

Market Landscape: PreK-12 Educational Sector in the US

Original Research - July 2022

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Executive Summary

Our team used X4Impact Research Technology to process over 850 million data points to create a PreK-12 Education Sector Market Landscape in the US. This report aims to inform funding, partnerships, go to market, and engagement strategies with the answers to these fundamental questions:

- 1. How can your outreach strategy use data to understand 99,600 public and 22,400 private PreK-12 schools, and 41,300 related nonprofit organizations that focus on fundraising, special education, and student life, among others?
- 2. 53% of PreK-12 students are Black, Hispanic, Asian/Asian Pacific, or mixed races. What is the distribution by region and type of school and where are the opportunity zones when defining an impact plan?
- 3. The X4Impact Tech Directory has over 340 tech solutions and services focused on PreK-12 Education. What is the state of technology solutions addressing the needs of schools and students?

Section 1: National and State Level School Data (Pages 3-15)

We set the stage with an overview of the US PreK-12 Education sector, in context of the US Nonprofit Sector with \$3.2 trillion in annual income.

Then we look at the state of PreK-12 schools (private and public) in the US serving 53M students. We analyze the quantity and distribution of schools, their reported annual income, expenses in selected categories, and reported number of employees. We also examine their student population demographics, which vary widely by school type and geography.

US Market At-a-Glance

1.8M Tax Exempt Organizations **Religious Organizations:** 315K Institutions \$3.2T Annual Income \$23B in Annual Income 21.5M+ Employees Foundations: 124M+ Volunteers 148K Institutions \$218B in Annual Income Human Services Organizations (Organizations that manage human cases): 317K Human Services Organizations \$335B in Annual Income . Hospitals, Clinics, Healthcare and Medical Research: 99K Organizations \$1.6T in Annual Income • Other: Utilities. Membership Associations, International Affairs, Arts, Museums, Climate, Advocacy, Research. etc 803K Organizations

Public Schools

- 99.6K Public PreK-12 Schools
- \$791B in Annual Income

Education Nonprofits

- 118K Organizations (including private schools)
- \$381B in Annual Income

PreK-12 Educational Institutions

PreK-12 Schools at a Glance

122,000 schools serve grades PreK-12 in the US. The majority of these institutes (99.6K) are traditional and chartered public schools. They employ nearly 3M Full Time Equivalent (FTE) teachers and educate close to 50M students. 22,400 private schools employ 353K FTE teachers and educate 4.2M students.

Public schools are tied to a local school district and funded through state & local taxes and federal grant programs. Public charter schools are often run by another for profit or nonprofit organization which maintains a contract with their local school district, and are also funded primarily from government sources. Private schools, which operate independently of any school district, qualify as nonprofits and generate most of their income from student tuition paid for by families, government programs and charitable donations.

The average student teacher ratio in public schools is 16:1 compared to 10:1 in private schools. Class size, calculated by dividing the number of students enrolled by the number of classrooms, is often considered a more accurate estimate than student teacher ratios, which divides the total number of students by the total number of teachers, without considering how enrollment and employment varies across districts, schools, and grade levels. According to the latest data from the National Center for Education Statistics (NCES) the average elementary class size is 24% larger and the average secondary class is 33% larger in public schools than private, varying widely across districts and states.

Addressing rising class sizes, access to early childhood development programs, and in the wake of COVID-19, availability & accessibility of remote learning resources, are key challenges facing this sector and the achievement of <u>UN Sustainable Development Goal 4, Quality Education</u>.

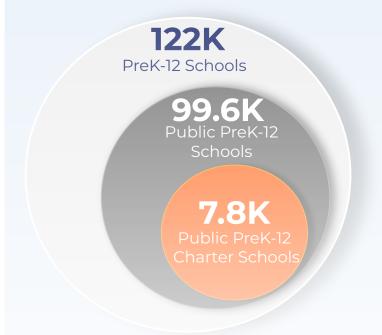
Public PreK-12 Schools

PreK-12 Public Schools in the US

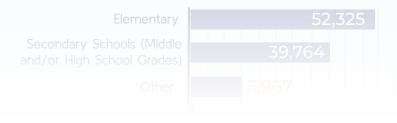
Traditional public schools are classified by the IRS as government instrumentalities, overseen by a local school district for budget and programs. They do not qualify as 501c3s, but do receive similar tax exemptions. Charter schools are also public schools, but operated by an independent organization, often a nonprofit, through a contract with a school district and can qualify as 501c3s.

