

# United States

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## Introduction

### Overview of Education System

Public education is decentralized in the United States, with each state governing and operating its own public school system. Thus, states direct (or delegate to local authorities) all aspects of primary and secondary education, including administrative and budget responsibilities. Chief state school officers support state boards of education by managing and operating state education agencies (SEAs), which are organizations responsible for implementing state education policies, distributing federal and state funds, and supporting local education agencies (LEAs).<sup>a</sup>

Although the balance of state versus local decision making depends on each state's laws and regulations, elected or appointed school boards and LEAs typically govern and operate the elementary and secondary schools in their communities. In the 2018–2019 academic year, there were approximately 13,450 LEAs serving approximately 48 million U.S. elementary and secondary school students.<sup>1</sup>

In 1965, U.S. Congress passed the Elementary and Secondary Education Act (ESEA), and in 2002 ESEA was reauthorized as the No Child Left Behind (NCLB) Act, which added accountability provisions and other conditions to receiving federal financial assistance.<sup>2</sup> NCLB required states to administer standardized tests in reading and mathematics in Grades 3 to 8 and in one grade in high school, and testing results carried high stakes for schools and teachers.

In December 2015, Congress reauthorized ESEA as the Every Student Succeeds Act (ESSA), retaining the assessment mandates of NCLB but returning much of the responsibility for assessing student performance to the states. ESSA also requires that states factor into their calculation of school performance at least one other indicator of outcomes beyond student performance (e.g.,

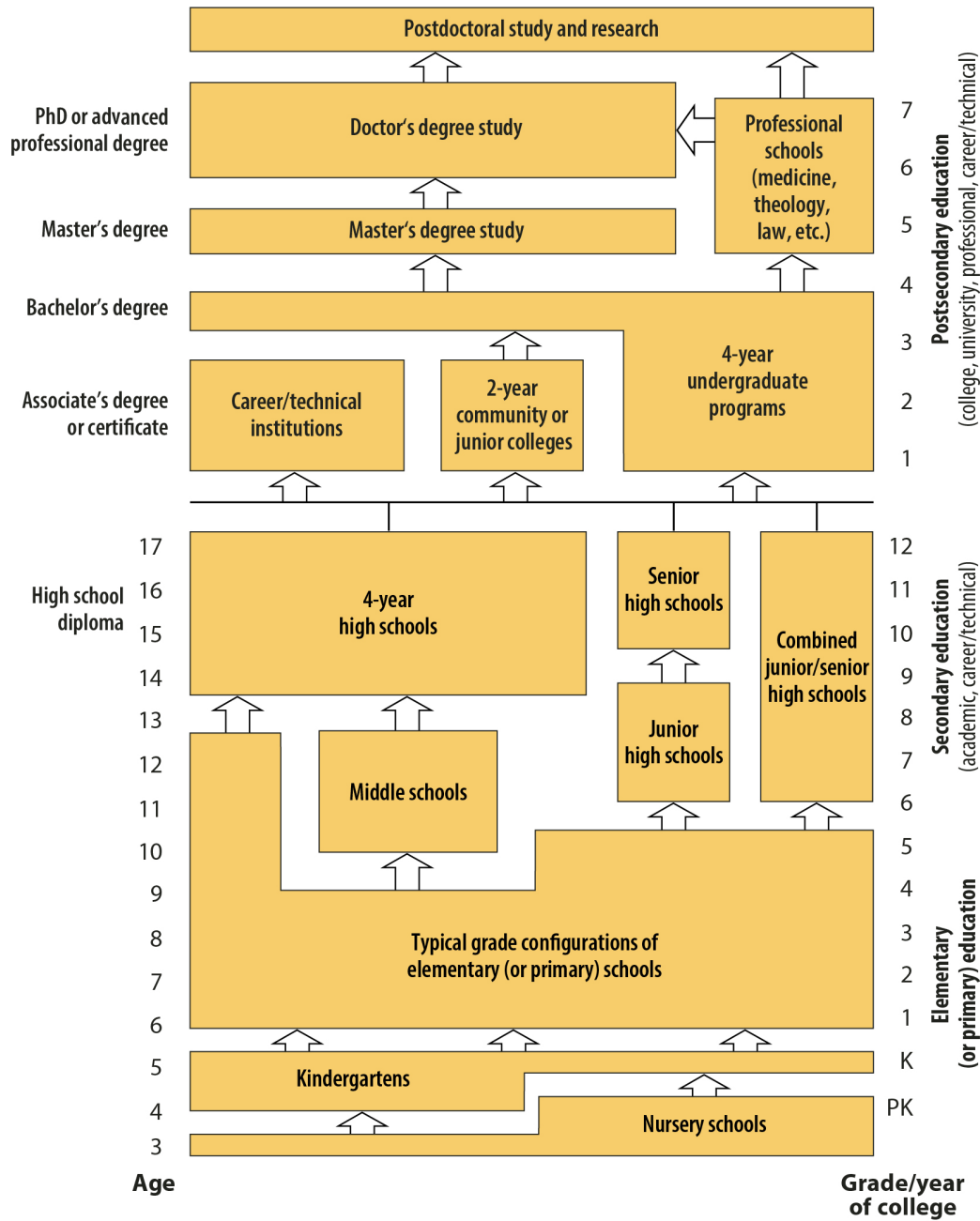
<sup>a</sup> Of students attending public and private elementary and secondary schools in the fall of 2018, approximately 90 percent attended public schools and approximately 10 percent attended private schools (see [https://nces.ed.gov/programs/digest/d20/tables/dt20\\_105.20.asp](https://nces.ed.gov/programs/digest/d20/tables/dt20_105.20.asp) for more information). Of students attending public schools in 2018, 7 percent attended public charter schools. Public charter schools are publicly funded and operate with freedom from many of the local and state regulations that apply to traditional public schools (see <https://nces.ed.gov/fastfacts/display.asp?id=30> for more information). Of students ages 5 to 17 with a grade equivalent of Kindergarten to twelfth grade, approximately 3 percent were homeschooled in 2019 (see [https://nces.ed.gov/programs/digest/d21/tables/dt21\\_206.10.asp?current=yes](https://nces.ed.gov/programs/digest/d21/tables/dt21_206.10.asp?current=yes) for more information). Note that these estimates are from before the COVID-19 pandemic and may change when the COVID-19 pandemic ends.

