Searching for Consistency in Attendance Data Recording, Reporting, and Utilization in the USA

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Abstract: According to the United States Department of Education (USDOE), 16% or over eight million kindergarten through twelfth grade students in the US missed 10% or more school days during the 2017–2018 school year. This is approximately 18 of 180 days required. We know this because schools are mandated to report their attendance data to their respective states and to the USDOE. There are concerns around accuracy and consistency because each state is allowed to compile data in their own way and report only select metrics to the USDOE to comply with federal guidelines. The consistency on federal metrics, nonetheless, allows for similar analyses at the federal and state levels and comparisons across states. To best understand what is reported, we report on data compiled by the National Center for Education Statistics (NCES) housed in the Institute of Education Sciences, the science branch of the USDOE, and describe how attendance data are collected, reported, and used at the national level. We share similar findings for two representative US states – Connecticut and Indiana – to highlight similarities and differences between them, and their "best practices." Key results from these multiple levels of analyses are then discussed, with the goal of informing research, practice, and policy related to school attendance, so that students of all ages and from all backgrounds are provided the opportunity to obtain optimal benefits from schooling throughout their school careers.

Keywords: school attendance, chronic absenteeism, truancy, multi-level analyses, case study, National Center for Education Statistics, education policy

For decades, countries have been in search of consistency in data collection to enable effective comparisons, and the United States is no different (National Forum on Education Statistics, 2009). Consistency in the collection of educational data, specifically kindergarten through 12th grade, is also no exception. In all fifty U.S. states, common and different data related to school attendance are collected in various forms and used for a myriad of purposes – from monitoring attendance and moving up or out of a grade to receiving a driver's license or committing a status offense.

When thousands of schools closed during the pandemic, all stakeholders worried about students' absence from school (Gross & Opalka, 2020; UNESCO, 2021). This

worry is legitimate because we know students are successful when they are active in learning environments with effective teachers. Teacher effectiveness is the strongest predictor of academic success, and teacher-student interactions are not possible when students are absent (Adelman, 2006). Absenteeism is particularly impactful for students who require additional support for disability or other individualized educational plans (Van Dinther et al., 2011). Nestled in the support and worry for students, schools in the United States continue to collect droves of student data to meet their federal and compliance requirements.

To provide a national perspective, we focus our review on data collected within the National Center for Education Statistics (NCES) that is housed within the U.S. Department of Education's (USDOE) Institute of Education Sciences (IES), the scientific branch of the USDOE. Within the NCES, the body that reports on national data is the National Forum on Education Statistics (NFES, 2018a). The Forum was established to produce and maintain, with the cooperation of states, comparable and uniform educational information and data on early childhood, elementary, and secondary schools which could be useful for policymaking at the federal, state, and local levels. State departments of education have the responsibility of ensuring that educational data are recorded, reported, and used at the state and local levels and reported to the USDOE as required. Although comparisons across all 50 U.S. states are beyond the scope of this paper, we chose to highlight the states of Connecticut and Indiana as case studies because they are in geographically different parts of the United States and can provide a glimpse into the similarities and differences which exist across states. Thus, our methodology included case and secondary analyses of national and state data.

The purpose of this paper is to share *what* attendance data are collected, *how* they are reported, and how they are *used* at the national and state level. To understand the data, it is necessary to first understand the context in which the data are recorded, reported, and used. We, therefore, start by providing an overview of the U.S. educational system, including its structure and its laws and statutes related to school attendance. Next, we discuss how data are recorded, reported, and used at the national level. We follow a similar format for reporting information from Connecticut and Indiana and minimize redundancy in our case studies by not repeating what is already specified as the educational context in the United States and mandatory requirements by the USDOE. Instead, our case studies focus on specific information relevant to each state. Our focus at all three levels also is primarily on public school education, kindergarten through 12th grade, to facilitate comparisons. We convey our findings to illustrate and draw similarities, differences, and, where possible, "best practices" across and between them. We highlight key findings from these multiple levels of analyses to aid in informing research, practice, and policy relative to consistent attendance data collection and usage to serve the best interests of all children. Searching for consistency has been a long-standing goal for researchers in truancy and absenteeism, too (Gentle-Genitty et al., 2015; Heyne et al., 2019).

1 Overview of the U.S. Educational Context

Diversity is interwoven throughout the U.S. educational context. First, the U.S. student population is diverse. As of fall 2020, there were 22.6 million (45.7%) White students, 13.8 million (27.9%) Hispanic students, 7.4 million (15%) Black students, 2.7 million (5.5%) Asian students, 2.2 million (4.5%) students of two or more races, 0.5 million (1%) American Indian/Alaska Native students, and 0.2 million (0.4%) Pacific Islander students (National Center for Education Statistics, 2020a). In the 2019–2020 school year, 7.3 million students ages 3–21 or 14% of the public school population received special education services (National Center for Education Statistics, 2020a). As of fall 2018, five million or 10.2% of public school students were English language learners (National Center for Education Statistics, 2020a).

Diversity also is evident in the U.S. educational system. In addition to public schools, there also are private, charter, and alternative Career and Technical Education schools. Over one-third of schools (i.e., approximately 32,461) are private elementary and secondary schools (National Center for Education Statistics, 2020a). In addition, homeschooling is allowed in the United States, and as of 2016 approximately 1.7 million (3.3%) K-12 students were homeschooled (National Center for Education Statistics, 2020b). Diversity is accentuated further by the fact that the United States has a decentralized education system in which education is considered the primary responsibility of states (UNESCO-IBE, 2007). However, to receive annual federal funding, states must provide certain information to the federal government.

Within each state, school districts operate public elementary and secondary schools within their boundaries and are administered and financed by their local communities and their respective state department of education. Districts are typically governed by locally elected school boards and headed by superintendents (Stevenson & Lee, 1995). School boards oversee the operations and the funding of schools. Superintendents are charged with overseeing the implementation of educational policies and practices. Although considerable local control is allowed, nonetheless, districts and schools are bound to comply with federal and state laws and state policies and procedures related to the recording, reporting, and utilization of data, including attendance and absenteeism data.

1.1 Relevant Laws and Mandates at the National Level

Thousands of laws and statutes govern U.S. education practices, many of which are tracked by the NCES. However, for the scope of this manuscript, we present an overview of the federal laws and statutes of most relevance to the recording, reporting, and usage of attendance data.

Department of Education Organization Act (1979)
This act authorizes the Office for Civil Rights (OCR) in the USDOE to ensure that schools comply with all civil rights laws under its jurisdiction, i.e., those that prohibit

discrimination in programs or activities that receive federal financial assistance from the USDOE. The OCR collects data directly from districts on a biennial basis (https://ocrdata.ed.gov).

Starting with the 2013–2014 school year, the OCR required all state educational agencies and schools serving kindergarten through 12th grade students to report the percentage of students who were chronically absent (CA). Prior to this time, there were no national data on CA, and most states were not collecting or reporting CA data.

