigned public schools normally

disabilities are rising at a much more rapid pace among students in high-poverty communities than among students in low-poverty communities.<sup>99</sup> Theories behind these findings speculate a greater cultural and social phenomenon that implicates the way in which children enter the public education system in communities of differing income levels.<sup>100</sup> Such an analysis is outside the scope of this Note, but it is noteworthy that statistically, the population of students falling into the subset of individuals discussed in this Note is currently on the rise.<sup>101</sup>

This Note examines whether, despite federal regulations to the contrary, there is a lack of access to assistive technology for students with disabilities in high-poverty public elementary and secondary school classrooms, and whether such a finding has a long-term effect on students. As such, it is necessary to examine the sources of funding for educational tools in public elementary and secondary schools. According to the Department of Education, the “U.S. Constitution leaves the responsibility for K-12 education with the states.”<sup>102</sup> In the 2010–2011 school year, federal funding only constituted about 12.5% of all elementary and secondary educational funding in the nation, with state funding constituting 44%, and local funding providing the remaining 43% of necessary funds.<sup>103</sup> State and local funding allocated towards education is, in large part, collected through revenue from local community property taxes.<sup>104</sup>

Local community property taxes, and the amount from those taxes that is directly contributed to school expenditures, varies greatly not only within states, but nationally, across states.<sup>105</sup> Significantly, statistics demonstrate that these funding disparities most affect students who are already disadvantaged.<sup>106</sup> There is a systemic overrepresentation of minority students and students with disabilities in the schools that receive the lowest amount of funding.<sup>107</sup> Part III of this Note examines the impact of funding disparities across schools in creating a gap in access to assistive technology between high-poverty and high-income public schools.

### III. ANALYSIS

Access to cutting-edge technical tools is vital to ensure every child develops the skills necessary to lead an independent and self-directed life. Federal legislation and initiatives in the United States promote this message,

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designate students to attend by proximity of the family home to the school. *Fast Facts: Public School Choice Programs*, NAT'L CENTER FOR EDUC. STAT., <http://nces.ed.gov/fastfacts/display.asp> (last visited Mar. 7, 2016).

99. Carla O'Connor & Sonia DeLuca Fernandez, *Race, Class, and Disproportionality: Reevaluating the Relationship Between Poverty and Special Education Placement*, 35 EDUC. RESEARCHER 6, 7 (2005).

100. *Id.* at 6–11.

101. *Id.*

102. THE U.S. DEP'T OF EDUC., 10 FACTS ABOUT K-12 EDUCATION FUNDING 1 (2005).

103. NAT'L CTR. FOR EDUC. STAT., *supra* note 90.

104. Press Release, Dep't of Educ., More Than 40% of Low-Income Schools Don't Get a Fair Share of State and Local Funds, Department of Education Research Finds (Nov. 30, 2011) (on file with the author).

105. See Liu, *supra* note 53, at 333 (“In other words, even if we were to eliminate disparities between school districts within each state, large disparities across states would remain.”).

106. *Id.*

107. *Id.*

and emphasize the importance of access to technology in the classroom.<sup>108</sup> One such initiative issued by the White House is ConnectED, a program intended to encourage teacher training to support and integrate technology into the classroom.<sup>109</sup> Congress also recently proposed the *Technology, Education, and Accessibility in College and Higher Education Act*, which aims to ensure all students' individual needs are met in the classroom through the assistance of technology.<sup>110</sup> The impact of technology in education is so prevalent that the Common Core Standards, a set of educational standards crafted in 2009 that is now adopted by forty-three states and the District of Columbia,<sup>111</sup> includes a set of literacy strategies intended to be taught solely through the use of technology.<sup>112</sup> Technology is "at the core of virtually every aspect of our daily lives and work;" it is vital that we leverage it in our schools to "provide engaging and powerful learning experiences, content, and resources."<sup>113</sup>

For students with disabilities, technology often enables basic access into the classroom<sup>114</sup> by allowing students to engage in classroom activities in which they may not otherwise be able to physically, academically, or socially participate.<sup>115</sup> Examples of devices and services that promote an inclusive learning environment are varied.<sup>116</sup> Such tools might include a device that enlarges print, to aid a student with a visual impairment in reading, a noisemaking device, which allows a non-verbal student to participate in classroom discussions, or a pencil grip, which allows a student with developing fine motor skills to participate in art class.<sup>117</sup> Without these devices and

108. U.S. DEP'T OF EDUC. OFFICE OF EDUC. TECH., TRANSFORMING AMERICAN EDUCATION: LEARNING POWERED BY TECHNOLOGY ix (2010), <https://www.ed.gov/sites/default/files/NETP-2010-final-report.pdf> [hereinafter TRANSFORMING AMERICAN EDUCATION] ("The plan recognizes that technology is at the core of virtually every aspect of our daily lives and work, and we must leverage it to provide engaging and powerful learning experiences and content.")

109. OFFICE OF THE PRESS SEC'Y, EXEC. OFFICE OF THE PRESIDENT, CONNECTED: PRESIDENT OBAMA'S PLAN FOR CONNECTING ALL SCH. TO THE DIGITAL AGE (2013) [hereinafter CONNECTED], [https://www.whitehouse.gov/sites/default/files/docs/connected\\_fact\\_sheet.pdf](https://www.whitehouse.gov/sites/default/files/docs/connected_fact_sheet.pdf) (last visited Mar. 7, 2016).

110. See, e.g., Ben Sheffler, *Bills in Congress Could Mean Equal Digital Access for Disabled Students*, USA TODAY (Sept. 28, 2014, 1:03 PM), <http://college.usatoday.com/2014/09/28/bills-in-congress-could-mean-equal-digital-access-for-disabled-students> (discussing Congressional efforts to pass the Technology, Education and Accessibility in College and Higher Education Act).