chronic absenteeism).<sup>3</sup> States have the flexibility to determine the relative importance of each measure in their calculation of school performance and outline their own consequences for schools whose performance is inadequate.

### **Structure of the Education System**

Before the age of 5, children often attend preschool (sometimes called nursery school or pre-Kindergarten). Neither pre-Kindergarten nor Kindergarten is compulsory in the United States as a whole, but 20 states do have a Kindergarten attendance requirement.<sup>4</sup> Each state requires children to begin school between the ages of 5 and 8.<sup>5</sup> School districts organize grades into elementary schools (generally including Kindergarten and Grades 1 to 4, 1 to 5, or 1 to 6, sometimes called primary schools); middle schools (commonly consisting of Grades 5 to 8, 6 to 8, 7 and 8, or 7 to 9, sometimes called intermediate or junior high schools); and high schools (typically comprising Grades 9 to 12 or 10 to 12, sometimes called secondary schools). After graduation from high school, students who want to continue their education may enroll in public or private universities or colleges, community colleges, or vocational or technical schools (see Exhibit 1).

**Exhibit 1: The Structure of Education in the United States<sup>6</sup>**



Note: The grade configurations shown are not the only possible routes of educational attainment. For example, some areas of study permit entering a doctoral program directly out of an undergraduate program, which generally takes four years or more to complete.<sup>7</sup>

## Use and Impact of PIRLS

The results from the 2021 administration of the Progress in International Reading Literacy Study (PIRLS 2021) will supply the United States with a fifth year of data on the performance of U.S. students<sup>b</sup> in reading and literacy. Media and government sites used data from previous administrations of PIRLS to inform discussion of U.S. policy, national and cross-national comparisons of the performance of subgroups in the United States, and general information on reading and literacy. For example, media outlets publicized the results from PIRLS 2016, noting a decrease in students' average reading scores compared with 2011 and highlighting the results of the new ePIRLS assessment, including cross-national comparisons of achievement gaps, such as girls outperforming boys in 11 education systems, including the United States.<sup>8,9</sup>

The use of PIRLS results in the United States can also be tracked through visits to the PIRLS website<sup>c</sup> on the website of the U.S. Department of Education's (ED) National Center for Education Statistics (NCES), the nation's primary resource for U.S. PIRLS information. Traffic to the PIRLS website fluctuates throughout the year and tends to peak when reports are released and during recruitment periods for the study. For example, there were over 8,000 visits in December 2017 after the release of the 2016 national report; in comparison, the PIRLS website averaged more than 2,000 visits per month in 2018.<sup>10</sup> A high level of interest in PIRLS 2021 data is expected from the public and researchers as it is one of the first national reports of reading assessment since the COVID-19 pandemic began.