For both the 2013–2014 and 2015–2016 data collection periods, the OCR defined CA as missing 15 or more days in a school year. As of the 2017–2018 school year, collection of CA data shifted to the USDOE's ED*Facts* initiative where data are collected from state departments of education that have greater responsibility for quality control, and the definition of CA was changed from missing 15 or more days to missing 10% of more of school days (Attendance Works and Everyone Graduates Center, 2021). Under both definitions, CA counts include all absences: excused absences, unexcused absences, and absences due to disciplinary actions taken by the school. When CA rates are disaggregated by racial/ethnic groups, special education status, and SES status, disproportionalities are found that suggest some student groups are at a much higher risk of experiencing the negative outcomes associated with poor attendance than are others. Disproportionality in current CA rates will be presented in later sections.

The Elementary and Secondary Education Act of 1965 and Its Reauthorizations

The Elementary and Secondary Education Act (ESEA) of 1965 and its reauthorizations are also relevant because they represent the principal laws governing students in kindergarten through high school. The most recent reauthorizations of the ESEA Act include the No Child Left Behind Act (NCLB) of 2001 and the Every Student Succeeds Act (ESSA) of 2015. Both NCLB and ESSA re-affirmed local control and expanded parental options (e.g., charter schools, private schools, home-schooling). Both also affirmed the need for schools to implement practices based on scientific research evidence and required accountability for results.

NCLB also stipulated that all states and territories must provide compulsory free and appropriate public education from the age of 6 or 7 to the age of 16 years. All 50 states comply with the NCLB requirements for compulsory education or go beyond them. For example, public education is free up to the age of 17 in Alabama and up to age 26 in Tennessee (National Center for Education Statistics, n.d.). NCLB also established the Institute of Education Sciences (IES) in the USDOE. In addition, NCLB included two provisions that had a strong influence on attendance policy and practice. First, NCLB was the first reauthorization of the ESEA Act that required states to report their truancy rates (albeit still allowing for states to determine their own definitions of truancy) even though most U.S. states had compulsory education laws and sanctions related to truancy over 100 years earlier (Katz, 1976). Second, in 2010

NCLB required each state to institute longitudinal student data systems. This requirement led to states, districts, and schools establishing electronic data systems that allowed them to calculate chronic absenteeism and other attendance-related metrics.

ESSA gives states the authority to develop a school accountability framework based on their unique contexts that could best result in college- and career-readiness outcomes for their students. ESSA requires schools to report on four indicators in their accountability frameworks, namely academic achievement, student growth, graduation rates, and the progress of English learners. In addition, ESSA leaves the "fifth indicator," known as the School Quality/Student Success (SQSS) indicator, to the discretion of each state. Any chosen SQSS indicator must: (a) apply to every student, (b) be valid and reliable, (c) identify meaningful differences across schools, (d) be comparable and applicable across the state, (e) be measured and reported for all students and disaggregated by student sub-group, and (f) have a proven impact on achievement.

With the passage of ESSA, chronic absenteeism (CA) rates came to the forefront as an example of a quality indicator, along with measures of student engagement, discipline rates, and postsecondary readiness. Table 1 provides a summary of the arguments in support of CA as an SQSS indicator (Attendance Works, 2016). Thirty-six states, including Connecticut and Indiana, and the District of Columbia chose to include CA in their accountability frameworks (Jordan & Miller, 2017). Both Connecticut and Indiana define CA as absent 10% or more of a school year regardless of the reason for the absence.

Table 1 Every Student Succeeds Act Criteria for a School Quality/Student Success (SQSS) Indicator and Justifications for Chronic Absenteeism (CA) to Serve as an SQSS Indicator

ESSA Criteria for SQSS Indicators	Justification for CA as an SQSS Indicator
Must be reliable and valid	Attendance and CA data are measured repeatedly; CA measures the amount of school students miss
Must identify meaningful differences across schools	CA rates vary across schools in a non-random way & highlight meaningful differences in student engagement (Jordan & Miller, 2017)
Must be comparable and applicable across the entire state	Schools must report CA rates to the Office of Civil Rights (OCR) in the U.S. Department of Education; CA is defined as missing 10% or more of school
Must be measured and reported for all students and disaggregated by student sub-group	Every student is included in attendance counts; CA data can be reported by student sub-groups within each school, district, and state; schools are required to do so to meet OCR data reporting requirements
Must have a proven impact on achievement	Numerous studies link CA to lower student achievement (e.g., Kearney & Graczyk, 2020)

Note: Table adapted from Attendance Works (2016)

Congressional Mandate: Report on the Condition of Education

In addition, the U.S. Congress mandated that the NCES produce an annual report, titled the *Report on the Condition of Education,* to summarize the latest data on education in the United States. The most current report (Irwin et al., 2021) includes 86 indicators with data compiled from multiple sources. Examples of indicators most relevant to school attendance include enrollment rates, school crime and safety, children's internet access at home, dropout rates, and high school graduation rates.

Taken together, the preceding overview of the organization of schooling in the U.S. and federal laws and policies relevant to school attendance can now serve as a backdrop for a discussion of how attendance and absenteeism data are recorded, reported, and used at both the national and state levels.

2 Attendance/Absenteeism Data Recording, Reporting, and Usage at the National Level

As mentioned earlier, the NCLB Act prompted the establishment of the IES that houses the NCES and the NFES. Improving the quality, collection, reporting and usage of school attendance data is one of the priorities of the NFES. As a result, it has produced several guides that focus on school attendance data (e.g., National Forum on Education Statistics, 2009; 2018a, b; 2021). We will be sharing information from these guides in the sections that follow.

2.1 Attendance/Absenteeism Data Recording and Reporting at the National Level

In the United States, schools are required to record and report metrics related to both attendance and absences. Elementary schools have traditionally collected and recorded school attendance and absenteeism data once or twice a day. Secondary schools have traditionally collected attendance and absenteeism data multiple times a day, typically at the start of the day and for each class. However, the ways in which attendance and absenteeism data are collected and recorded can vary. In both elementary and secondary schools, classroom teachers are often responsible for collecting and recording student attendance and absences. In some schools, absences reported by parents or caregivers, such as through a dedicated absence-reporting hotline, are collected by office staff who then transfer the information to an electronic data system. In other schools, reported absences are entered directly into an electronic data system.

As noted earlier, states and school districts must provide certain information to the federal government to receive federal funding, including school attendance and absenteeism data. The reporting of school attendance and absenteeism data typically flows from individual schools to their respective district, from districts to their respective state department of education, and from the state departments

of education to the USDOE. Reported data often are recorded in the Common Core of Data (CCD), the USDOE's primary database on public elementary and secondary education (https://nces.ed.gov/ccd/). In addition to attendance and absenteeism data, states are required to report other related data such as established compulsory attendance age, instructional days, minimum instructional hours, and kindergarten attendance (National Center for Education Statistics, 2020a).

To aid in the recording and reporting of absenteeism data, the NFES has provided definitions of excused and unexcused absences (National Forum on Education Statistics, p. 15, 2009). These definitions are as follows:

> Excused Absence: A student is not present at school or at a school-endorsed or sponsored activity, but is temporarily excused from attendance because he or she: 1. is ill and attendance in school would endanger his or her health or the health of others; 2. has an immediate family member who is seriously ill or has died; 3. is observing a recognized religious holiday of his or her faith; or 4. is otherwise excused from school in accordance with board policies.

