



# INFORMATION CAPSULE

## Research Services

Vol. 1607  
December 2016

Christie Blazer, Supervisor

### TEACHER ABSENCES

#### At a Glance

This Information Capsule addresses the issue of teacher absenteeism in U.S. public schools. Statistics on nationwide teacher absence rates are provided and the negative consequences of frequent teacher absences are discussed, including lower levels of student achievement, loss of quality classroom instruction, higher rates of student absenteeism, and the high cost of substitute teachers. Strategies for increasing teacher attendance are also summarized, such as offering financial incentives for good attendance, establishing a positive school climate, requiring teachers to report absences directly to the school principal, reducing job stress, discontinuing professional development during the school day, and establishing teacher wellness programs.

School districts across the U.S. are searching for ways to reduce teacher absences. Teacher absences have negative consequences for the entire school community, including reduced quality of instruction, lack of continuity in the classroom, increased disciplinary problems, a greater burden on the remaining teachers, and the high costs of recruiting, training, and hiring substitute teachers. According to the National Council on Teacher Quality (2014), teacher absenteeism is one of the most basic reasons why schools fail to make educational progress. The Council noted, “No matter how engaging or talented teachers may be, they can only have an impact on student learning if they are in the classroom.”

#### Statistics on Nationwide Teacher Absence Rates

Several large scale studies have been conducted on the average number of teacher absences during the school year.

- A study of teacher attendance data from 40 of the largest school districts in the U.S. found that teachers were absent an average of 11 days during the 2012-2013 school year. On average, teachers were in the classroom 94% of the school year. Sixteen percent of teachers had excellent attendance (defined as three or fewer days absent); 40% of teachers had moderate attendance (between four and 10 days absent); 28% of teachers were frequently absent (between 11 and 17 days absent); and 16% of teachers were chronically absent (18 or more days absent). The analysis found that 39% of teacher absences were due to sick leave; 32% of teacher absences were for personal leave; 20% were for professional leave, including workshops and training; and 9% were due to “other” reasons (National Council on Teacher Quality, 2014).
- The U.S. Department of Education’s Office for Civil Rights surveyed schools in all 50 states and the District of Columbia. Chronic teacher absenteeism was defined as

missing 10 or more days in a school year. Based on absence numbers self-reported by school districts, the Office for Civil Rights found that 27% of teachers were absent for more than 10 days during the 2013-2014 school year. Hawaii reported the highest rate of chronic absenteeism (75%) and Utah reported the lowest rate of chronic absenteeism (16%). In Florida, 39% of teachers were reported as being absent more than 10 days per school year. Reported percentages of teachers absent for more than 10 days during the school year in other states included 24% in California, 27% in Georgia, 24% in Illinois, 30% in New York, 31% in Pennsylvania, and 25% in Texas (Sparks, 2016).

It should be noted that although teacher absentee data were self-reported, some states and school districts, such as Hawaii, Onslow County Schools and Alamance-Burlington School System in North Carolina, and Del Mar Union School District and Solana Beach School District in California, have disputed the data published by the Office for Civil Rights, stating that their reported teacher absentee numbers were too high (Daysog, 2016; Matos, 2016; Sparks, 2016; Sutton, 2016).

Most experts agree that teacher abuse of leave time is rare. Teachers understand that their presence in the classroom is essential, but sometimes they need to take time off because they are ill, they are caring for a sick family member, or an emergency arises (Rogers & Vegas, 2013; Education World, 2012; Owen, 2010; Keller, 2008; Dell'Angela & Little, 2006; Pitkoff, 2003). Clotfelter and colleagues' (2007) study of teacher absences in North Carolina schools found that a small number of teachers accounted for a disproportionate proportion of the total days taken – the 10% of teachers with the most absences accounted for one-third of all teacher absences.

Kronholz (2013) cautioned that it is difficult to compare teacher absenteeism across school districts because they often count absences differently. For example, some districts count leave for professional development and field trips as teacher absences, while other districts do not.