## The Language/Reading Curriculum in Primary Grades

### Reading Policy

There are no federally mandated national reading policies or national curricula in the United States. States may develop their own language arts standards, adopt or develop their own state tests, and set achievement goals as long as together they provide challenging academic content and achievement standards for English language arts at all grade levels. Standards must also align with entrance requirements for credit-bearing coursework at each state's institutions of higher education and, when necessary, career and technical education standards. The Every Student Succeeds Act (ESSA) includes programs to help states, districts, and schools meet the education needs of all students, regardless of their backgrounds, instructional needs, or living situations (e.g., incarcerated youth or children of migrant workers). Schools serving economically disadvantaged students receive support from Title I, within ESSA, which funds state and district programs aimed

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<sup>b</sup> Due to COVID-19 impacts on school districts and schools, the U.S. administration of PIRLS 2021 was delayed from spring 2021 to fall 2021, which resulted in assessing fifth grade students rather than fourth grade students.

<sup>c</sup> The webpages can be found at <https://nces.ed.gov/surveys/pirls/>

at improving students' achievement in core academic subjects, including reading, and narrowing achievement gaps.<sup>11</sup>

### State Standards for English Language Arts

In 2009, through a state-led effort sponsored by the National Governors Association and the Council of Chief State School Officers, many administrators, teachers, and researchers collaborated on a common set of English language arts (ELA) standards for Kindergarten through twelfth grade (K–12).<sup>12</sup> These Common Core State Standards (CCSS) provide a clear and consistent framework to prepare children for postsecondary education and the workforce. They consist of broad achievement goals and grade-band-specific K–12 anchor standards in reading, writing, speaking, and listening. Their purpose is to guide educators to develop or select curricula to help all students, regardless of their backgrounds, achieve high expectations for English language arts. The CCSS initially were released in 2010, and by 2013, nearly all U.S. states and jurisdictions (i.e., 45 states, the Department of Defense Education Activity, the District of Columbia, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands) were using the CCSS in whole or in part to guide instructional decision making.<sup>13</sup> In the years since 2013, several states and jurisdictions have begun to drop the CCSS altogether and adopt other ELA standards or modify the CCSS in ways ranging from making minor edits and/or clarifications to making numerous substantive changes.<sup>14</sup> Despite this trend, the CCSS's four anchor standards for reading continue to influence curriculum developers nationwide as they determine the expectations for students' literacy learning. A summary of the four anchor standards is as follows:<sup>15</sup>

- Key Ideas and Details—Make logical inferences; cite specific evidence; determine central themes; and analyze how and why key elements interact over the course of a text.
- Craft and Structure—Attend to author's craft and text structure and assess how specific text features shape the content and style of the text.
- Integration of Knowledge and Ideas—Integrate knowledge and ideas and evaluate the content presented in diverse media and formats and the arguments and specific claims in a text; analyze two or more texts to compare themes.
- Range of Reading and Level of Text Complexity—Have diversity in the reading material in terms of text type (literary and informational) and levels of complexity.

Over the past few years, some states have taken steps to implement the “science of reading,” or evidence-based reading instruction to guide early reading instruction as the foundation of students' reading growth. Since 2017, at least 11 states have passed laws that address the “science of reading” through curriculum, teacher education, and requirements for licensure.<sup>16</sup>

### Current Curricular Options

Except where instructional materials are adopted statewide, administrators have many choices for materials to use in Kindergarten to fourth grade, including structured commercial reading

programs, often available in English and Spanish, and less structured literature-based programs built around a collection of grade-appropriate trade books that are progressively “leveled” for difficulty. Many literature-based programs include books depicting students of diverse backgrounds, concerning varied themes, and presenting issues related to equity and inclusion.