> Unexcused Absence: A student is not present at school or at a school-endorsed or sponsored activity without acceptable cause or authorization.

Table 2 Taxonomy of Attendance Codes by Category in the US (National Forum on Educational Statistics, 2018)

Category 1: Present	Category 2: Not-Attending/Absent
1. Present–In school, regular instructional program	1. Absent–Non-instructional activity recognized by state, district, or school (e.g., jury duty)
2. Present–Out of school, school-approved extracurricular or co-curricular activity (e.g., athletic competition)	2. Absent–Religious observation
3. Present–Nontraditional school setting, regular instructional program (e.g., off-campus distance education)	3. Absent–Illness, injury, health treatment, or examination
4. Present–Out of school, regular instructional program activity (e.g., field trip)	4. Absent–Family emergency or bereavement
5. Present–Disciplinary action, receiving instruction (e.g., in-school suspension)	5. Absent–Disciplinary action, not receiving instruction (e.g., out-of-school suspension)
	6. Absent–Legal or judicial requirement (e.g., participating on an election board)
	7. Absent–Family activity (e.g., family vacation)
	8. Absent–Student employment
	9. Absent–Transportation not available
	10. Absent–Student is skipping school (without parent or school approval)
	11. Absent–Situation unknown

82   In addition, the NFES (2018a) published a *Forum Guide to Collecting and Using Attendance Data* to help states, districts, and schools improve their collection, reporting, and usage of attendance data to boost school and student outcomes. The guide provides a taxonomy designed to be exhaustive that includes 16 mutually exclusive attendance and absenteeism codes organized under two categories, "Present/Attending" and "Absent/Not Attending." Table 2 contains the 16 taxonomy codes. Although states and districts are not required to use these definitions or the taxonomy, in practice there is considerable consistency between the NFES definitions and guidelines and those used by states and districts, as will be seen in the two case studies.

The initial response in the United States to the COVID-19 pandemic in March 2020 was to cancel all in-person instruction for the remainder of the 2019–20 school year; since then, U.S. schools have had to implement a variety of learning models, i.e., remote, synchronous, asynchronous, hybrid, and in-person (Nickerson & Sulkowski, 2021).

The National Forum on Education Statistics (2021) responded by publishing a companion guide to their 2018 guide. The purpose of the 2021 guide is to provide guidance on best practices for the collection, reporting and usage of attendance data when virtual education is being conducted. The 2021 guide describes a movement away from a narrow focus on the traditional "seat time" conceptualization of attendance relevant to in-person learning to a broader focus that considers attendance, participation, and engagement that could be relevant to a variety of learning models. The guide also provided examples of operational definitions of these constructs as they are being used at state and local levels to monitor student "attendance" data during the pandemic. Examples of these additional metrics include tracking participation or engagement rather than traditional attendance; expanding the definition of "checking in" to include online-meeting attendance, turning in work, and telephone calls with school staff; and expanding attendance/absenteeism codes to include such reasons as risk avoidance, quarantine, or preference for remote learning. In practice, many U.S. schools have expanded their attendance tracking during the pandemic to include measures of engagement and participation as the case studies will demonstrate.

Prior to the pandemic, the average daily attendance (ADA) rates in U.S. schools, defined as the average percent of enrolled students in attendance during the prior year, were approximately 95% for elementary schools, 92% for secondary schools, and 94% for elementary and secondary schools combined (National Center for Education Statistics, 2019a). In the fall 2020 ADA rates were 92% for elementary school students, 90% for middle school students, and 89% for high school students (Carminucci et al., 2021), reflecting the impact of the pandemic.

State plans for accountability, which must be submitted to the USDOE on an annual basis, also capture the ways in which states propose to increase active engagement with students and how support services are provided. In these plans, many schools are using a tiered approach, such as a Multi-Tiered System of Supports (MTSS)

framework, to address student absenteeism and provide services to students who are chronically absent (National Association of School Psychologists [NASP], 2022). Several state departments of education (Connecticut, Illinois, Louisiana, New Jersey, New Mexico, Tennessee, and Washington) endorse the use of a tiered system of supports and provide resources on their websites to support schools in its implementation (e.g., Connecticut State Department of Education, 2017).

The most recent OCR biennial publicly available CA data were collected during the 2017–2018 school year, prior to the pandemic. The data are noteworthy in several ways. First, the data revealed that over eight million students in the United States were CA. In addition, while the overall CA rate in the United States was 16%, CA rates were highest for students who were Native American (29%), Black (23%), with disabilities (23%), and Hispanic (17%). The data also revealed that 27% of schools had extremely high (≥30%) or high (20–29%) CA rates and over 50% of students who were CA attended those schools (Attendance Works and Everyone Graduates Center, February 2021). Taken together, these data reveal that CA in the United States persists at an elevated level, is *not* equally distributed across student groups or schools, and a greater percentage of students in certain groups and attending certain schools are at disproportionately greater risk of experiencing CA and the negative outcomes associated with it.

Although national data are not currently available, data from several diverse states (i.e., Connecticut, Michigan, Ohio, Virginia, and California) indicate that CA rates for the 2021–2022 school year have at least doubled compared to pre-pandemic levels (Chang et al., 2022). Although the elevated CA rates reported at all levels (i.e., national, state, district, and school) since the start of the pandemic include absences due to COVID-related illness and quarantine and an unprecedented mix of remote learning, in-person learning, and hybrid (i.e., combinations of remote and in-person) learning, it's also the case that the collection and reporting of data, including chronic absenteeism rates, were disrupted (U.S. Department of Education, n.d.). These factors need to be considered in interpreting results.

2.2 Attendance/Absenteeism Data Usage at the National Level

As mentioned earlier, the OCR uses CA and related data (e.g., truancy, suspensions, and expulsions) to determine and redress any civil rights violations that the data reveal. Also as mentioned earlier, since the passage of ESSA, CA data are used in most U.S. states as a fifth indicator of school quality. In addition to their usage by the OCR and as ESSA indicators, these data are used by other DOE offices. For example, the Office of Special Education and Rehabilitative Services (OSERS) in the USDOE monitors these indicators specifically as they apply to students with disabilities.

Attendance data are utilized to calculate various other metrics such as average daily attendance. Absenteeism data also are subsequently used to calculate various metrics, such as chronic absenteeism rates and truancy rates, the latter being defined as the number of days or percent of unexcused/unauthorized absences.