Studies have found several patterns in teacher attendance data:

- Schools with larger student enrollments tend to have higher rates of teacher absenteeism (Owen, 2010; Clotfelter et al., 2007; Miller et al., 2007).
- Elementary schools have higher teacher absentee rates than middle or high schools, with high schools usually having the lowest teacher absence rates (Cheng, 2013; Finlayson, 2009; Miller, 2008; Clotfelter et al., 2007; Smith, 2001).
- A number of studies have found that there is a disproportionately high rate of teacher absenteeism in schools serving low-income students (Rogers & Vegas, 2013; Portland Public Schools, 2012; Owen, 2010; Finlayson, 2009; Miller, 2008; Clotfelter et al., 2007; Bruno, 2002; Smith, 2001). However, several more recent studies have found that schools with high concentrations of low-income students do not have significantly higher rates of teacher absenteeism than schools with more affluent student populations (Crouch, 2016; Sparks, 2016; National Council on Teacher Quality, 2014). More research is needed to determine if low-income schools have higher teacher absence rates.

- Some studies indicate that teachers are absent from traditional public schools more than they are absent from charter schools and private schools. Using Office for Civil Rights 2009-2010 data, Miller (2012) found that approximately 37% of teachers were absent more than 10 days at traditional public elementary and middle schools, compared to 22% at charter schools. Cheng (2013) used data from the nationally representative 2007-2008 Schools and Staffing Survey and found that private school teachers and charter school teachers had lower absenteeism rates than teachers at traditional public schools by approximately one and 1.5 percentage points, respectively.
- Beginning teachers tend to have lower absence rates than experienced teachers. Clotfelter and colleagues' study of North Carolina schools (2007) found that beginning teachers used an average of 4.8 days of sick leave per school year and teachers with five to 10 years of experience used an average of eight or more days.
- Several studies have reported that teachers with tenure are absent more frequently than teachers without tenure (Cheng, 2013; Portland Public Schools, 2012; Clotfelter et al., 2007). Miller (2008) studied a large urban school district in the northern U.S. and found that tenured teachers took about 0.8 more days of discretionary absences per year than teachers who did not have tenure.
- Female teachers tend to be absent more often than male teachers. Researchers point out that females tend to be the primary caregivers for sick children and family members and take off more time than men for the birth of a child (Matos, 2016; Cheng, 2013; Portland Public Schools, 2012; Owen, 2010; Miller, 2008).
- Teachers who commute long distances to work – and are therefore susceptible to bad weather and other obstacles – tend to be absent more often than teachers with shorter commutes (Miller, 2012; Owen, 2010).
- The weekdays with the highest percentage of teacher absences are Fridays and Mondays (Wert, 2013; Education World, 2012; Miller, 2012).

### **Impact of Teacher Absences**

Teacher absenteeism has many negative consequences for schools and students, as summarized below.

- **Lower student achievement.** Researchers have concluded that teacher attendance is related to students' academic performance. Studies have found that when teachers are absent more frequently, students have lower levels of academic achievement, especially in mathematics (Crouch, 2016; Porres, 2016; Sparks, 2016; National Council on Teacher Quality, 2014; Cheng, 2013; Brown & Arnell, 2012; Hanover Research, 2012; Portland Public Schools, 2012; Owen, 2010; Finlayson, 2009; Wisconsin Association of School Boards, 2008; Clotfelter et al., 2007; Miller et al., 2007; Scott et al., 2007). Clotfelter and

colleagues (2007) reported that the negative effects of teacher absences on math scores that occurred during the second semester – leading up to the annual state achievement tests - were approximately three times as large as those that occurred during the first semester.