111. *About the Standards*, COMMON CORE STATE STANDARDS INITIATIVE, <http://www.corestandards.org/about-the-standards> (last visited Mar. 7, 2016).

112. James R. Stachowiak & Liz Hollingworth, *Technology Toolbox for the K-12 Literacy Teacher*, in TECHNOLOGICAL TOOLS FOR THE LITERACY CLASSROOM 159, 160 (Jeff Whittingham et al. ed., 2013).

113. TRANSFORMING AMERICAN EDUCATION, *supra* note 108, at v.

114. See 29 U.S.C. § 3001(a)(5) (2014) ("Substantial progress has been made in the development of assistive technology devices, including adaptations to existing devices that facilitate activities of daily living that significantly benefit individuals with disabilities of all ages. These devices, including adaptations, increase involvement in, and reduce expenditures associated with, programs and activities that facilitate communication, ensure independent functioning, enable early childhood development, support educational achievement, provide and enhance employment options, and enable full participation in community living for individuals with disabilities. Access to such devices can also reduce expenditures associated with early childhood intervention, education, rehabilitation and training, health care, employment, residential living, independent living, recreation opportunities, and other aspects of daily living.")

115. *Assistive Technology Program Overview*, CA.GOV DEP'T REHAB. (2014) <http://www.rehab.cahwnet.gov/AT/> (last visited Mar. 7, 2016) ("For people with disabilities, assistive technology allows them to live independently and be part of the community.")

116. *What are Some Types of Assistive Devices & How Are They Used?*, *supra* note 80.

117. See *Assistive Technology Basics*, UNDERSTOOD (2014), <http://www.ncl.org/students-disabilities/>

services, students with disabilities may be prevented from full inclusion in the classroom with regular education peers, a violation of their federally protected rights.<sup>118</sup> This concern is particularly pronounced in public schools, where limited funding may preclude purchasing up-to-date technology.<sup>119</sup> The U.S. public school system strives to protect every student's right to education.<sup>120</sup> As such, no student should be barred from learning simply because of a dearth of funding.

A. *Benefits of Access to Technically Innovative Tools in the Classroom*

Incorporating technology into the classroom is a national initiative,<sup>121</sup> and the United States government encourages active student engagement in developing technologies.<sup>122</sup> Congress has enacted regulations to provide technology to students of special subject classes<sup>123</sup> and has established the U.S. Office of Educational Technology (OET) to develop "national educational technology policy and" establish "the vision for how technology can be used to support learning."<sup>124</sup> OET is overseen by the Department of Education, and is responsible for all matters related to educational technology.<sup>125</sup> This includes integrating technology in the classroom to bolster students' immersion into cutting edge technical career tracks.

One facet of OET's work includes an annual study of the developing role of technology in schools. The 2010 evaluation found that:

[h]ow we need to learn includes using the technology that professionals in various disciplines use. Professionals routinely use the Web and tools, such as wikis, blogs, and digital content for the research, collaboration, and communication demanded in their jobs. They gather data and analyze the data using inquiry and visualization tools. They use graphical and 3D modeling tools for

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assistive-technology-education (last visited Mar. 7, 2016) (providing a list of potential devices that can be used as assistive technology tools for students with disabilities).

118. See 20 U.S.C. § 1412(a)(5) (2006) ("To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.").

119. See, e.g., Nick Pandolfo, *As Some Schools Plunge into Technology, Poor Schools are Left Behind*, THE HECHINGER REPORT (Jan. 24, 2012), <http://hechingerreport.org/as-some-schools-plunge-into-technology-poor-schools-are-left-behind> (discussing the "digital divide" between students in high and low-income schools, and how a lack of access to technology is resulting in a deficit for children in poor schools).

120. See, e.g., *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1, 30 (1973) ("Nothing this Court holds today in any way detracts from our historic dedication to public education.").

121. CONNECTED, *supra* note 109.

122. See, e.g., *id.* (stating that "President Obama called on the Federal Communications Commission to take the steps necessary to . . . ensur[e] that 99 percent of American students can benefit from these advances in teaching and learning.").

123. See, e.g., 29 U.S.C. § 3001(b) (2006) (describing the purpose of the Assistive Technology Act of 1998 as ensuring that all students with disabilities have access to the proper assistive technology tools in the classroom).

124. *What We Do*, OFFICE EDUC. TECH., <http://tech.ed.gov/what-we-do/> (last visited Mar. 7, 2016).

125. *Id.*

design. For students, using these real-world tools creates learning opportunities that allow them to grapple with real-world problems—opportunities that prepare them to be more productive members of a globally competitive workforce.<sup>126</sup>

Technology is a driving force behind industry and development in the modern world.<sup>127</sup> The global job market is based on technical innovation; for students to remain competitive during both their academic careers and after graduation, students must have a clear understanding of science, math, and technology.<sup>128</sup> This knowledge begins with exposure to innovative technical tools in classrooms.

Knowledge of technology can assist in maintaining a competitive edge in the job market, but the impact of technology's integration into the classroom is not conclusively beneficial to students.<sup>129</sup> A 2011 study “found that technology . . . can help student learning, [b]ut it's often more effective if devices are supporting student learning.”<sup>130</sup> The study suggested that devices should be interactive. For example, a tool that facilitates interactive classroom games, rather than merely displaying information (e.g. a TV screen), has a more measurable benefit.<sup>131</sup> While integration of technology into the classroom is not necessarily beneficial for all students, integration of technical tools *is* beneficial for English language learners and students with disabilities.<sup>132</sup>

#### *B. Benefits of Access to Technically Innovative Tools for Students with Disabilities*

As discussed in Part II, Congress states in IDEA that educating students 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.”<sup>133</sup> Assistive technology is meaningful for students with disabilities because of the capacity of these tools to allow students to “use their

126. TRANSFORMING AMERICAN EDUCATION, *supra* note 108, at xi.

127. See, e.g., CONNECTED, *supra* note 109 (stating that “[d]riven by new digital technologies, the future of learning is increasingly interactive, individualized, and full of real-world experiences and information.”).