The USDOE makes collected data publicly available in numerous ways, such as providing access to data sets, data tables, reports such as the annual *Report on the Condition of Education*, reader's guides, glossaries, publications such as *At-A-Glance* and *Data Point*, guides to additional resources, and websites such as *Ed Data Express* (https://eddataexpress.ed.gov). As a result, the data are frequently used by policymakers, researchers, state departments of education, media outlets, regional offices

Table 3 Examples of U.S. Attendance/Absenteeism and Related Data Recorded, Reported and Used at the National Level*

Category	Type of Data Collected
School & District Characteristics	Total number of students enrolled in school*
Attendance	Chronic student absenteeism rates, including excused and unexcused absences* Average daily attendance rates
Discipline	K-12 students who received one or more suspensions*(in-school suspensions; out-of-school suspensions) Preschool and K-12 students expelled*
Harassment and Bullying	Number of reported allegations of harassment or bullying of K-12 students based on sex, race, color, or national origin; disability; sexual orientation; religion Number of K-12 students reported as harassed or bullied based on sex, race, color, or national origin; disability* Whether a local education agency (LEA) has a written policy or policies prohibiting harassment or bullying of students based on all the following: sex, race, color, national origin, or disability
Pathways to College and Career	High school graduation rates* High school drop-out rates* Number of students ages 16–19 years who participated in LEA-operated high school equivalency exam preparation program* Number of K-12 students retained by grade* Whether the school is connected to the Internet through fiber-optic connection Whether the school has wi-fi access in every classroom Whether the school allows students to take home school-issued devices that can be used to access the Internet for student learning Whether the school allows students to bring to school student-owned devices that can be used to access the Internet for student learning Number of wi-fi enabled devices provided by the school to students for student learning use
Teachers and other personnel (funded with federal, state, and/or local funds)	Number of FTE counselors Number of FTE psychologists Number of FTE social workers Number of FTE nurses

Notes: Source – Office of Civil Rights Data Collection and ED*Facts* Initiative; * = disaggregated by race, sex, disability status, English learner status

of education, school districts, local schools, other organizations, and the public. Publicly available data allow for secondary analyses by external organizations, such as grade level comparisons of student attendance by instructional model (Carminucci et al., 2021); comparisons of CA rates by state, district, school, or student subgroup (Hamilton Project, 2021); and nationwide CA levels by school concentration of poverty (Attendance Works and Everyone Graduates Center, 2021). In summary, the data collected by the USDOE are utilized in a variety of ways, both internally by multiple departments within the USDOE as well as externally by multiple entities. Table 3 includes a listing of attendance/absenteeism and related data that are recorded, reported, and used at the national level in the United States.

With the national perspective serving as a foundation, we now provide case studies for two states – Connecticut and Indiana – in our search for consistency in attendance data recording, reporting, and utilization.

3 Case Study I: Connecticut

Connecticut is a state in the northeastern part of the United States with a population of approximately 3.6 million people (U.S. Census Bureau, 2021). Connecticut has a four-year high school graduation rate of 88.4%, compared to the national graduation rate of 85.3% (U.S. News & World Report, 2021). As of School Year (SY) 2022, Connecticut's student body consists of a variety of racial/ethnic groups with 48.6% White, 29.0% Hispanic/Latino, 12.6% Black, 5.1% Asian, and 4.3% 2 or more races (Connecticut State Board of Education, n.d.). Approximately 16.7% of students receive special education support, 8.8% are English learners, and approximately 40.6% are eligible for free or reduced lunch. According to U.S. News & World Report (2021), Connecticut ranks third out of the 50 states for its pre-kindergarten to 12th grade educational system, with the ranking based on student enrollment in pre-kindergarten, public school graduation rates, and standardized test scores.

3.1 Connecticut's Educational Context

As of SY 2021, Connecticut has 205 school districts with 1,507 schools and educational programs that serve 513,079 students in pre-kindergarten through 12th grade. Under Connecticut law, children between the ages of five and eighteen are required to attend school. Although Connecticut requires school attendance, it does not require public school attendance.

3.2 Attendance/Absenteeism Data Recording and Reporting in Connecticut

Definitions. In 2008 the Connecticut State Board of Education adopted the attendance definitions specified below for "In Attendance" and "Absent." In 2012, the State Board further specified the excused and unexcused absence categories (Connecticut State Department of Education, 2013). It is important to note that these definitions do not preclude districts from establishing their own definitions for local use such as for the purposes of grading or determining eligibility for extracurricular activities. However, when reporting student attendance to the Connecticut State Department of Education, districts must adhere to the following definitions (Connecticut State Department of Education, 2008):

> In Attendance: A student is considered to be "in attendance" if present at his/her assigned school, or an activity sponsored by the school (e.g., field trip), for at least half of the regular school day. Students who are tardy but are present for at least half of the regular school day, are considered in attendance.

> Absent: A student who does not meet the definition for in attendance is deemed to be absent.

In the Connecticut general statutes, a child is identified as truant if the accumulation of unexcused absences reaches one of two thresholds: the child has four unexcused absences in a month (30 consecutive calendar days) or 10 unexcused absences in a school year (chapter 168, section 10–198a). A child is identified as chronically absent (CA), when a child is enrolled in school and their total number of absences at any time during the school year is equal to or greater than 10% of the total number of days that the student has been enrolled in that school for that school year (chapter 168, section 10–198c).

Connecticut's CA rate includes excused absences, unexcused absences, and out-of-school suspensions (Connecticut State Department of Education, 2017). The state's CA rate for SY 2022 was 24.9% compared to the 2018–19 school year, the last full pre-pandemic year for which the CA rate was 10.4%. The 14.5% difference represents an approximately 134% increase in the CA rate associated with the pandemic. Rates higher than the overall average rate were reported for students who are homeless (57.4%), free meal eligible (39.6%), students with disabilities (35.3%), students with high needs (34.9%), English learners (34.0%), and reduced-price meal eligible (26%) (Connecticut State Department of Education, 2022).

Board policy delineates two levels of excused absences (described below) for which school staff must receive or generate documentation for each instance of absence. The absence levels correspond with the total number of days absent within the school year.

> Absent (Excused – Level 1): A parent or guardian may excuse the first nine absences in a school year *for any reason they approve*. The school must collect a note, or docu-

mentation of a live or technology mediated in-person explanation or conversation with the school nurse, which includes the absence dates, reason for absences and signature, from the parent or guardian and staff member receiving the excuse.

Absent (Excused – Level 2): Upon the 10th and any subsequent absence, Level 2 criteria apply for what may be considered an excused absence. The parent must provide a note and, in some cases, additional documentation for the following reasons:
– Student illness. (Note: to be deemed excused, an appropriately licensed medical professional must verify all student illness absences, regardless of the absence's length.)
– Student's observance of a religious holiday.
– Death in the student's family or other emergency beyond the control of the student's family.
– Mandated court appearances (additional documentation required).
– The lack of transportation that is normally provided by a district other than the one the student attends (parental documentation is not required for this reason).
– Extraordinary educational opportunities pre-approved by district administrators. (Opportunities must meet certain criteria.)

The Connecticut guidelines for excused and unexcused absences (2013) also explain how Level 1 and 2 absences could be applied to family holidays taken during the school year when school is in session. If, for example, the family holiday involved days 8–13 of a student's absences, days 8 and 9 would be considered Level 1 absences and counted as excused. However, days 10–13 would be Level 2 absences and counted as unexcused. In other words, the criteria for Level 2 excused absences are more stringent, and family holidays during the school year that involve a 10th day or more of absences during a school year would not meet Level 2 criteria.

In addition to excused absences, Board policy specifies unexcused absences and disciplinary absences. They are defined as follows:

Absent (Unexcused): An absence is considered unexcused unless it either meets the definition for an excused absence or the absence meets the definition of a disciplinary absence.

Absent (Disciplinary): Students who are absent because of school or district disciplinary action (out-of-school suspensions or expulsions) are considered absent.