- **Loss of quality classroom instruction.** Teacher absences lead to lower quality instruction for several reasons:
  - Substitute teachers are often less qualified instructors than the teachers they replace (Crouch, 2016; Sparks, 2016; Sutton, 2016; Cheng, 2013; Brown & Arnell, 2012; Finlayson, 2009; Miller, 2008). Owen (2010) stated that “substitute teachers can never measure up to the regular classroom teacher, nor can that be expected of them. An extensive knowledge of the curriculum for which the teacher is responsible as well as knowing the students they teach are both integral parts of the student teacher relationship.”
  - Classroom routines and procedures are disrupted when regular teachers are absent (Cheng, 2013; Kronholz, 2013; Portland Public Schools, 2012; Miller, 2008; Smith, 2001).
  - Substitute teachers’ lack of knowledge regarding students’ skill levels makes it difficult for them to provide differentiated instruction that addresses the needs of individual students (Crouch, 2016; Miller et al., 2007).
  - Students tend to misbehave more when they have a substitute teacher, requiring administrators and other faculty to spend more time addressing disciplinary issues (Owen, 2010; Scott et al., 2007; Dell’Angela & Little, 2006).
  - Teacher absences result in reduced time for collaborative teacher planning (Portland Public Schools, 2012).
- **Higher rates of student absenteeism.** Studies have found that student absentee rates are higher in schools that have higher rates of teacher absenteeism. Researchers have concluded that students do not view school attendance as important when their teacher is absent from the classroom on a regular basis. They emphasize that teachers serve as role models for students and influence their perceptions about what constitutes acceptable behavior (Porres, 2016; Sparks, 2016; Owen, 2010; Finlayson, 2009; Miller, 2008).
- **High cost of substitute teachers.** The expense of hiring substitute teachers is significant. In addition to paying the full salary of the absent teacher, districts must pay the substitute teacher’s salary, the administrative costs associated with recruiting, hiring, and training substitute teachers, and the expenses associated with the time-keeping and payroll processes (Porres, 2016; Sutton, 2016; Wert, 2013; Portland Public Schools, 2012; Owen, 2010; Finlayson, 2009; Wisconsin Association of School Boards, 2008;

Clotfelter et al., 2007; Bruno, 2002; Smith, 2001). Miller (2012) estimated that the cost of substitute teachers and associated administrative expenses was approximately \$4 billion per year nationwide, or about 1% of total K-12 spending. The National Council on Teacher Quality (2014) reported that the 40 school districts included in their analysis spent \$424 million combined to cover teacher absences in 2012-2013, or an average of at least \$1,800 for each teacher they employed.

### **Financial Incentive Programs for Increasing Teacher Attendance**

School districts have implemented a variety of financial incentive strategies to reduce teacher absenteeism. Experts agree that the costs associated with incentive programs can be covered by the savings realized from reduced absenteeism (Kronholz, 2013; Wert, 2013; Hanover Research, 2012; Miller, 2012; Owen, 2010; Jacobs & Kritsonis, 2007). The financial incentive plans most frequently used by school districts include:

- Payment for unused sick leave at the end of the school year;
- Conversion of unused sick leave into retirement benefits;
- Cash awards for excellent attendance; and
- Recognition of good attendance with non-monetary rewards, such as gift certificates, tickets to local sporting events, or attendance at a professional conference (National Council on Teacher Quality, 2014; Kronholz, 2013; Brown & Arnell, 2012; Education World, 2012; Portland Public Schools, 2012; Finlayson, 2009; Keller, 2008; Miller, 2008; Wisconsin Association of School Boards, 2008; Clotfelter et al., 2007; Scott et al., 2007; Smith, 2001).

Researchers have made several recommendations to districts when they develop incentive plans, including:

- Clearly communicate details of the incentive program to all eligible teachers;
- Simplify the design of incentive programs, thereby increasing teacher understanding of the program;
- Determine if the program has a positive effect on teacher attendance;
- Analyze and incorporate teacher feedback; and
- Calculate the costs of the incentive program and if savings (from reduced substitute teacher expenses) exceeded the cost of the plan (Shifrer et al., 2013; Wisconsin Association of School Boards, 2008; Lugo, 2004).