128. See *Preparing for the 21<sup>st</sup> Century: The Education Imperative*, NAT'L ACAD. OF SCI., <http://www.nas.edu/21st/education> (last visited Mar. 7, 2016) (“[T]oday, an understanding of science, mathematics, and technology is very important in the workplace. As routine mechanical and clerical tasks become computerized, more and more jobs require high-level skills that involve critical thinking, problem-solving, communicating ideas to others, and collaborating effectively.”).

129. Sarah Garland, *Why It's So Hard to Close the Digital Divide in High-Poverty Schools*, NBC NEWS (June 12, 2014), <http://www.nbcnews.com/feature/in-plain-sight/why-its-so-hard-close-digital-divide-high-poverty-schools-n129726>.

130. *Id.*

131. See *id.* (“[Technology is] often more effective if devices are supporting student learning, ‘rather than acting as a tool for delivering content.’”).

132. See, e.g., Karen L. Murphy et al. *Meaningful Connections: Using Technology in Primary Classrooms*, BEYOND THE J. NAT'L ASS'N FOR EDUC. YOUNG CHILDREN 2 (Nov. 2003), <https://www.naeyc.org/files/yc/file/200311/TechInPrimaryClassrooms.pdf> (“Technology can be a particularly effective tool for English language learners and can enhance the participation of children with disabilities.”).

133. 20 U.S.C. § 1400(e)(5)(H) (2006).

*abilities . . . to work around their disabilities . . .*”<sup>134</sup> A wheelchair, for example, facilitates mobility for a student otherwise unable to achieve mobile independence.<sup>135</sup> Such devices encourage self-reliance and independence.<sup>136</sup>

As technology evolves, individuals with disabilities benefit from new innovations intended to remediate many daily obstacles.<sup>137</sup> For instance, an individual with visual and motor impairments may not be able to visually read the words in a textbook, or have enough hand mobility to utilize braille, and previously may have required a personal classroom aid in order to participate in reading coursework. With the advent of new technical tools, the same individual can utilize a personal computer monitor, controlled exclusively by breaths, to interpret and read the text of the book aloud.<sup>138</sup> This state-of-the-art machine promotes independence where a student was previously entirely reliant on the assistance of another person.

Assistive technology devices and services include a broad list of tools.<sup>139</sup> Tools range from basic access devices and supports, such as mobility devices, to devices such as the aforementioned computer monitor controlled by breath—devices that may not be requisite for a student to access a classroom, but fundamentally improve the student’s quality of life and ability to achieve independence.<sup>140</sup> Devices that encourage a student’s independent access to all educational components of the classroom with minimal interference from their disability align with federal regulations outlined in IDEA: to “ensure the effectiveness of efforts to educate students with disabilities.”<sup>141</sup> The devices and supports enable a student to attain the academic skills necessary to prepare for future education and employment<sup>142</sup> while also encouraging development of the life skills necessary to live and work independently within their communities.<sup>143</sup>

Assistive devices and services for students with disabilities can address areas of need outside of the standard curriculum, including social skill development.<sup>144</sup> A common weakness in social development for individuals

134. *Assistive Technology for Kids with LD: An Overview*, GREAT!SCHOOLS, <http://www.greatschools.org/special-education/assistive-technology/702-assistive-technology-for-kids-with-learning-disabilities-an-overview.gs> (last modified Feb. 2010).

135. *Assistive Technology: Devices Products & Information*, DISABLED WORLD, <http://www.disabled-world.com/assistivedevices/> (last visited Mar. 7, 2016).

136. GREAT!SCHOOLS, *supra* note 134.

137. See, e.g., Sheryl Burgstahler, *Working Together: People with Disabilities and Computer Technology*, DISABILITIES, OPPORTUNITY, INTERNETWORKING, AND TECH. (2012) (“People with disabilities meet barriers of all types. However, technology is helping to lower many of these barriers.”).

138. See *id.* (“For those with more severe mobility impairments keyboard emulation is available, including scanning . . . . In scanning input, lights or cursors scan letters and symbols displayed on computer screens or external devices. To make selections, individuals use switches activated by movement of the head, finger, foot, breath, etc.”).

139. *What are Some Types of Assistive Devices & How Are They Used?*, *supra* note 80.

140. *Id.*

141. 20 U.S.C. § 1400(d)(4).

142. 20 U.S.C. at § 1400(d)(1)(A).

143. *Assistive Technology*, DISABILITIES, OPPORTUNITY, INTERNETWORKING, AND TECH., <http://www.washington.edu/doi/assistive-technology> (last visited Mar. 7, 2016).

