Teacher «» Student
Data Link Project

Funded by the Bill & Melinda Gates Foundation and
conducted by the Center for Educational Leadership and Technology

Attendance Report

Introduction

Educators and policymakers have recognized for a long time that school attendance is of critical importance to student achievement. Forty-four state education departments collect some form of attendance data from school districts, as part of their statewide longitudinal database system. States use the attendance data to calculate attendance-based school funding formulas, and to inform the implementation of programs developed to promote school attendance, decrease truancy and enforce state compulsory attendance laws.

Today, as states grapple with the issues of teacher accountability and student performance, teacher and student attendance has taken on new significance. Federal laws and US Department of Education regulations, including those associated with the American Recovery and Reinvestment Act, Race to the Top, and ESEA waiver applications, demand that states expand their statewide longitudinal data base systems (SLDS) to not only track student scores on statewide tests throughout their K12 experience but also to establish teacher and principal performance systems that include student achievement outcomes and/or student growth data. At a minimum, this involves creating a solid teacher-student data link (TSDL) that includes new policies, teacher of record (TOR) definitions, timelines, implementation strategies, and roster verification and correction tools. The US Department of Education now also requires states to report TSDL information to them and encourages states to use teacher and student attendance data in establishing their TSDL model. The Data Quality Campaign emphasizes the importance of attendance data by citing it as one of four critical missing functions in state and local data systems. [1]

This report articulates the scope, challenges and progress underway in states towards incorporating student and teacher attendance into their teacher-student data link work.

Scope

Some states have made significant progress establishing the teacher-student data link over the past several years, in part with assistance from the Teacher-Student Data Link Project funded by the Bill & Melinda Gates Foundation and led by the Center for Educational Leadership and Technology (CELT) in partnership with the Data Quality Campaign (DQC). According to DQC's 2011 report, ***Strengthening the Teacher-Student Link to Inform Teacher Quality Efforts***, 24 states report having a TSDL link. However, the report continues, "these linkages were not implemented for high stakes use (e.g., evaluation, compensation, value-add). As a result, state and local data systems lack critical functions including the ability to:

- » Account for the contributions of multiple educators in a single course
- » Enable a teacher to review their roster for accuracy
- » Incorporate common instructional models found in schools including virtual classes, labs, and team teaching, and,
- » Link a student's attendance records with their teachers to track the actual number of days of instruction by a particular teacher.

The inclusion of the teacher and/or student attendance data in the TSDL model presents new challenges for states and their longitudinal data systems. The challenges can be related to the technical infrastructure, the data sets collected by the SLDS, the established processes, the gap between present and needed policy framework, and the capacities of school, district and state staffs.

Challenges

The fundamental issue is: if and how student attendance is collected. Tracking student attendance by course and by teacher requires period-by-period attendance collection. This collection process, when performed period-by-period, can also be used to confirm whether the teacher assigned to the course section is the one who taught the students during that period or day, as well as whether or not the student was present for the class. This information is vital to the TSDL—it can point out instances when another teacher has delivered course content and whether or not the student was present during the delivery of instruction. State education departments or other agencies often collect some sort of attendance data from every school district, but rarely is data reported at the course/period level. This can occur as part of overall state education data collection, as well as efforts to monitor truancy, chronic absences, and adherence to state compulsory education law. However, some states such as California, Illinois and Colorado do not collect attendance in their longitudinal databases.

Other data collection challenges include:

- Frequently schools/districts do not schedule classes on a course/period level in their elementary schools and are, therefore, unable to collect or report attendance at that level.
- Many state longitudinal database systems collect only summary daily attendance or summary student enrollment information, typically for funding purposes.
- Not all states have statewide course codes/catalogs which enable uniform reporting by districts and schools.
- Most states do not collect teacher attendance data; schools collect daily teacher attendance and report it to the district for calculating pay, vacation, sick leave, etc.

The importance of clear and appropriate policies cannot be overstated. Well-defined policies provide the essential framework for TSDL processes and are crucial to a successful TSDL implementation. Policy development should be a thoughtful, thorough and careful process that involves all critical stakeholders and considers all relevant factors. Although educators recognize the importance of having high-quality policies, development can be challenging.