In recent years, technology increasingly has been included as a key part of an instructional program or as a supplement to traditional hard copy materials. The use of technology creates a “blended”<sup>17</sup> learning<sup>d</sup> environment that combines students’ independent work on computers or tablets with other instructional groupings and allows teachers to differentiate instruction according to students’ needs and interests.<sup>18</sup> Self-contained computer-based skills instruction is only one feature of a blended learning environment; students also use technology for online research and comprehension.<sup>19</sup> Additionally, digital reading programs are used to provide personalized instruction, allow students to progress at their own pace, and provide real-time assistance and feedback.<sup>20</sup>

Although there is no national database that tracks how technology is used in classrooms in the United States, some national data provide insights on how technology is used for reading instruction. For example, results from the 2019 National Assessment of Educational Progress (NAEP) data collection showed that 28 percent of fourth graders in the United States reported using a computer or digital device for ELA work at least one hour per day.<sup>e</sup> Results from the same survey showed that most fourth grade students used digital devices and materials as a supplement to reading (45 percent for electronic textbooks, 74 percent for educational games, and 75 percent for reading-related websites and apps).<sup>f</sup> Additionally, according to results from PIRLS 2016, 46 percent of fourth grade students in the United States had teachers who asked their students to read digital texts in reading lessons at least weekly.<sup>21</sup>

The format of material read online is typically less fixed and linear than what students experience in books, and readers often have more flexibility in how they engage with texts.<sup>22</sup> They also must master various communication modes (emails, blogs, etc.) to share ideas with their teachers and peers.<sup>23,24</sup> With the increased use of technology for reading and the increased demand for reading on digital platforms, students must learn many digital literacy skills, which are defined by the American Library Association as “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.”<sup>25</sup> Essentially, students who are digitally literate need additional skills to go along with those used for traditional reading in paper formats and ebooks; to learn these skills effectively, they need teacher instruction and guidance.

<sup>d</sup> Blended learning incorporates both face-to-face and online learning opportunities.

<sup>e</sup> Results retrieved from the NAEP Data Explorer using the student variable [R851101](#).

<sup>f</sup> Results retrieved from the NAEP Data Explorer using the teacher variables [T133002](#), [T133007](#), and [T133006](#).

Although no national guidance yet exists regarding computer use in schools, organizations such as the International Society for Technology in Education (ISTE)<sup>g</sup> provide standards for digital literacy and computer use for teachers and students.

## Professional Development Requirements and Programs

Typically, teachers receive professional development (PD), referred to as in-service training, from their local education agency (LEA). In some cases, the state assesses teachers' PD needs and works with LEAs to arrange the delivery of the training. In other instances, the LEA or school principal decides on the content and format of the training, which may include PD activities offered by publishers of reading programs adopted by the LEA. Consequently, the content and rigor of PD often vary substantially across districts and, in some cases, across schools within districts. PD programs are usually one or two days long and are offered (with pay) before the school year begins and/or during the year when students are not in attendance.

According to the 2017 National Assessment of Educational Progress (NAEP) reading assessment, 88 percent of fourth grade public school students had teachers who participated in workshop or training sessions related to the teaching of reading, writing, or literature.<sup>h</sup> From the same study, 55 percent of public school fourth graders attended schools that offered PD activities related to understanding the cognitive process of reading or writing to a moderate or a large extent,<sup>i</sup> and 84 percent attended schools that offered PD activities related to instructional strategies for teaching language arts to a moderate or a large extent.<sup>j</sup>

In 2015, the Every Student Succeeds Act (ESSA) updated the federal definition of professional development to require that activities be sustained, intensive, collaborative, job-embedded, data-driven, and classroom-focused.<sup>26</sup> As of 2020, 20 states required that Kindergarten through third grade teachers receive training and professional development related to literacy instruction.<sup>27</sup>

## Monitoring Student Progress in Reading

There is no single nationally required examination that has consequences for individual students' progression through schooling in the United States. However, the Every Student Succeeds Act (ESSA) requires states to implement annual statewide standardized assessments determined by

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<sup>g</sup> See [www.iste.org](http://www.iste.org) for more information.

<sup>h</sup> Results retrieved from the NAEP Data Explorer using the teacher variable [T083802](#).

<sup>i</sup> Results retrieved from the NAEP Data Explorer using the school variable [C049215](#). Unrounded numbers were used to combine the "moderate" and "to a large extent" categories.

<sup>j</sup> Results retrieved from the NAEP Data Explorer using the school variable [C049204](#). Unrounded numbers were used to combine the "moderate" and "to a large extent" categories.



each state<sup>k,28</sup> to measure students' progress in English language arts (ELA) for all students in Grades 3 to 8 for the purpose of evaluating school performance.