Studies conducted on the impact of incentive programs on teacher attendance rates have produced mixed findings. Some studies have found that rates of teacher absence drop when incentive programs are implemented. Other studies, however, have concluded that teacher attendance rates do not differ significantly between school districts with and without incentive programs (Shifrer et al., 2013; Hanover Research, 2012; Portland Public Schools, 2012; Keller, 2008; Miller, 2008; Scott et al., 2007). The National Council on Teacher Quality (2014), for example, found that in districts that allowed teachers to carry over personal leave from year to year, the average teacher attendance rate was 94.3%. Districts that did not allow personal leave to accrue from year to year had an average attendance rate of 94.0%.

Lugo (2004) analyzed the effects of an incentive program that paid teachers bonuses for good attendance in Arizona's Creighton School District. The program was found to have a positive effect on teacher absenteeism, but not all subgroups of teachers responded to the incentive program in the same way. Women were more likely to respond to the incentives than men, as were teachers assigned to the elementary grade levels, teachers between the ages of 31-40 years old, and teachers with more than four years of experience in the school district. No significant difference was found in the incentive plan's effect among teachers of different racial/ethnic backgrounds.

Some school districts have established collective incentive programs, in which incentives are based on school-wide teacher attendance (Kronholz, 2013; Education world, 2012; Scott et al., 2007). However, the impact of school-wide incentive plans on teacher attendance is unclear. An incentive program implemented in Palm Beach County, Florida, in 2006-2007 offered a combination of individual and school-wide incentives. The program was discontinued after it failed to increase teacher attendance. The school-wide award component of the program was believed to have contributed to the program's overall ineffectiveness because teachers who did not miss work reported that they felt they were being punished for the actions of their colleagues with lower attendance rates (Education World, 2012; Hanover Research, 2012; Wisconsin Association of School Boards, 2008; DeNardo, 2007).

### **Additional Strategies for Increasing Teacher Attendance**

In addition to the financial incentive programs summarized above, school districts have developed other strategies designed to increase teacher attendance. Although researchers have failed to identify one particular practice that has the strongest impact on teacher attendance across all schools, studies have concluded that school policies affect teacher absence rates (Riddile, 2014; Hanover Research, 2012; Wisconsin Association of School Boards, 2008; Clotfelter et al., 2007; Miller et al., 2007). The National Council on Teacher Quality (2014) reported that in districts that implemented policies to encourage good attendance, chronically absent teachers were out of school approximately two fewer days than chronically absent teachers in districts that did not implement such policies. Experts agree that decisions about the types of policies that are implemented to reduce teacher absenteeism should be made at the local level (Rogers & Vegas, 2013).

Strategies that school districts have implemented in an attempt to reduce teacher absences include:

- **Establish a positive school climate.** Studies suggest that teacher absence rates are lower when teachers feel more positive about the climate at their school. Teachers are more likely to perceive that there is a positive climate at their school when they are provided with time to plan together as a team, have input into school operations decisions, and have supportive relationships with administrators and other teachers (Riddile, 2014; Cheng, 2013; Miller, 2012; Owen, 2010).

In addition, schools should create a school climate that emphasizes the importance of consistent teacher attendance. Researchers have found that teachers are absent more often when their colleagues are absent too. They have concluded that there is an "absence culture" in schools, in which peers strongly encourage or discourage absenteeism (Porres, 2016; Miller, 2014; National Council on Teacher Quality, 2014; Cheng, 2013; Kronholz, 2013; Finlayson, 2009).