Policy challenges:

- Establishing the detailed and comprehensive set of appropriate policies can be time consuming, complicated and fraught with political and practical issues.
- Incorporating these policies into the SLDS through business rules.
- Establishing processes for data verification, certification and correction.
- Ensuring that data is timely and accurate.
- Establishing appropriate "exceptions" policies related to issues such as home-bound instruction, virtual courses, etc.

Examples of policies include setting thresholds for the minimum proportion of time (days, hours, sessions, etc.) that the student must be present (i.e. in attendance) in the course as compared to the total time the course is in session for TSDL, determining whether there will be a teacher attendance minimum for TSDL, and defining and establishing rules for chronic absences.

State Progress

In polling states regarding their status on incorporating teacher and student attendance into the teacher student data link, we found some states, such as South Dakota and Nevada that are in the beginning stages of SLDS implementation and have not yet addressed incorporating attendance into the TSDL. Nevada collects student attendance data on a daily basis and has all the data necessary to link teachers and students; they assign a unique identifier to all teachers licensed in Nevada and collect data regarding credentials, course assignments and qualifications. Plans are underway to develop a teacher performance framework to be used to evaluate teacher effectiveness which will require that Nevada implement a system to link teachers to students within the next two years. Other states, such as Michigan, collect student attendance data but do not use it in their TSDL.

At this time Kentucky is in the pilot phase of establishing their TSDL model and has not made a decision regarding the use of attendance data as a factor in the teacher student data link and teacher evaluation. They have a statewide student information system that has the capacity to track attendance and membership for students and teachers. The Kentucky Department of Education (KDE) is piloting the Teacher of Record (TOR) student data link in fifty-four volunteer districts and the Contributing Professional (CP) student data link in several districts this fall. After the pilot, Kentucky will survey teachers and other stakeholder groups to collect perceptual data which will be used to inform the development of business requirements.

In spite of the challenges, states are making bold moves to put the necessary policies and processes, robust state level database systems, and the enterprise architecture in place to use attendance data in establishing teacher/student linkages. The examples below show the diverse approaches that states are taking to incorporate student and/or teacher attendance into their TSDL model.

In Florida, student attendance is included in the value-added calculation, but it is at the school level, not the course level. If the student is present for attendance during first period, the assumption is that the student was present for all the courses that day.

In Idaho, the new Idaho System for Educational Excellence (ISEE) collects student daily attendance, teacher period attendance, staff assignments, course enrollment, student time in course, teacher role in course, time, absences and reasons, and minutes for student per week per course, which is all tied to student growth. This data is used to assist in the Star rating calculations, Idaho's school accreditation system, and the Pay-for-Performance program.

New York State is using attendance as a component of their TSDL work and has in place a detailed set of resources to assist school and districts in reporting. Section M of the "Guidance on New York State's Annual Professional Performance Review Law and Regulations" [2] contains detailed information on reporting and verifying TSDL information. All school districts and charter schools submit student demographic, enrollment, program service, other special education and State assessment information, teacher-student linkage start and end dates for grades 3-8 and secondary-level course codes, and teacher-student course, enrollment, and attendance linkage duration calculations for grades 3-8 ELA and math courses. The state's method of calculating the linkage durations has been developed and incorporated into NY districts' student management systems. Detailed definitions for all relevant terms are included in the guidance as well as recommended processes for data verification, certification and correction. An excerpt is below:

"Students are reported as linked to a teacher in two ways (i.e., "enrollment" linkage and "attendance" linkage):

- ***Enrollment linkage is defined as the amount of time (prior to the administration of the assessment to be used for evaluation purposes) that a teacher is assigned to the class and a student is enrolled in that class.***

- ***Attendance linkage is defined as the amount of time (prior to the administration of the assessment to be used for evaluation purposes) that a teacher is assigned to a class, the student is enrolled in the class, and the student attends the class.***

How enrollment and attendance linkage are reported will vary, depending on whether the class has a generally fixed schedule (i.e., generally meets during a fixed period of time each day) and whether class attendance is taken each time the class meets."

In Tennessee, a policy framework exists for incorporating attendance into the teacher-student data link. For example, according to Tennessee policy: A student must have been present for one hundred fifty (150) days of classroom instruction per year or seventy-five (75) days of classroom instruction per semester before that student's record is attributable to a specific teacher. Records from any student who is eligible for special education services under federal law will not be used as part of the value added assessment (TCA 49-1-606(a)). Their guidance document, Rules for Teachers who Claim Students for Teacher-Effect Calculations includes detailed instructions for claiming students in two categories - instructional time and instructional availability. Instructional time is defined as the percentage of time a teacher spent as the primary classroom instructor for each student. Instructional availability is determined by the number of days a student is anticipated to be available for instruction during the entire instructional period.

State progress in incorporating teacher and student attendance data for evaluation purposes is uneven. According to the Race to the Top at a Glance report "State Rules for Linking Student and Teacher Data for the Purpose of Evaluation" produced by the Reform Support Network, "five RTTT states (Colorado, Florida, Illinois, New York and Rhode Island) do not, at present, have specific rules for how many days a student needs to be in attendance for his/her achievement results to be counted in growth or value-added scores for teachers." Tennessee and the District of Columbia Public Schools have policies in place that take attendance for partial years into account in their value added models. [3]

N.B. At the time of the first version of this publication, New York was included in the aforementioned Race to the Top report. Since then, the state of New York has identified rules for the number of days students must be linked to a teacher and principal to be included in the educator's growth calculation for 2011-12. [4]

Conclusion

The stakes are higher today than ever before as state departments of education and school districts work together to create strong, accurate, efficient, fair teacher-student data link systems that will be used for multiple purposes. What often began as a need to link teachers and students for instructional support and to deliver data to teachers, has evolved into a foundational link to ensure accuracy and validity in accountability systems for student performance, teacher evaluation and, in some places, merit pay.

States are implementing numerous promising practices, such as statewide course codes, courses defined by standards, processes for collecting daily and period-by-period attendance, elementary school course scheduling, roster verification, and unique state student and staff identifiers. Progress has been made but challenges remain, such as capturing data on multiple professionals delivering instruction and/or support services in a course, tracking duration of student/teacher linkage, and teacher attendance. The uses for the link between students and teachers will continue to expand, for example, as more states work to include non-tested grades and subjects in their evaluation systems. As states move forward, they must closely align TSDL system development to policy and process development to ensure that transitions are smooth and the inevitable changes are accepted and implemented with fidelity. States must also view student and teacher attendance as a primary component of the teacher-student data link and move toward a broader, more systematic incorporation of attendance data into their systems.

As states become more proficient at linking students and teachers attendance through their data systems, new questions arise. Increasingly attention is being drawn to related attendance issues such as how chronic absences affect achievement, how poor quality teaching may affect student attendance, and how to incentivize improvement in attendance. States have just begun to wrestle with these issues from a policy and system viewpoint. By exchanging information and best practices through networks such as the Teacher-Student Data Link Project, states can make the needed progress towards comprehensive teacher-student data link systems more efficiently and effectively.

References:

(1) http://www.dataqualitycampaign.org/resources/details/947
(2) http://usny.nysed.gov/rttt/teachers-leaders/home.html
(3) http://www2.ed.gov/about/inits/ed/implementation-support-unit/tech-assist/state-rules-for-linking-student-and-teacher.pdf
(4) http://engageny.org/resource/guidance-on-new-york-s-annual-professional-performance-review-law-and-regulations

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For over two decades, the Center for Educational Leadership and Technology (CELT) has been viewed as a "thought leader" and "trusted technical advisor" focused on aligning leadership, learning, and technology. By working collaboratively with educational educations, government agencies, and foundations, CELT assists educators in their pursuit of increased student achievement, effective teaching, and improved operational effectiveness. CELT's mission is to help learning organizations attain their vision, mission and goals, by integrating high-quality programs, services, and technology with the organization's people and processes in a timely, efficient, and cost-effective way.

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