The 99.6K schools employ 3M FTE Teachers and prepare 49.1M students. This includes the 7.8K public charter schools that employ 177K teachers and serve 3.7M students. There are 516 students enrolled in a school on average, with a median enrollment of 419. The average student teacher ratio is 16:1. CA reports the highest ratio at 22:1, followed by NV and AK.

• The highest concentrations of public schools are in CA, TX, NY, IL, and FL. The highest concentrations of students are in CA, TX, FL, NY, and IL.



School Type



Public PreK-

This report focuses on the flow of \$ on a per-student basis and applies to

Nearly all of the revenue for these so taxes, as well as fundraising through re Clubs. Relying on these sources has le and schools, favoring more affluent as

In HI and VT the vast majority of scho respectively), followed by WA, NM, ID

Local sources account for the majority D.C., D.C. relies the most on local sour

Less than 8% (\$60B) of public school formula and competitive grant program TX.

Title I is the largest federal source for number of students who qualify for fi **Title I funding**, however because fund are not necessarily the ones directly b system receive services funded by Tit

Local

Revenue from property taxes and fundraising efforts from Parent & Teacher groups like PTAs, PTOs, Booster Clubs, etc. Varies significantly across schools and districts.

TAs, etc. ross **46.7%**

Federal

Includes primarily Department of Education

\$60**P**

- No Child Left Behind (Title I) Grant
- Professional Development for Educ
- English Language Learners (Title III)
- Student Support and Academic Ac
- Individual with Disabilities Education
- Elementary and Secondary School

Additional Special Education funds come for funds child nutrition programs, including Free supports Head Start programs.

Public School District Spending

PreK-12 public schools, including charters, spend \$17K per student each year on average.

However, there is huge variation across states and districts.

NY (\$24.8K), Washington D.C. (\$22.8K), NJ (\$21.3K), VT (\$21.2K) & CT (\$21.1K) spend the most on education per student. UT (\$8K), ID (\$8K), AZ (\$8.8K), NV (\$9.1K), & OK (\$9.2K) spend the least.

In total, schools spend over \$668B each year on PreK-12 education, including:

- **\$404B on Instructional Expenses** (including teacher salaries & benefits, textbooks, and other classroom supplies)
- **\$238B on Support Services** (from support staff like librarians, school nurses & guidance counselors to student transportation, school administration, and maintenance among others)
- \$26B on Food Services and Enterprise Operations

Top 10 Public School Districts

(All have revenues \$1.2B+ per year)

- 1. LOS ANGELES UNIFIED
- 2. <u>CITY OF CHICAGO SD 299</u> (Chicago Public Schools)
- 3. <u>MIAMI-DADE</u>
- 4. PHILADELPHIA CITY SD
- 5. CLARK COUNTY SCHOOL DISTRICT
- 6. MONTGOMERY COUNTY PUBLIC SCHOOLS
- 7. HAWAII DEPARTMENT OF EDUCATION
- 8. FAIRFAX CO PUBLIC SCHOOLS
- 9. <u>BROWARD</u>
- 10. <u>HOUSTON ISD</u>

Top Public Charter Schools

(All have revenues of \$50M+ per year)

- 1. <u>KIPP TEXAS INC</u>
- 2. HARLEM SUCCESS ACADEMY CHARTER SCHOOL 3 A/K/A SUCCESS ACADEMY CHARTER SCHOOLS - NYC

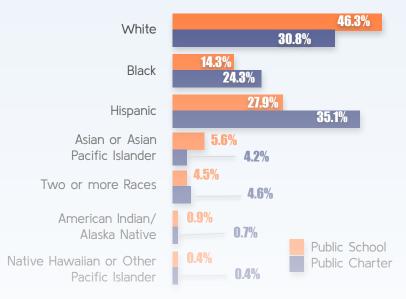
Public PreK-12 Students

White students make up nearly half of the US PreK-12 student population in traditional public schools, but just 30% in charters.

- The least diverse student populations are in WV, VT, ME, and NH where white students make up over 80% of the student body.
- In Washington D.C. Black students are 66% of the students body, while the US PreK-12 student population is 14% Black or African American.
- Hispanic students make up the majority of the student body in NM (63%), CA (56%) and TX (53%), compared to 28% of the US PreK-12 student population.