- **Hold principals accountable.** Experts agree that if teachers are frequently absent, it is the principal's responsibility to address the problem. Researchers recommend that principals explain attendance expectations to teachers at the beginning of each school year, closely monitor the attendance patterns in their schools, and meet with any teachers who have higher than average absence rates (Education World, 2012; Hanover Research, 2012; Wisconsin Association of School Boards, 2008; Dell'Angela & Little, 2006). A study conducted by researchers at Portland Public Schools (2012) concluded that lack of principal attention to teacher absences can create a culture that does not value good attendance and may contribute to higher rates of absenteeism.
- **Require teachers to report absences directly to the school principal.** Studies have found that teachers who are required to report absences directly to their principal by telephone are absent less often than teachers who report their absences to an automated absent management system (Porres, 2016; National Council on Teacher Quality, 2014; Kronholz, 2013; Education World, 2012; Miller, 2012; Portland Public Schools, 2012; Finlayson, 2009; Scott et al., 2007).
- **Hire supportive principals.** Studies have found that supportive principal leadership is associated with better teacher attendance. Teachers report that they perceive principals as being supportive when they make an effort to improve working conditions, encourage teamwork, enforce student discipline policies, evaluate work fairly, allow teachers to discuss their complaints, and offer teachers constructive performance feedback (Portland Public Schools, 2012; Miller et al., 2007; Scott et al., 2007). Owen's (2010) administration of school climate surveys in two Georgia middle schools (one with a high rate of teacher absenteeism and one with a low rate) found that when teachers were overwhelmed with work and "felt abandoned by the principal," they reported that they were more likely to be absent. In contrast, teachers said that if they believed their principal supported them, they would be more willing to attend school each day. Focus group interviews with teachers indicated that teachers were less likely to be absent when the principal was perceived to be working as hard as the teachers.
- **Improve working conditions.** Studies have found that teachers' working conditions affect their attendance rates. Working conditions that lead to low morale and high absence rates include neglected facilities and equipment, overcrowded classrooms, lack of administrative support, and lack of collegiality among staff (Porres, 2016; Rogers & Vegas, 2013; Brown & Arnell, 2012; Hanover Research, 2012; Owen, 2010; Miller, 2008; Scott et al., 2007; Dell'Angela & Little, 2006; Smith, 2001).
- **Reduce job stress.** Changes to the teaching profession, including a greater focus on high-stakes testing and increased parental pressure, have resulted in higher levels of job stress. A majority of teachers report that they feel under great stress at least several days a week. Multiple studies have linked teacher absences with high levels of job-

related stress (Crouch, 2016; Brown & Arnell, 2012; Education Week, 2012; Hanover Research, 2012; Portland Public Schools, 2012; Owen, 2010; Miller, 2008).

Experts believe that alleviating teacher stress can contribute to lower levels of teacher absenteeism. When teacher absences are related to stress, it is recommended that school leaders:

- Encourage teacher networking and collaboration, including peer support groups and mentors;
  - Provide constructive feedback on teaching performance;
  - Rotate teachers' classroom assignments to ensure that the same teachers do not always have the most challenging students;
  - Provide teachers with adequate resources; and
  - Help teachers identify short-term indicators of progress in meeting their own and the school's improvement goals (Brown & Arnell, 2012; Smith, 2001).
- **Discontinue professional development during the school day.** Several studies have found that school districts schedule a significant number of workshops, conferences, and committee meetings during the school day that require teachers to be absent from their classrooms (Crouch, 2016; Wert, 2013; Hanover Research, 2012; Wisconsin Association of School Boards, 2008; Pitkoff, 2003; Smith, 2001). In a study analyzing teacher absences in Portland Public Schools (2012), researchers found that schools with lower levels of academic achievement scheduled more days of professional development and in-service training than higher performing schools. They concluded that while the district may have intended to provide additional training to build stronger skills among those teaching at more disadvantaged schools, this policy contributed to significantly more teacher absences. The National Council on Teacher Quality (2009) acknowledged, "While sometimes staff development during school hours is unavoidable, it should occur only as a last resort and for no more than two days a year."
  - **Allow flexible use of leave time.** In many school districts, teachers are only able to take sick leave in increments of one-half or full days. Some experts believe that allowing teachers to take off smaller blocks of time (e.g., one or two hours) for medical appointments may reduce the amount of time they are absent from the classroom (Owen, 2010; Scott et al., 2007).
  - **Establish teacher wellness programs.** Frequent exposure to sick children results in high teacher illness rates. The sheer number of students, hands-on activities, meals and snacks served, facilities and equipment that are not clean, and juvenile hygiene issues cause teachers to be sick more often than adults working in other settings (Portland Public Schools, 2012; Miller, 2008; DeNardo, 2007; Dell'Angela & Little, 2006). There are several steps districts and schools can take to decrease teacher absences related to illness:



- Studies have found that use of an alcohol gel hand sanitizer reduces both teacher and student absences (Hopkins, 2015; Wert, 2013; Hanover Research, 2012; Miller, 2008; Hammond et al., 2000).
  - School-wide handwashing programs have been found to reduce teacher and student absenteeism (Hopkins, 2015).
  - Studies have found that classroom amplification systems can prevent teacher absences due to symptoms and complications of vocal strain (Hanover Research, 2012; Portland Public Schools, 2012; Miller, 2008; Blazer, 2007).
  - Some districts have implemented wellness programs to encourage good health. Teachers are provided with medical screenings, free flu shots, free immune support herbal supplements, fitness assessments, exercise and nutrition prescriptions, health education, and exercise classes (Portland Public Schools, 2012; Wisconsin Association of School Boards, 2008; Scott et al., 2007).
- **Closely monitor teacher attendance data.** Researchers recommend that districts and schools regularly monitor teacher absences to address attendance patterns that deviate from average or show high discretionary use of leave (Wert, 2013; Hanover Research, 2012; Finlayson, 2009; Wisconsin Association of School Boards, 2008; Smith, 2001). Researchers at Portland Public Schools (2012) suggested that district staff provide schools with monthly or quarterly reports that include data on the amount of teacher leave days taken, the reason for each absence, and day and seasonal use patterns.

Some school districts have decided to adopt attendance policies that are more restrictive in nature or focus on teacher accountability.

- **Discourage leave on certain days.** The National Council on Teacher Quality (2014) recommended that teachers be required to obtain approval to take leave on certain days, such as before or after holidays, during the first and last weeks of the school year, during state testing, and/or on professional development days. The Council reported that 27 of the 40 school districts included in its analysis had some type of policy restricting or subjecting leave to refusal on particular days or times of the year.
- **Require medical certification.** The National Council on Teacher Quality's (2014) analysis found that 28 of the 40 school districts studied required teachers to provide medical certification after absences. The Council reported that the certification requirement was activated at different times in different districts – for example, from three days in Atlanta and Kansas City to 20 consecutive days of absence in Salt Lake City.
- **Eliminate sick leave banks.** Some experts believe that sick leave banks (from which teachers who suffer catastrophic illnesses can draw on the accumulated leave of other staff members) encourage teachers to use all of their available leave because they know the sick leave bank will be available in case of a major illness. It has been reported that districts with sick leave banks average more leave days per year than districts without sick leave banks (Wisconsin Association of School Boards, 2008; Scott et al., 2007).

Britton (2014), who also recommended that sick leave banks be eliminated, stated that if banks are maintained, they should be limited to catastrophic illness or injury of employees only (not family members) and unavailable to those who have already used excessive sick leave.