In addition to the mandated statewide assessment, many states administer classroom-based assessments, often selected by LEAs, to screen and monitor students' reading ability throughout the school year. Some LEAs mandate screening and monitoring of students' preparedness to meet the state reading proficiency standard, often requiring the use of standardized measures (e.g., those developed by testing companies or textbook publishers). The responsibility of monitoring individual students' long-term progress generally is shared by students, parents, teachers, and schools.

The National Assessment of Educational Progress (NAEP), a congressionally mandated project, is administered by the U.S. Department of Education to inform the public of what elementary and secondary students in the United States know and can do academically and to monitor their academic progress. It is the largest continuing and nationally representative assessment of reading in the United States. Starting in 2017, NAEP transitioned from paper-based to digital assessments to address the increased role of technology in instruction as well as in state and classroom assessments in schools. The assessment offers benchmarking data at the national and state levels, as well as for some urban districts, but it does not provide results for individual students or schools, and it is not a high-stakes assessment for individual students and schools.

Due to disruptions caused by the COVID-19 pandemic, many of these assessments were either canceled or postponed. See the Response to COVID-19 Pandemic section for details.

## Special Reading Initiatives

The U.S. Department of Education (ED) sponsors national reading initiatives to promote reading and literacy with programs designed and supported by the federal government. The department also supports programs designed by nonprofit organizations using federal funds. All federal funds are distributed through individual state education agencies (SEAs), local education agencies (LEAs), or nonprofit organizations rather than being shared directly with individual schools or as part of a comprehensive national reading program. The primary goals of such programs are to improve reading instruction for all students and close achievement gaps across demographic groups.

The What Works Clearinghouse (WWC), based in ED's Institute of Education Sciences (IES), conducts meta-analytic reviews of rigorous research on reading and literacy topics and publishes results in topic-specific "practice guides." The practice guides summarize and explain evidence-based practices in ways that can help structure professional development or guide instructional

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<sup>k</sup> During the 2018–2019 academic year, two states and the District of Columbia administered assessments developed by the Smarter Balanced Assessment Consortium, and 11 states administered assessments from the Partnership for Assessment of Readiness for College and Careers; the remaining states used peer-reviewed assessments aligned to their own standards.



decision making. IES also publishes reviews of research on the efficacy of individual reading programs; these can help district or school leaders select commercial paper-based and blended learning programs.

In addition, three major federal initiatives gather information about decision making at the state and local levels and the diverse approaches to reading instruction that state and local agencies adopt. The ongoing national evaluation by the Comprehensive Literacy State Development (CLSD) program includes multiple implementation and impact studies, and the Striving Readers Comprehensive Literacy (SRCL) grants enable districts to adopt programs designed to improve teaching and learning in their schools. The Innovative Approaches to Literacy (IAL) grants encourage local educators to develop and implement programs to address the literacy needs of students who historically have been underserved.

Staff at the federally funded Regional Educational Laboratories (RELs) and Comprehensive Centers (CCs), which serve distinct regions of the country, collaborate with state and district educators to help in decision making and to provide professional development and other technical assistance. Through RELs and CCs, guidance on evidence-based practice is disseminated to administrators and teachers.

Nonprofit organizations in the United States also disseminate information about literacy-related topics. Reading Is Fundamental, the largest literacy organization in the United States, provides free books and other literacy resources. Reading Rockets, established with funding from ED, is a national multimedia literacy initiative that shares evidence-based findings on teaching reading and supporting children’s literacy growth.<sup>29</sup>

## Response to COVID-19 Pandemic

### Teaching and Learning During the COVID-19 Pandemic

There was no COVID-19-related decision making for U.S. school closures at the national level. The closing and reopening of schools varied by state, and within some states, districts and schools played a role in the decisions. By March 25, 2020, all U.S. public school buildings were closed, and all but two states (Wyoming and Montana) kept school buildings closed through the end of the 2019–2020 academic year.<sup>30</sup> K–12 students experienced disruptions in face-to-face instruction and had to shift abruptly to remote learning. With schools closed, there was also a disruption in other school supports, such as free or reduced-price meals provided by schools to eligible students. The U.S. Department of Agriculture (USDA) made an adjustment to school meal distribution, stating that “due to the exceptional circumstances of this public health emergency and the need for social distancing, USDA was able to make temporary changes so that meals may be taken home, and parents or guardians may pick [up] meals for their children if the state allows.”<sup>31</sup> In some areas, school buses were converted for use to deliver meals to students.<sup>32</sup>

When instruction suddenly shifted from in person to online, it became apparent that not all students across the country had access to technology and/or broadband internet. Responses to the student background questionnaire for the NAEP 2019 reading assessment showed that although 81 percent of fourth grade public school students had internet access and a computer or tablet at home they could use, 9 percent reported having internet access but no computer/tablet at home, 7 percent reported having a computer/tablet but no internet access, and 3 percent reported having neither a computer/tablet nor internet access.<sup>33,1</sup> An analysis by Common Sense Media and Boston Consulting Group found that before the pandemic, 15 million K–12 students lacked adequate internet connectivity or the devices<sup>m</sup> necessary to participate in remote learning from home.<sup>34</sup> In addition, before the pandemic, about 10 percent of K–12 public school teachers lived in households without adequate internet connections.<sup>35</sup> Schools and districts responded to students’ internet connectivity needs during the pandemic, and by December 2020, approximately 65 percent of adults with children enrolled in school reported that their schools or districts had provided computers or other digital devices.<sup>36</sup>

When the 2020–2021 academic year began, only four states (Arkansas, Florida, Iowa, and Texas) required schools to provide in-person instruction in all or some grades, and the majority of the largest 100 U.S. school districts began the school year with remote-only instruction.<sup>37</sup> As the COVID-19 pandemic continued, the availability of in-person and remote instruction varied across school districts. Some districts used hybrid models, generally understood to involve some combination of in-person and remote instruction. The NAEP 2021 School Survey, for example, defines the hybrid model as “open with both remote/online and in-person instruction.” If hybrid models were offered, students could attend school in person in different durations, from less than 1 day per week to 4 to 5 days per week.<sup>38</sup> Hybrid models varied across schools and sometimes even within classrooms. By May 2021, 98 percent of public school fourth grade students attended schools that offered hybrid or full-time in-person learning, while only 2 percent were offered only remote or online instruction.<sup>39</sup>

Arrangements and resources to support remote learning also varied by school district. While digital materials were made widely available either as a primary component of instruction or to supplement instruction, printed materials were also in use. In a nationwide survey conducted in May 2020, leaders of U.S. school districts reported that 62 percent of K–5 students worked with learning materials made available digitally (e.g., through email, a website, Google Classroom, or Canvas) as a primary component of instruction, while 33 percent worked with learning materials

<sup>1</sup> Results retrieved from the NAEP Data Explorer using the student variable [COMPINT](#).

<sup>m</sup> *Closing the K-12 digital divide in the age of distance learning* (Chandra et al., 2020) defines “adequate internet connection” as “forms of internet connection that are suitable for online learning. Includes DSL, cable, fiber, and satellite; cellular LTE; or cellular hotspot internet where mobile tethering is feasible. Does not include dial-up or cellular-enabled mobile devices.” “Adequate devices” are defined as “devices suitable for online learning. Includes laptops, computers, and tablets. Does not include mobile/cellular phones.” Retrieved from [https://www.common Sense Media.org/sites/default/files/featured-content/files/common\\_sense\\_media\\_report\\_final\\_7\\_1\\_3pm\\_web.pdf](https://www.common Sense Media.org/sites/default/files/featured-content/files/common_sense_media_report_final_7_1_3pm_web.pdf)

made available digitally to supplement instruction. About one-third of K–5 students (34 percent) worked with physical learning materials (e.g., paper packets, worksheets, textbooks) as a primary component of instruction, while 53 percent worked with physical learning materials to supplement instruction. Only 13 percent of K–5 students worked with digital learning activities using external websites (e.g., PBS Learning Media, National Geographic) as a primary component of instruction, while 70 percent of K–5 students worked with digital learning activities using external websites to supplement instruction.<sup>40</sup>

In the same nationwide survey, when asked whether districts provided teachers with professional development on how to differentiate instruction during distance learning after schools were closed due to the pandemic, only 22 percent of U.S. school district leaders reported that their district provided this type of professional development to all teachers, 43 percent reported it was provided to some teachers, and 34 percent reported that it was not provided. One theme that emerged from a qualitative study that included interviews with 57 U.S. public and private school pre-K–12 teachers was that teachers felt a lack of preparation and support for the transition to teaching online.<sup>41</sup> Teachers reported that there was more of a focus on the procurement of hardware, software, and internet access for students than there was on professional development for teachers to learn how to teach online effectively.