During the 2021 legislative session, Connecticut passed Public Act 21–46, An Act Concerning Social Equity and the Health Safety and Education of Children. Starting in the 2021–2022 school year, this law allows for students in grades kindergarten through 12th grade to take up to two non-consecutive mental health wellness days to attend to their own "emotional and psychological well-being in lieu of attending school." The mental health wellness days are considered excused absences regardless of Level 1 or Level 2 status if appropriate parental permission for the absences is provided.

In addition to the creation of mental health wellness days, Public Act 21–46 required that the State Board of Education amend the definitions of excused and unexcused absences to include student engagement during virtual learning. Connecticut's approach to amending these definitions was grounded in the state's 2008 policy that considered a student "in attendance" if the student was in school or an

activity sponsored by their school for at least half of the regular school day. Thus, the state adapted this policy to specify that a student working remotely could be considered "in attendance" on a particular day if the total time spent on specified activities equaled at least half the school day (Connecticut State Department of Education, 2021). These activities include synchronous virtual classes, synchronous virtual meetings, time logged into electronic systems, and assignment submission/completion. Further, since students could demonstrate presence through asynchronous methods (e.g., assignment submission/completion) at any time during the day, including after school hours, and given that some students may not be able to participate in synchronous virtual classes, the Connecticut State Department of Education strongly recommends that attendance on remote days be recorded on the following day, so all students have a chance to submit/complete work. When all schools are expected to provide full-time, in-person learning for all students, virtual learning may be used in instances related to COVID-19 (i.e., isolation, quarantine, local outbreaks, individual elevated risk).

During the 2020–2021 school year, the Connecticut State Department of Education started to require districts to submit monthly attendance data on a temporary basis to allow for more timely data-based decision-making due to the pandemic. For example, as of October 2022, the year-to-date CA rate for all students was 22.7%, with the highest rates indicated for students who experience homelessness (49%), students who are free meal eligible (31.4%), and students with disabilities (30.3%) (Connecticut State Department of Education, Monthly Attendance Report). The Connecticut State Department of Education officially tracks attendance and absenteeism data statewide at the end of each school year. At that time, schools are required to report per student the number of days of membership within the district, the number of days in attendance, and whether the student met the criteria to be considered truant during the school year.

3.3 Attendance/Absenteeism Data Usage in Connecticut

In Connecticut attendance/absenteeism data are primarily used for district and school reporting, accountability systems, and development or maintenance of attendance teams. District attendance reports include disaggregated attendance data by several key variables: race/ethnicity, gender, special education status, free/reduced price meal eligibility, English learner status, grade level, and school. Attendance data also are displayed longitudinally by school year and by town. Although the primary purpose of this reporting is to identify schools needing additional support for chronic absenteeism challenges, a secondary purpose is to highlight schools successfully addressing chronic absenteeism who can serve as exemplars to others.

Connecticut law also requires schools to have policies and procedures in place to address truancy. Once a student becomes truant, the school is required to meet with the student's parents within 10 school days. During the meeting, school staff are to work with the parents and students to develop a plan for the student's successful

return to school. If there are barriers that exist "beyond the school walls," then the school is expected to work with community agencies through the community's Youth Service Bureau to provide the necessary supports to the student and their family. Particularly noteworthy for its discontinuation of a widespread practice in response to truancy, the Connecticut legislature passed Public Act (P.A.) 16–147, An Act Concerning the Recommendations of the Juvenile Justice Policy and Oversight Committee, in January of 2017 that forbids students to be referred to the juvenile court system due to defiance of school rules or truancy. The law became effective in August 2017. Furthermore, Section 9 of P.A. 16–147 also required the Connecticut State DOE to identify effective truancy interventions for implementation by local and regional boards of education. These interventions were compiled and are available on the Connecticut State DOE website in the catalog titled *Catalog of Truancy Intervention Models* (2018).

Data at the state, district, and school levels are also reported on an annual basis in publications referred to as "report cards." Report cards can be accessed on the Connecticut state website (https://edsight.ct.gov) and on district and school websites. These report cards summarize a wealth of educational data, including the percentage of students chronically absent and the suspension/expulsion rates for the previous five years. Attendance data are further disaggregated by demographic subgroups.

More importantly from a prevention perspective, all these data are used to guide the work of Attendance Review Teams. According to An Act Concerning Chronic Absenteeism (2015), districts and schools are required to create and maintain district- or school-level attendance review teams to address CA under specific conditions. District attendance review teams must be created if the overall district CA rate is 10% or higher. A district attendance review team also may be created if the district has two or more schools with a school-wide CA rate of 15% or higher, even if the district-wide CA rate is under 10%; however, a school attendance review team may instead be created under this criterion. Last, each school within a district with a district CA rate of 15% or higher must have a school attendance review team at each of the schools. There are three main functions of the attendance review teams: (a) promote shared accountability and continuous improvement; (b) disaggregate, analyze, and use data to inform decision-making, and (c) generate a systemic response and improve policy and practice (Connecticut State Department of Education, 2017).

The attendance review teams use data to determine interventions within an MTSS framework that focuses on prevention (Tier 1) and early intervention (Tier 2) to minimize the number of students in need of intensive interventions (Tier 3) and to monitor student progress (Connecticut State Department of Education, 2017). In addition, local data are used beyond the context of schools. For example, the data provide a resource for district messaging about attendance to student caregivers. Attendance data are also used for outreach campaign efforts with community partners such as broad community messaging and opportunities to engage the community in addressing barriers to regular student attendance.

As mentioned earlier, Connecticut also uses their attendance data as part of their ESSA metrics for accountability (U.S. Department of Education, 2019). Indicator four in the state's ESSA plan states that the CA rate should not exceed 5% and points are awarded or rescinded based on deviance from that rate. Therefore, government authorities use attendance data for evaluating district and school performance as well as for educational funding.

As is true at the national level, Connecticut provides public access to a wealth of educational data. Pertinent to this paper, attendance, absenteeism, and other relevant data are accessible to researchers, policy makers, practitioners, external organizations, local authorities, and other interested individuals (see https://edsight.ct.gov).

4 Case Study II: Indiana

Indiana is a state in the Midwestern part of the United States with a population of approximately 6.8 million people (U. S. Census Bureau, 2021). Indiana has a four-year high school graduation rate of 88.1%, compared to the national graduation rate of 85.3% (U.S. News & World Report, 2021). Indiana's student body includes a variety of racial/ethnic groups with 66.1% White, 13.2% Hispanic, 12.5% Black/African American, 5.2% Multi-racial, 2.8% Asian, 0.2% Native American, and 0.1% Hawaiian or Pacific Islander (Indiana Department of Education). Approximately 45.9% of Indiana's students are economically disadvantaged, 15.5% receive special education support, and 6.6% are English learners. Indiana ranks ninth out of the fifty states in the United States with the ranking based on student enrollment in pre-kindergarten, public school graduation rates, and standardized test scores (U.S. News & World Report, 2021).

4.1 Indiana's Educational Context

As of October 2021, Indiana has approximately 1,870 schools in 403 school districts that serve 1,110,677 students in pre-kindergarten through 12th grade. Under Indiana Code (IC) § 20-33-2-6, children between the ages of 7–18 are required to attend school. In the state of Indiana attendance is taken seriously, and efforts are underway to improve and offer better options for school corporations, students, and stakeholders. In Indiana, the term "school corporation" refers to any corporation that has the authority by law to establish public schools and levy taxes for their maintenance.

Indiana Code §20-30-2 and 20-33-2 govern the requirements for attendance and its reporting. According to these codes, all schools – regardless of modality – have statutory obligations to respond to attendance, in particular chronic absenteeism and truancy, proactively and retroactively.

4.2 Attendance/Absenteeism Data Recording and Reporting in Indiana

In 2013 the Indiana state legislature passed IC 20-19-3-12.2 that directed the Indiana DOE to make reduction in absenteeism a priority and provided the currently used definitions of chronic absenteeism and habitual truancy in the state. The law also required that all schools with a "B-grade" or lower based on their accountability metrics to develop a plan to reduce CA as part of their school improvement plan. The definitions of CA and habitual truancy that follow are based on the 2013 legislation.

Definitions. Any individual who is at least seven (7) years of age and less than eighteen (18) years of age is bound by *compulsory attendance* requirements until the individual either graduates, becomes eighteen (18) years of age, or becomes at least sixteen (16) years of age and meets the requirements to withdraw from school before graduation. Indiana defines in attendance, habitual truancy, and chronic absenteeism as follows:

> In Attendance: A student is in attendance when they are physically present and enrolled in a school or another location where the school's educational program is being conducted during regular school hours on a day in which the educational programming is being offered.
>
> Habitual Truancy: Any student who is enrolled at a public or nonpublic school and accumulates at least ten (10) unexcused absences during a school year is considered habitually truant.
>
> Chronic Absenteeism: Any student who is absent from school for 10% or more of a school year for any reason is considered chronically absent.

When calculating attendance data, Indiana only includes students who spend most of the school year enrolled in the same school. For the 2020–2021 school year, the most recent year for which data are publicly available, Indiana's overall CA rate was 18.5% (Indiana Department of Education, n.d.). Like the CA rates at the national level and in Connecticut, Indiana's CA rates also vary across student groups. Student groups with higher CA rates than the overall average include Blacks at 38%, Native Hawaiian or Other Pacific Islander at 28%, Hispanic at 25%, Multiracial at 25%, and American Indian at 22%.

The Indiana Department of Education (DOE) reviews school calendars to determine whether a school met the statutory requirement to provide at least 180 days of instruction during a school year. Indiana law also requires the following:

– Each governing body of a school corporation and charter school *must* have an *attendance policy* that outlines, at a minimum, the definitions and *conditions for excused and unexcused absences*. While this is not required for nonpublic schools, the Indiana Department of Education strongly recommends such schools have an attendance policy that aligns with these requirements.

– Each public and nonpublic school *must* maintain an accurate daily record of attendance for each student. There is an expectation that an accurate daily record of attendance includes an approach to accurately capture virtual attendance.

– Within 15 days of a new semester, each public high school principal must compile a list of names and last known addresses of students who did not graduate and are no longer enrolled at the school. The list must be made available to local community college and any training program for dropouts.

Beginning with the 2020–2021 school year, schools submit student-level information to the state through the Data Exchange system on an established cycle. There are options for data correction and updates made available to schools. From time to time, as during the pandemic, new codes for tracking and reporting via student information systems have been established.

Schools are expected to track daily student attendance from the beginning of the school year using the following eight codes, several of which were revised or added due to changes in instruction in response to the pandemic and are indicated as (NEW):

In Attendance: This code should be used when a student is considered "in attendance" at the physical school building, pursuant to the local attendance policy. This code should be used for non-virtual students. (NEW)

Virtual: This code should be used when a student is considered "in attendance" at the virtual program or virtual school, pursuant to the local attendance policy. This code should be used for virtual students. (NEW)

Virtual Due to COVID-19: This code should be used when a school must provide virtual instruction in lieu of in-person instruction due to COVID-19, and a student is considered "in attendance" pursuant to the local attendance policy. It refers to any activities in which a student is engaged in their educational instruction, such as packet pick-up, use of a one-to-one device, emailed instruction, etc. This code should be used for non--virtual students. (NEW)

Excused Absence: This code should be used when a student is not "in attendance" and such absence is deemed "excused," pursuant to the local attendance policy. This code should be used for both virtual and non-virtual students.

Unexcused Absence: This code should be used when a student is not "in attendance," and such absence is deemed "not excused," pursuant to the local attendance policy. This code should be used for both virtual and non-virtual students.

Exempt: This code should be used when a student is not "in attendance" but is participating in one of the activities that is exempt by statute from consideration as an "absence." This code should be used for both virtual and non-virtual students. (NEW)

Suspended: This code should be used when a student has been suspended pursuant to the local discipline policy. This code should be used for both virtual and non-virtual students. (NEW)

Expelled: This code should be used when a student has been expelled pursuant to the local discipline policy. This code should be used for both virtual and non-virtual students.

Indiana recently introduced a Model Attendance framework. According to this framework, students could be considered "model attendees" if they fulfill criteria for either "persistent attendance" or "improved attendance" (Indiana Department of Education, n.d.-a). *Persistent attendance* is defined as in attendance at least 96% of enrolled days during a school year. *Improved attendance* is defined as an increase of at least three percentage points from a student's prior year's attendance to the current school year. Indiana has set a long-term goal of having at least 90% of students achieving model attendee status. To achieve this goal, Indiana set interim targets each year for model attendance. These annual interim targets refer to expected progress needed to achieve the state's long-term goal for model attendance. For 2021 the target was set at 76.3%, for 2022 the target is 79.7%, and for 2023 the target is 83.1%. The actual data, including the disaggregated data by student groups, can be accessed on the Indiana DOE website (Indiana Department of Education, n.d.-b).

Reporting for students who are habitually truant. Each superintendent or attendance officer must report a student who is habitually truant to an intake officer of the juvenile court or the Indiana Department of Child Services to proceed in accordance with Indiana Code § 31-30 through Indiana Code § 31-40. Any student between the ages of thirteen and fifteen who is habitually truant may *not* be issued an operator's license or learner's permit to drive a motor vehicle until the student is at least eighteen years of age. Each school or school corporation must report information to the Indiana Bureau of Motor Vehicles to indicate a student's ineligibility for an operator's license or learner's permit due to the student's habitual truancy. However, the school may periodically review the student's eligibility.

Reporting for chronically absent students. Each superintendent or attendance officer must report a student that is habitually absent from school to an intake officer of the juvenile court or the Indiana Department of Child Services to proceed in accordance with Indiana Code § 31-30 through Indiana Code § 31-40. These legal requirements apply to schools, regardless of whether instruction and learning occurs in an on-site or off-site context.

4.3 Attendance/Absenteeism Data Usage in Indiana

In Indiana, the attendance/absenteeism data are used for funding purposes and the assessment of schools' performance. The data are analyzed by the Indiana DOE's Data Accountability team on an annual basis. Data are made publicly available, including trend data, to stimulate improvement and allow for comparisons. The data also are used to monitor rates of attendance/absence, to amend policies on school attendance and absence when needed, and, in some cases, to issue sanctions such as penalties for non-attendance. As mentioned earlier, such sanctions or penalties could include ineligibility for a driver's license or learner's permit for habitual truancy or a referral to juvenile court or to the Department of Child Services for habitual truancy or habitual absenteeism. With partnerships and collaboration, more of the

attendance and absenteeism data are being used to study practices and update evaluations, school policies, and programs.

As is true at the national level and for the state of Connecticut, Indiana also provides public access to a wealth of educational data, including the multiple types of attendance and absenteeism data described above. In addition, annual performance and progress reports on each school in Indiana, similar to Connecticut's report cards, are accessible through the Indiana Department of Education's website (https://inview.doe.in.gov) and the respective corporation's and school's websites. These reports also provide data disaggregated by student subgroups and include state averages for comparison purposes.

5 Discussion

Our quest for consistency in attendance data recording, reporting, and utilization in the United States led us to review educational policies and practices related to attendance data at the national level and for two representative U.S. states, Connecticut and Indiana. As can be seen in Table 4, states are complying with all national expectations. However, our in-depth case study analyses revealed inconsistencies in the ways in which attendance data are measured and used. This was a clear gap in the analysis for which future work is needed.

Highlights of major commonalities and differences are summarized in the next sections, followed by a discussion of their implications for research, policy, and practice.

5.1 Collection of Both Attendance and Absenteeism Data

Schools in the United States collect both attendance and absenteeism data. Collecting both types of data is important because a sole focus on absences limits the opportunity to explore such metrics as "persistent" or "satisfactory" attendance, and "improved" attendance. A frequently used heuristic for satisfactory attendance defines it as being in school at least 95% of the time (e.g., Attendance Works, 2016). Indiana defines persistent attendance, a similar construct, as in school at least 96% of the time. However, there currently is no gold standard for the definition of "persistent" or "satisfactory" attendance, providing an opportunity for researchers to systematically investigate various criteria for persistent or satisfactory attendance to determine which would be most strongly associated with positive student outcomes.

"Improved attendance" as a metric also is beneficial because it provides policy makers, practitioners, and researchers with opportunities to identify which students have improved their attendance over a specific time period. Indiana's criteria for improved attendance requires an increase of at least three percentage points from a student's prior year's attendance to the current school year, but we are unaware

Table 4 Cross-Case Analysis of U.S. Attendance Data to Record-Report-Use

Required	National			Connecticut			Indiana		
	Record	Report	Use	Record	Report	Use	Record	Report	Use
Attendance*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Average Daily Attendance	✓	✓	✓	✓	✓	✓	✓	✓	✓
Absenteeism*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Chronic absenteeism*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Truancy (unexcused absences)*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Suspensions*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Expulsions*	✓	✓	✓	✓	✓	✓	✓	✓	✓
High school graduation rates*	✓	✓	✓	✓	✓	✓	✓	✓	✓
High school dropout rates*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Excused absences	**	**	**	✓	✓	✓	✓	✓	✓
Absent (Excused) – Level 1	—	—	—	✓	✓	✓	—	—	—
Absent (Excused) – Level 2	—	—	—	✓	✓	✓	—	—	—
Absences – Mental Health Days	—	—	—	✓	✓	✓	—	—	—
Model attendance	—	—	—	—	—	—	✓	✓	✓
Persistent attendance	—	—	—	—	—	—	✓	✓	✓
Improved attendance	—	—	—	—	—	—	✓	✓	✓

Notes: * = also disaggregated by student subgroups; ** = included in calculating chronic absenteeism; dashes in cell = not required

of any research that provides support for this criterion. A focus on improved attendance, however, would be helpful in monitoring student progress, regardless of the level of severity of student absenteeism at the start of the designated time span. Conversely, a metric such as "increased absenteeism" or "decreased attendance" could help identify the students whose attendance has deteriorated over a specific time period. To our knowledge, neither of these metrics is being used at the national level nor by the two states for which we conducted our case studies.

5.2 Chronic Absenteeism as a Metric

We also found consistency across the three cases in the definition of CA. The USDOE, Connecticut, and Indiana all define CA as being absent from school 10% or more of the time. The definition includes all absences: unexcused, excused, and absences due to the disciplinary actions of a school. The inclusive definition for CA is relevant because *all* absences, regardless of reason, limit a student's ability to benefit from

the educational, social, and language enrichment opportunities available in school (Kearney & Graczyk, 2020).

There are, however, differences in the frequency of CA data collection. The Office of Civil Rights in the USDOE collects CA data on a biennial basis; Connecticut and Indiana collect CA data on an annual basis for accountability purposes. In addition, Connecticut is also temporarily tracking CA data monthly during the pandemic. Potential barriers to more frequent data collection would include the technology capabilities in schools to monitor attendance and absenteeism data and the interface of school level student information systems with systems used at the regional, state, and national levels. That said, Connecticut has found a way to overcome these barriers through EdSight, their interactive data portal for public school districts, schools, and programs.

5.3 Disaggregation of Chronic Absenteeism Data

All three entities disaggregate their CA data by student groups and the disaggregated data, described in a previous section, reveal significant discrepancies in CA rates across groups. According to national and state level data, students at greatest risk for CA include students who are Black, Hispanic, disabled, and living in poverty. In other words, across all three data sets, these student groups are at disproportionately greater risk for the negative outcomes associated with poor attendance.

Both Indiana and Connecticut have taken positive action to address chronic absenteeism and the disproportionality in their CA rates. Until the start of the pandemic, CA rates in Connecticut had been showing a steady decline since 2012. In addition, Connecticut law, as described earlier, requires that School Attendance Review Teams be established at district and/or school levels when CA rates reach certain thresholds. Both Connecticut and Indiana also have been providing guidance to schools on evidence-based prevention and intervention strategies to improve student attendance (Connecticut State Department of Education, 2017; Lochmiller, 2013). Connecticut has utilized an MTSS framework as an organizing structure for attendance review teams (Connecticut State Department of Education, 2017). At the national level, the Regional Educational Laboratory (REL) West, housed within the Institute of Education Sciences in the USDOE, provides a resource titled *Helpful Links about Multi-Tiered Attendance Interventions* to help schools and districts use a multi-tiered approach to school attendance (REL West, n. d). Other states using an MTSS framework for attendance include Illinois, Louisiana, New Jersey, New Mexico, Tennessee, and Washington.

5.4 Taxonomy of Attendance and Absenteeism Codes

As mentioned earlier, in 2009 the National Forum on Education Statistics (NFES) provided operational definitions for excused and unexcused absences. In 2018 the NFES also provided a taxonomy of 16 mutually exclusive attendance and absenteeism

codes organized under the categories of "Present/Attending" and "Absent/Not At-tending." We present those codes in Table 2.

Both Connecticut and Indiana use many, but not all, of the codes in the NFES tax-onomy. There also are differences. While the definitions for excused and unexcused absences in Indiana are like the NFES definition, Connecticut differentiates between unexcused absences and absences due to disciplinary actions taken by the school. In addition, Connecticut categorizes excused absences by levels, depending on the number of days a student has been absent. Level 1 absences refer to the first nine absences in a school year and are considered "excused" regardless of the reason a parent provides for the absences. Level 2 absences, covering absences of ten or more days in a school year, require that more stringent criteria be met. Although we appreciate Connecticut's efforts to intensify requirements for absences that go be-yond the approximately 5% threshold that distinguishes Level 1 and Level 2 excused absences, we are not aware of any research that supports this practice.

Indiana does not differentiate levels in their absenteeism classifications. Howev-er, Indiana has gone beyond the categories used by the USDOE and Connecticut by tracking "Model Attendance" data that include "Persistent Attendance" and "Im-proved Attendance."

The onset of the pandemic heightened the need to reflect and revise the way in which schools viewed attendance. Moving away from the "seat time" model of attendance most relevant to in-person learning, the USDOE recommended a broader focus that included attendance, participation, and engagement (National Forum on Education Statistics, 2021). Connecticut and Indiana modified their attendance codes to include codes for virtual (remote) learning that aligned with the USDOE recommendations. During virtual learning, Connecticut counts a variety of activities toward attendance, including synchronous classes, synchronous virtual meetings, time logged into electronic systems, assignment submission/completion, and asyn-chronous activities (e.g., time a student utilizes to complete assignments outside of school hours). Indiana's codes are less specific, but during COVID-19 related virtual learning Indiana schools can count any activities in which a student is engaged in their educational instruction toward attendance. We believe that the inclusion of engagement metrics is beneficial whether students are in remote, in-person, or hybrid learning environments.

5.5 Defining and Responding to Truancy

In the United States, each state is responsible for defining truancy and procedures for schools to follow when a student's truancy reaches a certain threshold. Both Con-necticut and Indiana define truancy as unexcused absences, and both use a threshold of ten or more unexcused absences in a school year as a point at which schools must address a student's truancy. In addition, Connecticut also requires schools to act when students have four or more unexcused absences in a month. Both states spec-ify how schools are to respond. A difference between the two states is that Indiana

98 schools could refer students to the court system, while Connecticut law forbids court involvement. In our experience, when a referral to the juvenile justice system is an option, most school staff view it as a last resort.

5.6 National, State, District and School Annual Reports of Attendance and Absenteeism Metrics

The USDOE, Connecticut and Indiana provide publicly available data about education in a myriad of ways, as described in previous sections. These annual reports provide valuable information regarding a variety of attendance and absenteeism metrics. We believe that the data included in these reports and the multiple pathways to access the data are beneficial for several reasons. First, the reports provide meaningful information in an easy-to-read format for a variety of stakeholders. Second, having multiple pathways to the data allows for improved visibility and access to the data. Third, requiring schools, districts, and states to provide the data included in the reports also enhances accountability. In our experience, the information in these reports is widely used by a variety of stakeholders, including prospective home buyers in a school's catchment area.

5.7 Future Directions for Research, Policy, and Practice

Taken together, our investigation highlighted a variety of practices, procedures, and issues that are relevant to research, policy, and practice. Considering these, we make the following recommendations:

1. Researchers, policymakers, and practitioners should utilize measures of attendance and absenteeism in their work. In addition, as mentioned earlier, the onset of the pandemic required schools to restructure their view of attendance by moving away from the "seat time" model to one that focuses more heavily on engagement. Future research is needed to provide empirically supported operational definitions of constructs such as persistent or satisfactory attendance, improved attendance, engagement, and chronic absenteeism that are linked to short-term outcomes such as academic achievement and long-term outcomes such as college and career readiness. In addition, it would be important that future research take a bioecological perspective and one that considers other factors such as functional impairment (Kearney, 2022; Melvin et al., 2019).

2. Schools, districts, regions, states, and national departments of education should routinely disaggregate their absenteeism data to identify groups at heightened risk of school attendance problems. National and state level data in the United States clearly indicate that disproportionalities exist. States and national departments of education should hold schools accountable to redress identified disproportionalities, and policy makers at all levels need to ensure that educators have the professional learning opportunities, tools, and resources they need to do this work effectively.

3. A tiered framework, such as an MTSS framework, could serve as an organizing structure in which to embed evidence-based practices and policies to promote attendance for all students (e.g., Kearney & Graczyk, 2014, 2020). However, research is needed to determine the factors that influence implementation of the framework, such as fidelity, and how implementation of the framework influences student, family, and school level outcomes.

4. The NFES taxonomy with its 16 mutually exclusive categories could serve as a useful resource when development or refinement of an attendance and absenteeism coding system is warranted.

5. Although we found similarities in the definition of truancy used by Connecticut and Indiana, truancy is not defined consistently across the 50 U.S. states (Gentle-Genitty et al., 2015). Without a consistent definition of truancy, researchers, practitioners, and policy makers are constrained in their ability to conduct comparative analyses and in their efforts to prevent and intervene effectively to address truancy in the United States and internationally. It also is essential to note that truancy is a symptom of a much broader social problem and, as such, warrants interventions with an ecological perspective that incorporates a simultaneous focus on society, systems, schools, caregivers, and students (Gentle-Genitty & Taylor, 2021).

6. National, state, and local educational entities should provide the public with access to attendance and absenteeism data via multiple pathways and in a variety of forms. In the United States, for example, annual reports of school attendance and absenteeism data are available at the national, state, and local levels. Of particular relevance for the general public are publications such as Connecticut's school report cards and Indiana's school annual performance and progress reports that provide attendance, absenteeism, and other relevant data in easily digestible formats.

7. Schools need the technology that would allow them to access attendance data quickly so they can monitor and respond in a timely fashion to changes and trends in their data. Connecticut's system could serve as a model for the United States, other countries, regions, or states interested in pursuing technology that would allow for more frequent collection and utilization of attendance data.

5.8 Limitations

Although we searched extensively for information at the national and state levels to include in this paper, we acknowledge that we may have overlooked some relevant information to the purpose of this paper. Omissions could be due to our search procedures. Omissions also could be due to the challenges inherent in attempting to access specific elements from the multitudinous data sets, tables, and reports available. To help ensure accuracy in reporting, we did seek verification from representatives of the Connecticut State Department of Education and the Indiana Department of Education. At the national level we ensured accuracy by utilizing data compiled by the NCES and, when outside references were used, by verifying that the secondary analyses were conducted with data compiled by the NCES. In addition, we

reported on two out of the 50 U.S. states. The extent to which the results from these two states can be generalized to all 50 U.S. states limits external validity. However, reporting on all 50 states was well beyond the scope and space limitations of this article. As a result, we intentionally chose Connecticut and Indiana for our case studies because they represent states within different regions of the United States.

6 Conclusion

In the United States, the past decade has seen an upsurge in the recording, reporting, and usage of school attendance and related data at the national, state, and local levels. Multiple types of attendance and absenteeism data are publicly available and have helped to guide both policy and practice. We have attempted to highlight contributions at the national and state levels that could serve as springboards for international researchers, policymakers, practitioners, governmental and non-governmental organizations, and individuals in their efforts to improve attendance and address school attendance problems. Unfortunately, our review also revealed that disproportionalities across student groups stubbornly persist and must be redressed. Policies, research, and practice that focus on meaningful data utilization and effective preventative and strategic interventions across *all* student groups must be an explicit and critical focus at the international, national, regional, state, and local levels in the years to come.

Acknowledgement

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