- **Include attendance as part of teachers' annual evaluations.** Several researchers have suggested that school districts include attendance as a factor in teachers' performance evaluations (Britton, 2014; National Council on Teacher Quality, 2014; Hanover Research, 2012; Portland Public Schools, 2012; Pitkoff, 2003). The National Council on Teacher Quality (2014) reported that 10 of the 40 districts examined in its study included teacher attendance as a measure in their district's teacher evaluation framework. In those 10 districts, the requirement was most frequently incorporated as part of a broader evaluation measure describing the professional competency of the teacher.
- **Do not hire substitute teachers to replace absent classroom teachers.** Some researchers have reported that teacher absenteeism is reduced when schools do not hire substitute teachers, but instead distribute absent teachers' students among the remaining teachers in the school (National Council on Teacher Quality, 2014; Wert, 2013; Owen, 2010; DeNardo, 2007; Bruno, 2002). According to Kronholz (2013), "It . . . means that one teacher is imposing on another, which creates some accountability, or at least discomfort for the teacher calling in repeated excuses."

### Summary

This Information Capsule addressed the issue of teacher absenteeism in U.S. public schools. Nationwide, teachers are absent an average of 11 days per school year. Statistics also show that 27% of teachers are absent for more than 10 days during the school year. Teacher absenteeism tends to be higher in elementary schools, schools with larger student enrollments, and traditional (as opposed to private or charter) schools. Teachers with higher absence rates are more likely to be experienced teachers with tenure, female teachers, and teachers who commute long distances to work.

High rates of teacher absenteeism have negative consequences for the entire school community. Studies have found that when teachers are frequently absent, students have lower levels of academic achievement, especially in mathematics. Teacher absences lead to lower quality classroom instruction, higher rates of student absenteeism, and high costs for districts that are required to pay the salary of both the absent teacher and the substitute teacher.

School districts have implemented a variety of strategies to increase teacher attendance. One of the most popular strategies is the implementation of financial incentive plans. Some studies have found that rates of teacher absence decrease when incentive programs are implemented. Other researchers, however, have concluded that teacher attendance rates do not differ significantly between school districts with and without incentive programs. More research in this area is clearly needed.

In addition to financial incentive plans, school districts have developed other strategies to increase teacher attendance, such as establishing a positive school climate, requiring teachers

to report absences directly to the school principal, hiring supportive principals, reducing job stress, discontinuing professional development during the school day, and establishing teacher wellness programs.

Researchers have been unable to identify one particular practice that has the strongest influence on teacher attendance, but in general, it appears that teachers take fewer days off when they work at schools that implement policies that encourage good attendance.

## References

Blazer, C. (2007). *Improving the Classroom Environment: Classroom Amplification Systems*. Miami-Dade County Public Schools, Information Capsule 0607. Retrieved from <http://drs.dadeschools.net/InformationCapsules/IC0607.pdf>.

Britton, J.E. (2014). *Responding to Employee Absenteeism*. Paper presented at the Ohio School Boards Association 2014 Capital Conference, Columbus, OH. Retrieved from [http://conference.ohioschoolboards.org/2014/wp-content/uploads/sites/3/2014/11/2PM111\\_OC213Britton.pdf](http://conference.ohioschoolboards.org/2014/wp-content/uploads/sites/3/2014/11/2PM111_OC213Britton.pdf).

Brown, S.L., & Arnell, A.T. (2012). Measuring the Effect Teacher Absenteeism Has on Student Achievement at An "Urban But Not Too Urban" Title I Elementary School. *International Journal of Humanities and Social Sciences*, 2(17), 172-183.

Bruno, J.E. (2002). The Geographical Distribution of Teacher Absenteeism in Large Urban School District Settings: Implications for School Reform Efforts Aimed at Promoting Equity and Excellence in Education. *Education Policy Analysis Archives*, 10(32), July 26, 2002. Retrieved from <http://epaa.asu.edu/ojs/article/viewFile/311/437>.

Cheng, A. (2013). *Taking Attendance: Teacher Absenteeism Across School Types*. University of Arkansas Department of Education Reform, Fayetteville, AR. Retrieved from <http://www.uaedreform.org/wp-content/uploads/2013/08/Cheng-EDRE-WP-2013-09.pdf>.