Over 21M students (43%) participate in Free & Reduced Lunch programs. TX, NY, FL, OH & MI report the most Title I eligible schools (funds determined by free & reduced lunch student

US PreK - 12 Students



Highest Percentage of Minority Students*

	DC	

Private PreK-12 Schools

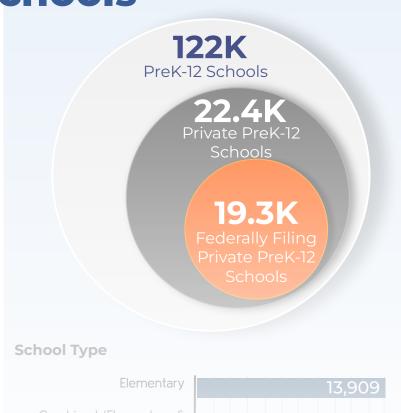
PreK-12 Private Schools

In the US there are over **22,000 private** schools serving grades PreK-12. The IRS categorizes them as 501c3s, and while some receive religious or group exemptions, the vast majority must file an annual return (forms 990).

Almost 353K FTE Teachers prepare 4.2M students in these institutes where the average student teacher ratio is 10:1. HI reports the highest ratio at 14:1, followed by IN and OH. There are 188 students enrolled in a school on average, while the median enrollment is 111.

- The highest concentration of private schools is in CA followed by a high concentration of schools in FL, PA, NY, and TX.
- The highest concentrations of students are in CA, NY, FL, TX & IL.

The 19.3K schools that file a tax return with the IRS report \$45B in annual revenue. The

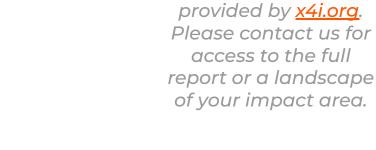


Private PreK

Unlike public schools, **private schools** (of their reported revenue. Endowmer individuals, and some federal programs that help families pay for tuition costs

- School vouchers. Parents receive education to pay for some or a non-religious options.
- **Tax credit scholarships**. Busines scholarship overseen by a nonp tuition.
- Education savings accounts (ES funding state governments alre government-assigned public sch education-related expenses incl services and therapies for study and TN. Twenty-three states him

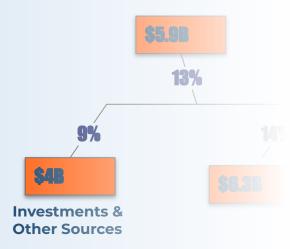
Whether local taxes support private so the Individual with Disabilities Education determined by student populations any public and private schools.



This is an excerpt

Charitable Grants

Private endowments and donations, including contributions to tax credit scholarships.



Private PreK-12 Spending

These organizations generate over **\$28B (64%)** of their annual income from sales, primarily in the form of student tuition. Charitable and Government grants represent 13% (\$5.9B) and 14% (\$6.3B) of their annual income. They spend **\$362M on IT**.

> Two thirds of these schools are small organizations with revenues of up to \$1M per year.

These small organizations have a median IT spending of **\$2.6K**, and spend **\$1.5K on professional fees** related to accounting, fundraising, lobbying, legal, investment and more.

Top 10 Private Schools

(All have revenues of \$50M+ per year)

- 1. <u>MILTON HERSHEY SCHOOL</u>
- 2. <u>TRUSTEES OF THE ESTATE OF BERNICE PAUAHI BISHOP</u> (Kamehameha Schools)
- 3. <u>TRUSTEES OF PHILLIPS ACADEMY</u> (Phillips Academy Andover)
- 4. PHILLIPS EXETER ACADEMY
- 5. <u>THE LAWRENCEVILLE SCHOOL</u>
- 6. <u>PUNAHOU SCHOOL</u>
- 7. HORACE MANN SCHOOL
- 8. <u>THE HARKER SCHOOL</u>
- 9. ETHICAL CULTURE FIELDSTON SCHOOL
- 10. WOODWARD ACADEMY INC