144. See Katie Ash, *Assistive-Tech Connections*, EDUC. WEEK (Oct. 14, 2009), <http://www.edweek.org/dd/articles/2009/10/21/01autisticttech.h03.html> (“[S]tudents [with autism] need help with social skills.”).

with disabilities is understanding the implied contextual background in social situations.<sup>145</sup> Examples of innovative solutions to encourage development of this skill include an iPad application that focuses on developing communication skills, or an augmentation device intended to assist with verbal communication.<sup>146</sup> Such devices promote social development, in addition to full educational integration.<sup>147</sup> These innovative tools teach students how to communicate with peers without the assistance of an aide or translator, a vital skill both in and out of the classroom.<sup>148</sup>

Every individual with a disability has different needs, abilities, and goals.<sup>149</sup> Disability rights advocates promote environments in which individuals with disabilities can develop the requisite skills to live their most independent, self-directed lives.<sup>150</sup> This message is reflected in the provision of assistive tools as early as preschool. Living or working independently does not require the acquisition of just a single skill; it is the combination of academic skills, understanding social interactions, and the ability to physically move without regular assistance.<sup>151</sup> Providing assistive technology services that promote the development of a full range of skills as early as possible enables students to develop independent living and decision-making skills.

Utilizing innovative assistive technology devices and services has long-term benefits in all aspects of students with disabilities' lives.<sup>152</sup> However, students with disabilities are not the lone beneficiaries of incorporating assistive technology devices into the classroom. The National Institute for Urban School Improvement found that the tools used to assist students with disabilities in the classroom benefit *all* students.<sup>153</sup> Every child, regardless of their [dis]abilities, has a different set of learning needs.<sup>154</sup> Consequently, the increase in academic supports in the classroom intended for students with

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145. Lisabeth Escobedo et al., *MOSOCO: A Mobile Assistive Tool to Support Children with Autism Practicing Social Skills in Real-Life Situations*, ACM (May 5, 2012), [http://www.gillianhayes.com/wp-content/uploads/2012/08/C29\\_chi2012\\_SocialCompass\\_cameraReady-v2.pdf](http://www.gillianhayes.com/wp-content/uploads/2012/08/C29_chi2012_SocialCompass_cameraReady-v2.pdf).

146. Meris Stansbury, *New Assistive Technology Research Focuses on iPad, Communication Skills*, ESCHOOL NEWS (May 31, 2010), <http://www.eschoolnews.com/2010/05/31/new-assistive-technology-research-focuses-on-ipad-communication-skills/>.

147. *Id.*

148. *Id.* (“We believe that being able to communicate with peers and with others, not only in a classroom, but on a much larger scale, is becoming increasingly important to students and younger generations—and the technology and interest in the field is reflecting this.”).

149. *About Independent Living*, NAT'L COUNCIL ON INDEP. LIVING, <http://www.ncil.org/about/aboutil/> (last visited Mar. 7, 2016).

150. *Id.* (“Independent Living philosophy emphasizes consumer control, the idea that people with disabilities are the best experts on their own needs, having crucial and valuable perspective to contribute and deserving of equal opportunity to decide how to live, work, and take part in their communities, particularly in reference to services that powerfully affect their day-to-day lives and access to independence.”).

151. *IL Skills Training*, N. W. VA. CTR. FOR INDEP. LIVING <http://nwvcil.org/il-skills-training/> (last visited Mar. 7, 2016) (“Independent living skills are those skills necessary to live as independently as possible . . . . Such skills may include but are not limited to: housekeeping, cooking, time management, shopping, laundry, and budgeting.”).

152. *Highlights of Tech Act Project Accomplishments*, ASS'N ASSISTIVE TECH. ACT PROGRAMS, <http://www.ataporg.org/highlights.html> (last visited Mar. 7, 2016).

153. *Together We Learn Better: Inclusive Schools Benefit All Children*, INCLUSIVE SCH. NETWORK (June 10, 2015), <http://inclusiveschools.org/together-we-learn-better-inclusive-schools-benefit-all-children/> [hereinafter *Together We Learn Better*].

154. *Id.*

disabilities allows every student in the room to learn at their own capacity through easy access to additional, directed academic support and differentiated instruction.<sup>155</sup> Further, public education is intended to prepare students both academically and socially for life post-graduation.<sup>156</sup> The inclusion of students with disabilities, and their associated academic supports, in the classroom promotes the development of empathy for diverse backgrounds and needs for all students.<sup>157</sup> Access to innovative assistive technology tools in educational settings is a necessity for students with disabilities, but notably, it is also a significant academic and social benefit to every student in the classroom.<sup>158</sup>

### C. *High-Poverty Classrooms Display the Failings of Current Regulations*

The U.S. Department of Education found that students in high-poverty communities attend lower funded schools than students living in lower poverty communities.<sup>159</sup> Due to the high costs of technology, and innovation requiring regular updates to old devices, funding disparities across public school districts is particularly noticeable when examining technology access.<sup>160</sup> “Fewer than 20 percent of teachers say their school’s Internet connection meets their teaching needs . . .”<sup>161</sup> and the issue affects much more basic needs than Internet access.<sup>162</sup> The “digital divide” refers to the inequities in technical resources across low- and high-income community schools.<sup>163</sup> The phrase initially referred to whether a classroom was outfitted with computers and Internet, but now includes software and “WiFi dependent devices such as iPads.”<sup>164</sup>

IDEA’s purpose statement enumerates that enactment occurred “to ensure that all children with disabilities have available to them a free appropriate public education” designed to “prepare them for further education, employment, and independent living.”<sup>165</sup> The intent is to ensure equity of

155. *Id.*

156. *About ED: Overview and Mission Statement*, U.S. DEP’T EDUC., <http://www2.ed.gov/about/landing.jhtml> (last visited Mar. 7, 2016) (“ED’s mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.”).

157. *Together We Learn Better*, *supra* note 153.

158. *Id.*

159. See Press Release, *supra* note 104 (“The analysis of new data on 2008-09 school-level expenditures shows that many high-poverty schools receive less than their fair share of state and local funding, leaving students in high-poverty schools with fewer resources than schools attended by their wealthier peers.”).