Clotfelter, C.T., Ladd, H.F., & Vigdor, J.L. (2007). Are Teacher Absences Worth Worrying About in the U.S.? *National Bureau of Economic Research Working Paper 13648*. Retrieved from <http://www.nber.org/papers/w13648.pdf>.

Crouch, E. (2016). Teacher Absences Hurt Student Learning. *St. Louis Post-Dispatch*, August 8, 2016.

Daysog, R. (2016). Report: Teacher Absenteeism a Widespread Problem in Hawaii. *Hawaii News Now*, June 28, 2016. Retrieved from <http://www.hawaiinewsnow.com/story/32320962/report-teacher-absenteeism-a-widespread-problem-in-hawaii>.

Dell'Angela, T., & Little, D. (2006). Teachers Miss Days. *Chicago Tribune*, September 25, 2006.

DeNardo, C. (2007). 'A' Is For Absent Teachers. *Palm Beach Post*, September 3, 2007. Retrieved from <http://www.palmbeachpost.com>.

Education World. (2012). *Districts Offer Incentives to Curb Teacher Absences*. Retrieved from [http://www.educationworld.com/a\\_admin/admin/admin544.shtml](http://www.educationworld.com/a_admin/admin/admin544.shtml).

Finlayson, M. (2009). *The Impact of Teacher Absenteeism on Student Performance: The Case of the Cobb County School District*. Dissertations, Theses and Capstone Projects, Paper 4, Kennesaw State University, Kennesaw, GA. Retrieved from <http://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=1006&context=etd>.

Hammond, B., Ali, Y., Fendler, E., Dolan, M., & Donovan, S. (2000). Effect of Hand Sanitizer Use on Elementary School Absenteeism. *American Journal of Infection Control*, 28(5), 340-346.

Hanover Research. (2012). *Addressing Teacher Absenteeism and Attendance*. Retrieved from <http://www.hanoverresearch.com>.

Hopkins, G. (2015). School-Wide Handwashing Campaigns Cut Germs, Absenteeism. *Education World*, June 14, 2015. Retrieved from [http://www.educationworld.com/a\\_curr/School-Wide-Handwashing-Campaigns-Cut-Germs-Absenteeism.shtml](http://www.educationworld.com/a_curr/School-Wide-Handwashing-Campaigns-Cut-Germs-Absenteeism.shtml).

Jacobs, K.D., & Kritsonis, W.A. (2007). An Analysis of Teacher and Student Absenteeism in Urban Schools: What the Research Says and Recommendations for Educational Leaders. *The Lamar University Electronic Journal of Student Research*, Fall 2007. ERIC Document Reproduction Service No. ED499647.

Keller, B. (2008). Districts Experiment With Cutting Down on Teacher Absence. *Education Week*, 27(35), 1, 13.

Kronholz, J. (2013). No Substitute for a Teacher. *Education Next*, 13(2). Retrieved from <http://educationnext.org/no-substitute-for-a-teacher/>.

Lugo, S. (2004). No Substitute for Quality: A Time Series Quasi-Experimental Study of the Effects of a Pay for Performance Remedy for Teacher Absenteeism. *SubJournal*, 5(2), 9-19. ERIC Document Reproduction Service No. ED491626.

Matos, A. (2016). 1 in 4 U.S. Teachers are Chronically Absent, Missing More Than 10 Days of School. *The Washington Post*, October 26, 2016.

Miller, R. (2008). *Tales of Teacher Absence: New Research Yields Patterns that Speak to Policymakers*. Center for American Progress, Washington, DC. Retrieved from [https://cdn.americanprogress.org/wp-content/uploads/issues/2008/10/pdf/teacher\\_absence.pdf](https://cdn.americanprogress.org/wp-content/uploads/issues/2008/10/pdf/teacher_absence.pdf).

Miller, R. (2012). *Teacher Absence as a Leading Indicator of Student Achievement*. