The NCES
**Ed Tech
Equity**
Initiative

TECHNOLOGY AND K–12 EDUCATION:
THE NCES ED TECH EQUITY INITIATIVE

DATA COLLECTION PRIORITIES

The National Center for Education Statistics (NCES) is the primary federal entity responsible for collecting and analyzing data related to education in the U.S. and other nations. In carrying out this mission, NCES has found that inequities in student achievement persist, but may differ when technology (i.e., digital resources) is a factor.

After conducting an internal review of existing NCES technology-related survey questions and gaining insight and recommendations from stakeholders, NCES developed a list of subtopics to prioritize across the three indicator categories highlighted in *The NCES Ed Tech Equity Initiative Framework.* This list is not comprehensive of all subtopics that inform ed tech equity; rather, this list highlights select topics that are aligned with the needs and interests of education stakeholders, as well as the ability of NCES survey respondents to provide meaningful information that can be utilized to create the types of data and statistics that will inform ed tech equity.

By focusing on these topics, NCES will better inform the condition of American education by giving greater attention to education technology and equity (ed tech equity) as it relates to K–12 education. More specifically, ed tech equity refers to the difference between students' educational experiences and outcomes when technology is a factor, with a particular focus on key subgroups (e.g., by English language learner status, disability status, geographic location, race/ethnicity, sex, socioeconomic status, etc.).

TECHNOLOGY RESOURCES AND SUPPORT

- **ACCESS TO DIGITAL DEVICES AND TOOLS IN-SCHOOL:** the availability of digital devices and tools provided by or associated with a school (e.g., access to one-to-one devices in the classroom, take-home devices, software, etc.). In addition to what devices and/or tools are available and who provides these devices and/or tools, particular attention will be given to the extent of that access (i.e., the quantity, quality, frequency, and duration of students' access).

- **ACCESS TO DIGITAL DEVICES AND TOOLS OUT-OF-SCHOOL:** the availability of digital devices and tools not provided by or associated with a school (e.g., a home computer). Rather, such devices are available via other sources (e.g., parents/guardians, community centers, public libraries, etc). In addition to what devices and/or tools are available and who provides them, particular attention will be given to the extent of that access (i.e., the quantity, quality, frequency, and duration of students' access).

- **ACCESS TO INTERNET IN-SCHOOL:** the availability of internet in-school and/or provided by a school. In addition to who provides the internet access, particular attention will be given to the type of internet access (e.g., dial-up, satellite, high-speed broadband, etc.), how the internet is accessed (e.g., smartphone vs. laptop), where it is accessed (e.g., classroom, library, etc.), and the extent of access (i.e., frequency and duration).

- **ACCESS TO INTERNET OUT-OF-SCHOOL:** the availability of internet outside of school. Such access is available via a source not associated with a school (e.g., parents/guardians, community centers, public libraries, restaurants, community initiatives, etc). In addition to who provides the internet access, particular attention will be given to the type of internet access (e.g., dial-up, satellite, high-speed broadband, etc.), how the internet is accessed (e.g., smartphone vs. laptop), where it is accessed (e.g., home, library, restaurant, etc.), and the extent of access (i.e., frequency and duration).

- **IT STAFF IN-SCHOOL:** individuals who support the functionality of digital resources and technology infrastructure (e.g., IT staff, instructional technology support, etc.) and the quantity and quality of such supports. These individuals may or may not be full-time employees of a particular school.

- **TECHNOLOGY SPECIALISTS IN-SCHOOL:** individuals who promote the integration of technology into curriculum (e.g., technology implementation specialists, technology coaches, etc.) and the quantity and quality of such supports. These individuals may or may not be full-time employees of a particular school.

INTEGRATION OF TECHNOLOGY

- **TECHNOLOGY USE IN-SCHOOL:** how, where, why, and when technology is incorporated into students' educational experiences (e.g., students' use of adaptive learning software via tablets twice a week), as facilitated by or associated with a school (e.g., instructional staff).

- **TECHNOLOGY USE OUT-OF-SCHOOL:** how, where, why, and when technology is incorporated into student's educational experiences (e.g., use of a 3D printer at a maker camp), as facilitated by or associated with an entity other than a school (e.g., a nonprofit initiative).

TECHNOLOGY KNOWLEDGE, SKILLS, AND ATTITUDES

- **STUDENTS' TECHNOLOGY KNOWLEDGE AND SKILLS LEARNED IN-SCHOOL:** the acquisition of knowledge and skill, through use of technology, that is facilitated by or associated with a school (e.g., using software to create a digital model as part of a class project).

- **STUDENTS' TECHNOLOGY KNOWLEDGE AND SKILLS LEARNED OUT-OF-SCHOOL:** the acquisition of knowledge and skill, through use of technology, that is not facilitated by or associated with a school (e.g., coding skills learned through playing video games at home).

- **EDUCATORS' TECHNOLOGY KNOWLEDGE AND SKILLS:** educators' (e.g., teachers, principals, etc.) knowledge of and ability to use technology in general and, more specifically, their knowledge and ability to integrate technology into teaching and learning in-school and beyond school premises (e.g., homework).

- **EDUCATORS' ATTITUDES TOWARD TECHNOLOGY:** educators' (e.g., teachers, principals, etc.) feelings or perceptions about using technology in general, and more specifically in teaching and learning.

GLOSSARY

ED TECH EQUITY: education technology and equity—the difference between students' educational experience and outcomes when technology is a factor, with a particular focus on key subgroups (e.g., by English language learner status, disability status, geographic location, race/ethnicity, sex, socioeconomic status, etc.).

ED TECH EQUITY EXPERTS: individuals—including policymakers, practitioners, researchers, and innovators—with extensive expertise as it relates to ed tech equity in the context of K–12 education.

TECHNOLOGY: digital resources (e.g., internet, smart phones, laptops, tablets, and software).

ADDITIONAL RESOURCES

AN OVERVIEW OF THE INITIATIVE: to learn more about this exciting work, explore *The NCES Ed Tech Equity Initiative* brochure.

ADVANCING THE INITIATIVE: for an overview of the key steps NCES is taking to advance this work, explore *The NCES Ed Tech Equity Initiative* infographic.

THE FRAMEWORK: to learn more about the Framework NCES is using to guide its ed tech equity efforts, explore *The NCES Ed Tech Equity Initiative Framework* fact sheet.

CONTACT

Halima Adenegan
Project Director
EdTechEquity@ed.gov

NCES.ED.GOV