160. See Sarah Garland, *Why It’s So Hard to Close the Digital Divide in High-Poverty Schools*, NBC NEWS (June 17, 2014, 8:33 AM), <http://www.nbcnews.com/feature/in-plain-sight/why-its-so-hard-close-digital-divide-high-poverty-schools-n129726> (describing how it’s challenging to keep up with technical advancements in low income schools because of the rapid pace of development, and number of components that need to be constantly updated).

161. *Id.*

162. Nick Pandolfo, *As Some Schools Plunge into Technology, Poor Schools Are Left Behind*, HECHINGER REP. (Jan. 24, 2012), <http://hechingerreport.org/as-some-schools-plunge-into-technology-poor-schools-are-left-behind/>.

163. *Id.* (discussing the “digital divide” between students in high and low-income schools, and how a lack of access to technology is resulting in a deficit for children in poor schools).

164. *Id.*

165. 20 U.S.C. § 1400(d)(1)(A).

resources and support for all students in the public school system.<sup>166</sup> The Act, however, fails to take into account barriers to access.<sup>167</sup> Notably, it fails to specify the methods of funding allocation that will ensure its purpose is carried out appropriately, particularly in high-poverty schools.<sup>168</sup> This omission has resulted in profound disparities in implementation, resulting in differences in assistive tools in the classroom across communities.<sup>169</sup> Despite its mission, IDEA alone does not ensure equitable support for students with disabilities in high-poverty schools.<sup>170</sup>

Part II of this Note discussed the method of identifying high-poverty schools, and concluded that students attending such schools are most likely to be members of low-income families.<sup>171</sup> Consequently, it is unlikely that students with disabilities attending high-poverty schools have the ability to independently purchase the most innovative assistive technology tools. The federal government has attempted to remedy this funding gap, and has established several methods by which a low-income individual with a disability can request funding for an assistive technology device.<sup>172</sup> These methods include Medicaid, Social Security Disability Insurance (SSDI), grant funding, or greater state requests to fund programming.<sup>173</sup> The funding programs are beneficial to many individuals, but still allow for systemic flaws.

In order to request a device through Medicaid or SSDI, an individual must obtain a prescription, written by a doctor, indicating that the device is medically necessary.<sup>174</sup> Funding and allocations “vary according to decisions made by individual states . . . availability of funds, and individualized assessments of need and potential.”<sup>175</sup> Given the scarcity of funding, allocations are made in order of priority.<sup>176</sup> For example, an individual in need

166. See 20 U.S.C. § 1400(d) (“The purposes of this chapter are—to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living.”).

167. See *id.* (refraining from a discussion of the specifics of resource allocation to schools).

168. *Id.*

169. *About Independent Living*, NAT’L COUNCIL ON INDEP. LIVING, <http://www.ncil.org/about/aboutil/> (last visited Mar. 7, 2016).

170. See Donna L. Terman & Richard E. Behrman, *Financing Schools: Analysis and Recommendation*, 7 FUTURE OF CHILDREN: FIN. SCH. 4, 9 (1997) (“Some experts have proposed that efficiency would be improved by requiring equal funding for each school within a district and allowing each school greater leeway in allocating its budget, including personnel decisions.”); See also Claire Raj, *The Gap Between Rights and Reality: The Intersection of Language, Disability, and Educational Opportunity*, 87 TEMP. L. REV. 283 (2015) (discussing IDEA’s inadequacy in dealing with English Language Learners’ needs).

171. This inference is based on the premise that the majority of students attend an assigned public school, rather than a public school of their choosing. Assigned public schools normally occur by neighborhood designation. *Fast Facts: Public School Choice Programs*, NAT’L CTR. FOR EDUC. STAT., <http://nces.ed.gov/fastfacts/display.asp> (last visited Mar. 7, 2016).

172. *ATIA Funding Resources Guide*, ASSISTIVE TECH. INDUS. ASS’N, <http://www.atia.org/i4a/pages/index.cfm> (last visited Mar. 7, 2016).

173. *Id.*

174. See, e.g., *What is Assistive Technology? How is it Funded?*, ASSISTIVE TECH. INDUS. ASS’N, <http://www.atia.org/i4a/pages/index.cfm?pageid=3859> (last visited Mar. 7, 2016).

175. *Family Information Guide to Assistive Technology*, U.S. DEP’T EDUC., [https://www.osepideasthatwork.org/parentkit/37\\_3\\_Funding.asp](https://www.osepideasthatwork.org/parentkit/37_3_Funding.asp) (last visited Mar. 7, 2016).

176. See generally Eric Pianin, *Social Security Disability Funding Fix Hits Brick Wall*, FISCAL TIMES (Feb. 12, 2015), <http://www.thefiscaltimes.com/2015/02/12/Social-Security-Disability-Funding-Fix-Hits->

of a wheelchair for mobility, where there is no alternative tool to allow mobility for the individual, is more likely to be deemed “medically needy” and receive financial support than a student with cerebral palsy requesting a computer activated by breath that will alleviate the student’s reliance on an aid. Even before this preliminary consideration for funding, however, an individual must successfully complete the application process, a barrier to access on its own,<sup>177</sup> as it is both lengthy and complicated.<sup>178</sup>

Federal disability legislation contains inadequate language on equitable funding schematics. The Assistive Technology Act of 2004 states that the Act is intended to “increase the ability of individuals with disabilities . . . to secure and maintain possession of assistive technology devices as such individuals make the transition between services offered by educational or human service agencies or between settings of daily living.”<sup>179</sup> Notably, the Act does not mention how a person qualifies to receive assistive technology.<sup>180</sup> Federal and state agencies have interpreted the language as requiring only the minimum assistive technology necessary to allow access.<sup>181</sup> This results in a spectrum of assistive technology devices and services that low-income families cannot independently afford. Families are forced to trust the public education system to ensure all students receive the most appropriate, up-to-date, assistive technology tools to promote learning and growth during school.

Unfortunately, akin to the Assistive Technology Act, IDEA only guarantees that every student receives an education consisting of “access to specialized instruction and related” services.<sup>182</sup> It is not required that any student receives *all* the tools necessary to reach their full learning or independence potential.<sup>183</sup> A student is only guaranteed the minimum

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Brick-Wall (discussing SSDI funding scarcity concerns); *The Status of the Social Security Disability Insurance Trust Fund: Hearing Before the S. Comm. on the Budget*, 114th Cong. (2015) (statement of Carolyn W. Colvin, Comm’r of the Soc. Sec. Admin.) (explaining that the SSA uses “sophisticated predictive models to ensure that [it] prioritize[s] reviewing cases where beneficiaries are more likely to have medically improved and are capable of working, which may mean that they are no longer eligible to receive DI or SSI benefits.”).

177. See generally *Education and Socioeconomic Status*, AM. PSYCHOL. ASS’N, <http://www.apa.org/pi/ses/resources/publications/factsheet-education.aspx> (last visited Mar. 7, 2016) (discussing socioeconomic status correlations with low academic achievement, literacy, and ability to devote resources to academic development which by extension makes longer, complex application forms more difficult for low income families).

178. See generally *Assistive Technology Funding Tips*, UNITED CEREBRAL PALSY, <http://ucp.org/resources/assistive-technology/funding-tips/> (last visited Mar. 7, 2016, 1:36 PM) (explaining the process of procuring federal funding for assistive technology services and devices, and related tips when for individuals going through the process).

179. Assistive Technology Act of 2004, 29 U.S.C. § 3001(b)(1)(B) (2006).

180. See Assistive Technology Act of 2004, 29 U.S.C. § 3001 (2006) (abstaining from stating specific instances in which an individual may be awarded federal funds to obtain an assistive technology device or service).

181. See generally *Legal Mandates for Assistive Technology*, GA. DEP’T EDUC., <http://www.gpat.org/Georgia-Project-for-Assistive-Technology/Pages/Legal-Mandates-for-Assistive-Technology.aspx> (last visited Mar. 7, 2016) (describing Georgia’s approach to Assistive Technology vis-à-vis Federal legislation and how the State provides for the technology).

182. See Ballard, *supra* note 86, at 56 (articulating the scope of IDEA and its operation for special education needs).

183. See *id.* (illustrating the absence of a federal requirement to provide every tool available on the market for a student’s enrichment).

appropriate assistance to reach yearly academic goals.<sup>184</sup> Thus, assistive technology that enables learning or development above the minimum requirement of accessing a classroom is not required to be included in a school's budget, and is not a component of federal funding schematics.<sup>185</sup>

Since education is not a fundamental right, educational financing plans are not overseen by the federal government and are instead left to state governments.<sup>186</sup> Most states utilize property taxes to fund the majority of educational expenditures.<sup>187</sup> This results in a fundamentally unfair system, where elementary and secondary public schools that benefit from high neighborhood property taxes have large operating budgets, while high-poverty schools, located in low-income communities with lower property taxes, have comparably tiny operating budgets.<sup>188</sup> The effect of these funding schemes in high-poverty schools is in direct conflict with the goals of disability rights advocates.<sup>189</sup> While high-income schools may have the budget to provide assistive technology tools to assist students with development of skills that aren't deemed "medically necessary" (e.g. social skill development), high-poverty schools struggle to meet even the most basic student needs.<sup>190</sup> Students with disabilities in high-poverty schools are at an economic, academic, and social disadvantage compared to their wealthier peers,<sup>191</sup> and are suffering the worst repercussions of this extreme digital divide.

#### IV. RECOMMENDATION

In order to craft an adequate recommendation that may begin to rectify the harm caused to students with disabilities in high-poverty schools seeking assistive technology, it is paramount to first assess the already existing processes and identify current barriers to access. This analysis has identified three factors that bar students in high-poverty schools from accessing the same resources as their higher income peers: (1) a low family income,<sup>192</sup> (2) inequities in school funding,<sup>193</sup> and (3) an inability to acquire assistive technology through an outside funding source, such as Medicaid or SSDI.<sup>194</sup>

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184. *Id.*

185. *Id.*

186. *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1, 18 (1973).

187. KENYON, *supra* note 8 (“[N]early half of all property tax revenue [is] used for public elementary and secondary education.”).

188. *Id.*

189. *See About Independent Living*, NAT’L COUNCIL ON INDEP. LIVING, <http://www.ncil.org/about/aboutil/> (last visited Mar. 7, 2016) (discussing the overall goals of disability rights advocates).

190. *See* BRUCE D. BAKER, AMERICA’S MOST FINANCIALLY DISADVANTAGED SCHOOL DISTRICTS AND HOW THEY GOT THAT WAY: HOW STATE AND LOCAL GOVERNANCE CAUSES SCHOOL FUNDING DISPARITIES 6 (Ctr. for Am. Progress, July 2014) (articulating the funding challenges wrought by local governance).

191. *See generally* Baker, *supra* note 7 (discussing the general consequence of unequal school funding across districts).

192. Press Release, *supra* note 104 (“A new report from the U.S. Department of Education documents that schools serving low-income students are being shortchanged . . .”).

193. *Id.*

194. Mark Green et al., *Addressing the Challenges Facing SSA’s Disability Programs*, 66 SOC. SEC. BULL. 29 (2005/2006) (“Applying for disability benefits can be a difficult experience for individuals with disabilities, not only because of the complexities of the program but also because of their disabilities.”).

Family income serves as a vital resource for high-income students. Higher income families can purchase the most current technology, and where there are gaps in federal and state social services, higher income families can step in as a back-up funding source. Identifying a solution to poverty is beyond the scope of this Note, however, and this analysis proceeds under the assumption that the students most affected by this analysis are members of low-income families.

The national school funding schematics structure is the second factor that most affects students with disabilities seeking assistive technology in high-poverty schools. The majority of states currently operate under clauses in their state constitutions that enumerate the right to an education for all citizens.<sup>195</sup> Unfortunately, however, the *Rodriguez* holding is still good law, and enumerates that: (1) the right to an education is not a fundamental right in the United States,<sup>196</sup> and (2) that oversight of the public school system is the responsibility of state and local governments.<sup>197</sup> State and local governments have created both oversight and financing schemes to support public education,<sup>198</sup> but the rampant funding inequities across, and even within, states demonstrates that the public education system is still failing to meet its obligations to all students.

Legislation enacted at both the federal and state levels has demonstrated a progressive, and admirable, national commitment to education.<sup>199</sup> For example, nearly every state has established requirements that all children must attend school.<sup>200</sup> That said, the funding system enacted by most states has proven disastrous for students in high-poverty communities, and consequently, high-poverty classrooms.<sup>201</sup> Most educational funding structures currently rely upon local property taxes to fund community schools.<sup>202</sup> If median community incomes were uniform across the country, this scheme would equitably distribute funding to every school.<sup>203</sup> Unfortunately, there is severe disparity

195. See Salerno, *supra* note 17, at 527–30 (discussing how at least twenty-nine state courts have ensured access to education for their citizens through broad or explicit education provisions in their constitutions, or broad interpretations of education clauses through state court decisions).

196. See *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1, 18 (1973) (holding that education is not a fundamental right under the Fourteenth Amendment, and therefore is not subject to a strict scrutiny test of constitutionality).

197. *Id.*

198. See Press Release, *supra* note 104 (discussing state and local efforts to oversee public education funding); Salerno, *supra* note 17, at 527–30 (2007) (discussing how at least twenty-nine state courts have ensured access to education for their citizens through broad or explicit education provisions in their constitutions, or broad interpretations of education clauses through state court decisions).

199. See Elementary and Secondary Education Act (ESEA), 20 U.S.C. § 6301 (2006) (“The purpose of this subchapter is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education.”); Individuals with Disabilities Education Act 20 U.S.C. § 1412 (2006) (“A free appropriate public education is available to all children with disabilities residing in the State between the ages of 3 and 21, inclusive, including children with disabilities who have been suspended or expelled from school.”).

200. See Salerno, *supra* note 17, at 527–30 (2007) (discussing how at least twenty-nine state courts have ensured access to education for their citizens through broad or explicit education provisions in their constitutions, or broad interpretations of education clauses through state court decisions).

201. See Bruce Baker, Danielle Farrie & David Sciarra, *Is School Funding Fair? A National Report Card*, EDUC. L. CTR. (Spring 2015), <http://www.schoolfundingfairness.org/> (discussing findings of disparity in school funding across various states, based upon different funding structures in each state).

202. Press Release, *supra* note 104.

203. KENYON, *supra* note 8 (“[N]early half of all property tax revenue [is] used for public elementary

in median community income levels across the U.S., and the funding structure is, as a result, inherently inequitable.<sup>204</sup> Such funding disparities harm all students in high-poverty schools, but have a particularly negative impact on students with disabilities.

A recommendation that may assist in alleviating the disparities in education is for the federal government to consider education a fundamental right under the Equal Protection Clause of the Fourteenth Amendment.<sup>205</sup> Such a classification would ensure that no student can be deprived of their right to an education in the United States, and would permit the federal government to implement a uniform national educational funding structure.<sup>206</sup> This would require the Supreme Court of the United States to consider a case challenging *Rodriguez*'s holding: an inherently difficult task, as it would require the establishment of a case, identification of parties, attorneys would have to pursue the case through an appeals process to the Supreme Court, and the plaintiff's arguments would have to be clear enough that the Court felt comfortable setting precedent with the specific set of facts. Under ideal circumstances, such a process would take years, at least. Further, given the numerous times that a case asking for such a remedy has been considered by the Court with no success, such a recommendation is, at best, far-fetched.<sup>207</sup>

More significantly, any broad proposal of this nature ignores the inherent complexity of the issue at hand. This Note examines how the disparity in funding across schools affects the provision of assistive technology for students with disabilities. Federal oversight alone is insufficient to address such a nuanced issue. Much like IDEA's provision that every student is unique and no "one-size-fits-all" solution or plan can address every child's educational needs,<sup>208</sup> a plan to overhaul the public education system with changes implemented identically in every community, for every student, would be shortsighted. No two communities or students are identical, particularly those of extreme differing median incomes. Given the improbability of the implementation of an idyllic system of public education in which every school receives equivalent funding and every child is provided the best assistive technology possible, smaller changes are more realistic.

The third factor affecting access to assistive technology for students with disabilities in high-poverty schools is the students' inability to acquire an

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and secondary education.").

204. *Id.* See Baker & Corcoran, *supra* note 9 ("The sad reality is that gross funding inequities continue to exist in this country, and too often the schools serving students with the greatest needs receive the fewest resources.").

205. Wilkins, *supra* note 22.

206. *Id.*

207. See, e.g., *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1, 30 (1973) (holding that education is not a fundamental right under the Equal Protection Clause); *Plyler v. Doe*, 457 U.S. 202, 206 (1982) (finding a Texas statute prohibiting state funds from being allocated to school districts unconstitutional, but neglecting to speak on the issue of whether education itself is a fundamental right).

208. See 20 U.S.C. § 1400(d) (2006) ("The purposes of this chapter are—to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living.").

assistive device through outside funding sources, such as Medicaid or SSDI. Medicaid and SSDI are currently the main secondary funding sources of assistive technology devices and tools for qualifying low-income individuals with disabilities.<sup>209</sup> This assistance, however, is provided on the basis of “medical need,” a threshold that is difficult to meet.<sup>210</sup> This Note recommends that in the short-term, Medicaid and SSDI reassess their evaluation processes for determining how to allocate assistive technology devices.

Medicaid and SSDI should broaden their provision of assistive technology tools to include technology that is “medically,” “educationally,” and/or “socially” needed. The current definition, which requires a medical need,<sup>211</sup> serves as a significant barrier for many individuals with disabilities. Individuals with disabilities that impair social and educational development, but not medical or physical development, are unable to request adaptive assistive technology supports through Medicaid or SSDI.<sup>212</sup> For example, under current program requirements, the previously discussed student with cerebral palsy that requests a computer monitor controlled by breath is unlikely to receive the device from Medicaid or SSDI. After submission of a funding request, the student will likely be informed that a one-on-one classroom aid can provide the same assistance as the requested device, rendering the device not medically necessary for access to the classroom. While this response is facially true, what this request process fails to consider is the value of the independence gained through the use of such a device. These programs currently bar a significant portion of the population from accessing technology that could assist a significant number of students in key areas of development. It is urgently necessary for students with disabilities to have access to all assistive technology that promotes the development of skills necessary to lead self-directed, independent lives.

The largest barrier to making such systemic change in programs such as Medicaid and SSDI is, of course, funding. SSDI is funded by a payroll tax, and is what the government terms “an earned right.”<sup>213</sup> Individuals must have worked, or their parent or guardian must have worked, for a certain period of time in order to be eligible for these benefits.<sup>214</sup> Alternatively, Medicaid is funded entirely by a combination of state and federal funds.<sup>215</sup> In both cases, the limited funding of the program makes granting every request for assistive technology an impossibility. This issue is one of a much broader scope. While this Note cannot adequately examine the federal budget, this analysis clearly demonstrates the enormous need present in funding federal and state social service initiatives. It is time for an examination of funding priorities, and a

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209. See, e.g., *What is Assistive Technology? How is it Funded?*, ASSISTIVE TECH. INDUS. ASS'N, <http://www.atia.org/i4a/pages/index.cfm> (last visited Mar. 7, 2016) (discussing various assistive technology funding sources available to individuals with disabilities).

210. *Id.*

211. *Id.*

212. *Id.*

213. *Overview and Background*, SOC. SEC. OFF. POL'Y, [https://www.ssa.gov/policy/docs/chartbooks/disability\\_trends/overview.html](https://www.ssa.gov/policy/docs/chartbooks/disability_trends/overview.html), (last visited Mar. 7, 2016).

214. *Id.*

215. *Id.*

true prioritization of the well being of all individuals.

“Education is the key to America’s economic growth and prosperity and to our ability to compete in the global economy.”<sup>216</sup> In accordance with this sentiment, expressed by the Department of Education, all public schools should have access to the assistive technology tools that best facilitate learning for *every* student, regardless of their family’s total income. The U.S. government has already noted, through the implementation of the No Child Left Behind Act in 2001, that they believe in pursuing a goal of ensuring “that all children have a fair, equal, and significant opportunity to obtain a high-quality education.”<sup>217</sup> This may be possible if the provision of technology ensuring equal access to the educational environment is equitable. It is time for meaningful national change towards accomplishing this goal.

## V. CONCLUSION

The Supreme Court has repeatedly upheld the constitutionality of allowing state and local governments complete discretion in funding decisions for public education in the United States.<sup>218</sup> As a result, the majority of funding for public elementary and secondary school systems across the nation is collected through property tax revenue.<sup>219</sup> This structure is dictated entirely by community income level, and consequently creates a fundamentally inequitable structure with extreme variances in school funding based on school location.<sup>220</sup> Ideally, this structure should be abolished in favor of a more equitable, uniform funding structure that provides adequate resources to all students. This systemic reform is an unlikely event, however, and in the short-term, a more realistic goal is to restructure the way in which secondary aid programs, such as Medicaid and SSDI, determine how to provide assistive technology. These programs must start ensuring that students with disabilities can access all assistive technology that assists with medical, educational, and social access in a classroom. Providing these tools to all students with disabilities enables academic, social, physical, and emotional development, and increases the potential for students to achieve independence and full integration into their communities once they leave school. It is our communal and moral obligation to ensure that all children have the opportunity to achieve their potential through education, and access to innovative assistive technology is a key component of allowing all children, regardless of their [dis]abilities, to fulfill their dreams.

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216. *Transforming American Education: Learning Powered by Technology*, DEP’T EDUC.: OFFICE EDUC. TECH. (2010), <http://www.ed.gov/sites/default/files/netp2010.pdf>.

217. No Child Left Behind Act of 2001, PL 107-110, 115 Stat. 1425 (2002).

218. *See, e.g.*, *San Antonio Indep. Sch. Dist. v. Rodriguez*, 411 U.S. 1, 69 (1973) (holding that a Texas law funding public schools based upon property taxes is constitutional).

219. Press Release, *supra* note 104.

220. *Baker & Corcoran, supra* note 9 (“[M]ost modern school funding formulas aim, at least in part, to decrease inequalities in school funding. Yet the significant differences in per-pupil spending . . . show that in many states the funding systems fail to achieve this goal.”).