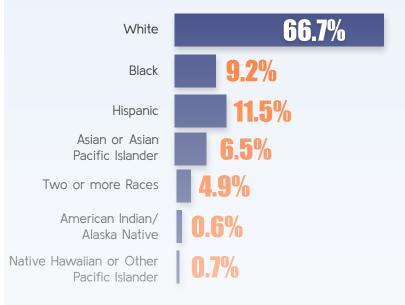
Median Spending by Organization [*]				
Information Technology	Professional Fees		Legal Fees	

Private PreK-12 Students

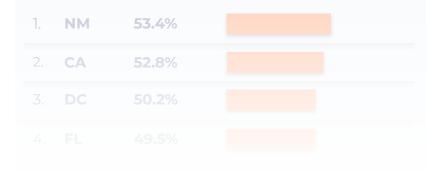
White students make up two-thirds of the US PreK-12 student population in private schools.

- Only in HI, NM, CA, and Washington D.C. do white students make up less than 50% of the student body.
- In D.C. and MD Black students are 27% and 23% of the student body respectively, while the US private PreK-12 student population is 9% Black or African American.
- Less than 2% of students are Black or African American in HI, ID, and MT.
- Hispanic students do not make up the majority of the student body in any state. The highest percentage of these students at private schools are in NM (34%), AZ (28%), FL (26%), TX (24%), and CA (21%) compared to 11.5% of the US private PreK-12 student population.
- In both ME and WV Hispanic students are less than 2% of the student population.

US PreK - 12 Students



Highest Percentage of Minority Students^{*}



Related Nonprofits PreK-12 Education

PreK-12 Related Organizations

To further refine results from the total number of Educational organizations, we applied a filter to look at just the active PreK to 12th grade tax exempt organizations that are not schools in the US.

There are roughly **41,300 active tax exempt organizations** in the PreK-12 sector, with **\$14B** in annual revenue. They are staffed by 164K employees and over 1.6M volunteers. The median income for these organizations is \$59,580 per year. The average is \$354,630 per year.

The two largest categories of PreK-12 organizations by revenue are:

- Educational Services (provide educational programs within & outside of traditional school curriculum, partnering parents, families, schools, business and/or community leaders) with 560 entities (1.4%) and \$3.4B in annual income (24%).
- Alliance & Advocacy organizations

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% Of Annual Income by Source



Half of the revenue reported by non-school PreK-12 education organizations goes to:

- Educational Services (24%, \$3.4B), which provide educational programs within & outside of traditional school setting and often partner parents, schools, community leaders together.
- Alliance & Advocacy organizations (17%, \$2.4B), which focus on influencing public policy regarding PreK-12 education.
- Special Education Services (16.5%, \$2.3B), which provide individualized programming, instruction and support services for children and youth who are gifted or have disabilities.

Parent & Teacher Groups account for three quarters of these organizations but just 6% of the total income. Organizations that act as a fundraising supporter for a single beneficiary organization and special education services also make up a large share of the sector by number of organizations.

Focus Area	Total Annual Income of Reporting Organizations [*]	Active Organizations

PreK-12 Relation Organization Annual Incor

To understand the rate of growth by a non-school 501c3 PreK-12 charitable This included organizations of all ages

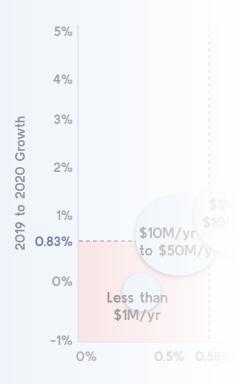
To keep statistical relevance of the re-

- 1. Organizations by Annual Income
- 2. Organizations by Age (based or

Between 2018 and 2020, the Income across the defined incomedian growth rate was 0.83

Organizations with annual inco Organizations that had the hig \$50M per year in annual rever





PreK-12 Related Orgs by Geographic Distribution

Two-thirds of the revenue reported by these organizations is concentrated in just 7 states and Washington D.C.. The top market by revenue is NY, followed FL, NJ, TX & CA. A go-to-market to test Education Technology Solutions can start in these states, in addition to the state with the highest concentration of organizations CA, followed by TX, NY, FL and NC.

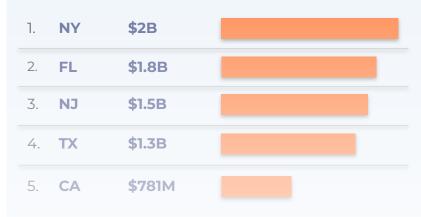
If we focus only on Educational Services:

- The top states by number of orgs are CA, NY, TX, NC and MA.
- The top states by reported revenue are NJ, NY, CA, II & IN.

If we focus only on **Parent & Teacher Groups**:

• The top states by number of orgs are

Top 5 States Ranked by Annual Income Reported by PreK-12 Organizations





Two thirds of the revenue is concentrated in 7 states (NY, FL, NJ, TX, CA,

Financial Insights

These organizations generate over **\$6.2B (44%) of their annual income from sales**. Charitable and Government grants represent 24% (\$3.4B) and 26% (\$3.6B) of their annual income.

Over nine of every ten organizations related to PreK-12 (excluding schools) are small organizations with revenues of up to \$1M per year.

These small organizations, with a median annual income of **\$53.7K** have a median IT spending of **\$2.4K**, and spend **\$1K on professional fees** related to accounting, fundraising, lobbying, legal, investment and more.

Top Ten PreK-12 Orgs by Revenue

Excluding Schools. All have revenues of \$50M+/yr

- 1. EDUCATIONAL TESTING SERVICE
- 2. <u>COLLEGE BOARD</u>
- 3. <u>STEP UP FOR STUDENTS INC</u>
- 4. <u>PARENTS ASSOCIATION OF SAGE RIDGE</u> <u>SCHOOL</u>
- 5. <u>EARLY LEARNING COALITION OF MIAMI</u> <u>DADE MONROE INC</u>
- 6. <u>EARLY LEARNING COALITION OF PALM</u> <u>BEACH COUNTY INC</u>
- 7. <u>NORTH CAROLINA PARTNERSHIP FOR</u> <u>CHILDREN INC</u>
- 8. <u>HILLSBOROUGH COUNTY SCHOOL</u> <u>READINESS COALITION INC</u>
- 9. <u>FIRST BOOK</u>
- 10. <u>AVID CENTER</u>

Selected Median Annual Figures^{*}

Median Annual Income		Median Professional Fees



The **41,300** PreK-12 non-school tax exempt organizations in the US report annual spending of over **\$162M in advertising** per year and **\$1.6B on professional fees** related to accounting, fundraising, lobbying, legal, investment and more.

Organizations report annual spending of over \$433M on travel and conferences and \$603M on rent, utilities and related expenses.

These organizations spend over \$180M on Information Technology (IT). Legal spending is over \$95M per year.

Spending on Facilities as well as Travel and Conferences are **expected to decrease**, **with some money shifting to IT spending** as both schools and nonprofits accelerate spending on online conferences, virtual learning, and remote work due to the ongoing COVID-19 pandemic.



PreK-12 Parent & Teacher Groups

While public schools receive government funding for core services, Parent & Teacher Groups, like Parent and Teacher Associations (PTAs), Parent Teacher Organizations (PTOs) and Booster Clubs provide much of the funding for other aspects of school life, from software to additional support staff & diversity programming, to music & art programs, to team uniforms.

Contributions to these organizations are often tax deductible and don't require district approval. This presents an additional funding opportunity for EdTech solutions outside of traditional school budgets.

Unlike PTAs, which benefit from the 501c3 status of the National Association, PTOs must register themselves with the IRS. They have no national association, so financial contributions go directly to the organization and their priorities.

Over 30,000 Parent & Teacher Groups report

Large disparities exist in PTA fundraising and fund distribution

10% of the money raised by PTAs goes to 0.1% of PreK-12 students

Top 10 Parent & Teacher Groups by Revenue

- 1. PARENTS ASSOCIATION OF SAGE RIDGE SCHOOL
- 2. NATIONAL CONGRESS OF PARENTS & TEACHERS
- 3. <u>CALIFORNIA CONGRESS OF PARENTS TEACHERS</u> AND STUDENTS INC

PreK-12 Education Technology

PreK-12 Education Technology

Spending on EdTech increased significantly during the early years of the Covid-19 Pandemic. The consequences for the education sector will be long lasting and technology can provide important solutions to addressing the new needs of schools and students.

A Survey from the Learning Council found that **the US K-12 sector spent \$35.8B in 2020 on EdTech**, including hardware, software and digital curriculum. EdTech Evidence Exchange, which also includes classroom assessments, state-level exams and professional development that relies or is focused on technology as EdTech, estimates the US spends \$26B - \$41B annually.