The Individuals with Disabilities Education Act (IDEA) of 2004 is federal legislation that requires school districts to provide free and appropriate public education to students with disabilities. School closures due to COVID-19 made it more difficult for districts to comply with IDEA requirements. In a survey conducted with leaders of U.S. school districts in May 2020, approximately three-quarters reported that it was “more or substantially more difficult” for them to provide instructional accommodations that were appropriate for students with disabilities, and 82 percent reported that providing hands-on instructional accommodations and services was “more or substantially more difficult.”<sup>42</sup>

### **Impact of the Pandemic on Student Learning**

There has been no national study to evaluate the impact of the COVID-19 pandemic on student learning. In fact, many state assessments were canceled, and national and international studies of student achievement, including NAEP, were postponed. During the 2020–2021 academic year, at least 12 out of 50 states and the District of Columbia requested waivers of mandated state assessments because of significant disruptions in instruction due to the COVID-19 pandemic.<sup>43</sup> However, as described below, a few research studies (often conducted by assessment or reading program publishers) have compared how students performed in reading assessments administered before the pandemic (i.e., in the 2018–2019 academic year or fall of the 2019–2020 academic year) with how students performed in reading assessments in the first full school year of the pandemic (i.e., in the 2020–2021 academic year). In addition, some results have been published from state assessments that were administered during the 2020–2021 academic year.

A review of publicly available sources that examine impacts of the COVID-19 pandemic on U.S. students conducted by the ED Office for Civil Rights indicates there has been a negative effect on academic growth and a widening of preexisting disparities in access and achievement.<sup>44</sup> In a separate study, researchers analyzed scores of reading assessments designed to monitor growth in the comprehension skills of 3.3 million students (Grades 1 to 8) using a metric for what student growth during the 2020–2021 academic year would have been without the pandemic.<sup>45</sup> Comparing reading performance from the 2019–2020 academic year to fall 2020 and winter 2020–2021, the study found that reading growth was slower than what would be expected in a typical year (i.e., before the pandemic).

Another study of achievement in reading for approximately 5.5 million public school students (Grades 3 to 8) found that, on average, students across most grades made reading gains from the 2018–2019 academic year (the most recent year of data from before the pandemic) to the 2020–2021 academic year. However, the gains were at a lower rate than they were before the pandemic, and students ended the 2020–2021 academic year with lower overall achievement compared to students at the same grade level in a typical year, with larger declines in mathematics than in reading.<sup>46</sup> Another finding from this study is that the declines during spring 2021 in reading achievement were more pronounced for students in Grades 3 to 5 than in Grades 6 to 8.<sup>47</sup>

Some states released results from state assessments they were able to administer in the 2020–2021 academic year. All results should be interpreted with caution as the administration of the tests varied in terms of student participation rates, test makeup and/or length, and setting (i.e., remote or in person) compared to before the pandemic.<sup>48</sup>

- In Massachusetts, where the participation rate for the Massachusetts Comprehensive Assessment System (MCAS) English language arts test was about the same as it was before the pandemic, there was a 6-point decrease in the percentage of students in Grades 3 to 8 who scored “Meeting Expectations” or higher compared to the 2018–2019 academic year.<sup>49</sup>
- In Virginia, nearly 70 percent of students in Grades 3 to 8 who took the Standards of Learning reading assessment passed in the 2020–2021 academic year, compared to 78 percent in the 2018–2019 academic year.<sup>50</sup> However, these comparisons only include students who took the Standards of Learning reading assessment in school buildings, and approximately three-quarters of Virginia students in Grades 3 to 8 took the assessment in school buildings in 2020–2021, compared to 99 percent in a typical year before the pandemic.
- In North Carolina, a comparison of results from the required end-of-grade test in Grades 3 to 8 (aligned to the state’s Standard Course of Study in English language arts) showed that lower percentages of students met Level 3 and above (i.e., grade-level proficiency) or Level 4 and above (i.e., college and career ready) in 2020–2021 than in 2018–2019.<sup>51</sup> Note that the participation rate on state assessments in North Carolina was above 90 percent. The assessments were administered in longer windows of time to accommodate for the variation in instruction modes (i.e., remote, hybrid, and in person).

## Policy and Practice Changes

At the federal level, Congress passed a series of bills that allocated funds to support remote learning in schools as a direct result of the COVID-19 pandemic. Separate laws were signed in March 2020 (the Coronavirus Aid, Relief, and Economic Security, or CARES, Act), December 2020 (the Coronavirus Response and Relief Supplemental Appropriations Act), and March 2021 (the American Rescue Plan), setting aside approximately \$13 billion, \$54 billion, and \$122 billion, respectively, for K–12 schools.<sup>52</sup> As a reference point, total U.S. expenditures on elementary and secondary schools were approximately \$832 billion in the 2018–2019 academic year.<sup>53</sup>

The majority of states used some of their CARES Act funding to address shortcomings in remote learning access.<sup>54</sup> For example, Alabama used \$100 million to increase internet connectivity in areas of greatest need by providing home internet access vouchers for equipment and service costs to families of K–12 students who were eligible for free and reduced-price meals or who met other income criteria.<sup>55</sup> In addition, Alabama spent \$10 million of its Governor Emergency Education Relief Funds (GEER), also offered through the CARES Act, to provide Wi-Fi access on all school buses. Tennessee used \$50 million of its GEER funds to create a grant program for districts to purchase devices such as laptops. Colorado set aside \$5 to 6 million to expand the Colorado Empowered Learning program, an online program that supports schools implementing blended and online learning models in pre-K–12 education by providing online courses, professional development, and technical assistance.<sup>56</sup> In Illinois, K–12 school districts received \$32.5 million to buy laptops and tablets and another \$7.5 million to buy Wi-Fi hotspots and increase internet connectivity for students and families.

The pandemic has put a spotlight on the “digital divide” in the United States by drawing attention to the fact that access to technology and broadband internet is not ubiquitous across the country. This has ignited a conversation about providing more reliable connectivity to rural communities and low-income residents in all geographic areas. Access to technology is becoming critically important as states increase virtual schools and programs. In the summer of 2021, the Associated Press surveyed officials from 38 SEAs, and a majority said additional virtual schools and programs would be made available in the next school year.<sup>57</sup>

## Impact of the Pandemic on PIRLS 2021

Due to the continued impact of COVID-19 on school districts and schools in the 2020–2021 academic year, the U.S. administration of PIRLS 2021 was delayed from spring 2021 to fall 2021. This change in schedule resulted in a change in the target population, with the United States assessing fifth grade students at the beginning of the academic year rather than fourth grade students at the end of the academic year, to align with international guidance recommending that students in the sampled grade have a mean average age of at least 9.5 years. The teacher questionnaire was not administered due to challenges in analyzing and interpreting response data



from fifth grade teachers at the beginning of the academic year rather than fourth grade teachers near the end of the academic year with the sampled class.

The pandemic presented logistical and recruitment challenges for the administration of PIRLS 2021 in the United States. The PIRLS 2021 assessment was administered within each school in the United States by a team of PIRLS representatives who implemented a variety of safety protocols to limit the risk associated with the pandemic. These included requirements for COVID-19 vaccinations; regular COVID-19 testing and symptom checks; the use of personal protective equipment, including face masks and gloves; frequent hand sanitization; and sanitization of all PIRLS equipment between, before, and after student use. Some protocols changed between the start of recruitment and the assessment window in accordance with updates to national public health guidelines. The U.S. PIRLS recruitment materials include an overview of the mitigation protocols. Prior to assessment day, school coordinators were asked to provide information on any additional COVID-19-related requirements, such as school-specific check-in procedures, requirements for providing proof of vaccination status, and/or requirements for documenting student seating arrangements during the assessment session.

The recruitment of schools was delayed due to the later assessment window and to limit the burden on schools as they addressed COVID-19-related impacts on teaching and learning. Recruitment and participation remained a challenge leading up to and throughout the assessment window. Some states, school districts, and schools declined to participate and cited COVID-19-related reasons, including concern about the impact of COVID-19 on student learning, the need for staff to focus on implementing shifting COVID-19 protocols, and active COVID-19 infections within the school community and/or the sampled classes. To improve school and student participation rates, the assessment window was extended from 4 to 7 weeks.

## Suggested Readings

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