EdTech companies are benefiting from this renewed interest and need - raising over **\$20B from VCs in 2021**, compared to \$14.6B in 2020 and \$7B in 2019^{*}.

Government funding is also prioritising EdTech - an analysis by Georgetown University's FutureEd found of the initial \$83B from the latest federal relief funds for Elementary and Secondary Schools (ESSER III) **\$5.8B (9%)** is designated for technology. Other keys areas outlined in Top Education Technology Solutions on <u>x4i.org</u>:

Early Childhood Learning \rightarrow

- Cognitive ToyBox
- MetrixIQ
- Upkid

<u>Learning Management Systems \rightarrow </u>

- Civitas
- Literra
- Sakai

<u>Remote Learning \rightarrow </u>

- Blocksi
- Buncee
- InSpace

School Operations & Teacher Support \rightarrow

- Adopt a Classroom
- Alpaca



Visit x4i.org for More Data & Insights

Other reports you might find useful

- Nonprofit & Tech for Good Compensation
- US Nonprofit Landscapes by UN SDG
- <u>Technology Innovation in the US</u>

Our Data

This report is based on a July 2022

analysis of over 850 million data points gathered from the United States Internal Revenue Service (IRS), the National Center of Charitable Statistics (NCCS), the National Center for Education Statistics (NCES) and our proprietary Database of Technology Solutions.

We also conduct primary research to complement our understanding of the sector.

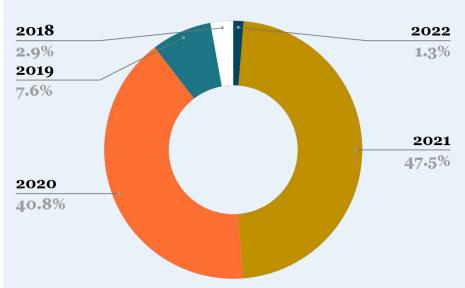
We update our datasets periodically to get the most representative sample of the US Nonprofit Sector.

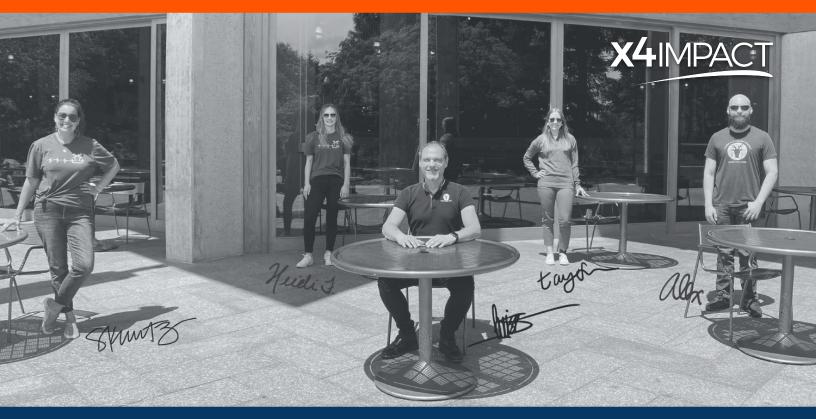
Our classification is based on the NTEE codes reported by the IRS, the National Center for Charitable Statistics, and the mission statement reported by organizations in their filings with the IRS.

Margin of error

- Organization Classification under PreK-12 Sector: +/-10%.
- IT Spending Analysis: +/-3%.
- Professional Fees, Legal, Travel, Rent and other Spending Analysis: +/-10%.
- Employment, Volunteering and other metrics: +/- 10%

Data Freshness





X4Impact - Data Intelligence for Social Innovation (The Gartner™ for Social Impact, as some leaders refer to us!)

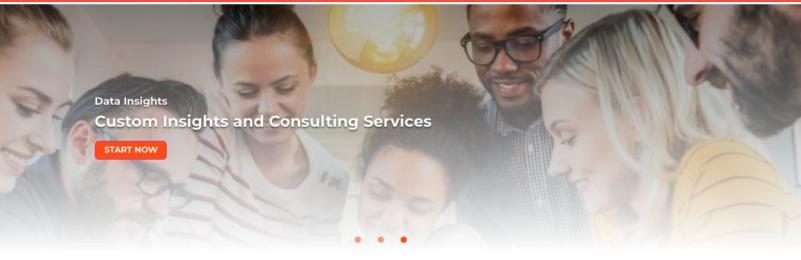
Credits

Key Sources

- X4Impact Analysis of the IRS, NCCS and NCES data sets 2017 2022
- X4Impact Tech & Services Solutions Directory 2022
- Edtech Investment Continues To Soar Even As Schools Return To In-Person Learning Crunchbase
- EDUCATION SAVINGS ACCOUNTS (ESAS) State Policy Network
- Financial Trends in Local Schools' Covid-Aid Spending FutureEd
- Just How Large is the K12 Ed-Tech Market? The Learning Council
- <u>National Teacher and Principal Survey</u> National Center for Education Statistics, U.S. Dep of Education
- The Outsized Role of Parent Contributions in School Finance Center for American Progress
- <u>Title I Explained</u> Education Week
- Charter Schools in the States: Charter School Finance National Conference of State Legislatures

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X4Impact helps leaders make the right decisions and stay ahead on the path to drive social impact

Our research technology processes billions of social impact data points to provide you with crucial insights, advice, and tools to deliver on your mission and build the social impact organizations of tomorrow. Learn more **about us**.



About X4Impact

X4Impact, Inc. is the leading Insights as a Service Platform for the US \$3.2 Trillion per year Nonprofit Sector. Our technology processes billions of social impact data points to help foundations, tech companies, nonprofits, social innovators, academia, and investors build tomorrow's social impact organizations and initiatives. X4Impact was honored in *Fast Company's* World Changing Ideas 2022 Awards in two categories. Visit **x4i.org** and follow us at www.linkedin.com/company/x4impact.

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Appendix

Education in the US



By 2030 SDG 4, Quality Education aims to ensure inclusive and equitable quality education while promoting lifelong learning for all. This includes providing safe and inclusive learning environments and ensuring equitable access to education at all levels, including pre-primary and technical and vocational programs. This means addressing the cost of college and student loan debt, access to early childhood development programs, rising student-teacher ratios in K-12 education, and in the wake of COVID-19, addressing access to remote learning resources.

Quality Education in the US in Context

Clobally, over 600 million youth lack basic math and literacy skills and **773 million adults (2/3 of them women) are illiterate**. The shift to remote and virtual learning in the midst of the COVID-19 pandemic is estimated to have left at least 800 million students out of school because of a lack of access to technology and other resources needed to access remote learning platforms.

In the US:

- 11.6% of public funding is spent on education.
- 6.1% of children ages 3-18 lived in a household with no internet, limiting their ability to access remote learning among other resources.
- Student loan debt has surpassed \$1.7 trillion owed by over 43 million borrowers.
- There are over 81 million students, where the average student-teacher ratio in elementary schools and secondary schools is 16:1.

Pre-primary Education & K-12 Education

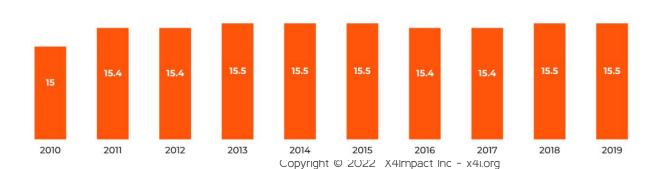


Participation in a preschool program has been shown to help with developing a range of learning and social skills and is important for early childhood development. However, according to research by the Annie E. Casey Foundation, during 2016-2018 over 4 million 3 and 4 years old (52%) were not in a pre-primary program, a percent that has not changed since 2009.

As of 2018, there are 130,930 K-12 schools in the United States, 70% of which are public. **Federal projections estimate there will be 50.6 million K-12 students, and 3.2 million fulltime teachers in the Fall of 2021**, with an average student to teacher ratio of 16:1. However, this varies greatly by state. Attracting and retaining teachers plays a large role in the increasing student teacher ratios. 14% of new teachers resign by the end of their first year, 33% leave within their first 3 years, and almost 50% leave by their 5th year.

The 2015-16 school year was the first in which the majority of public school children were minorities. Yet 79.3% of teachers are white. The vast majority of teachers are also women (76.5%).

In 2018, 6.1% of children ages 3-18 lived in a household with no internet at all. This only further compounds the unequal impacts the pandemic is having on children and families as schools have shifted to fully remote learning.



Students per Faculty in Public K-12 Schools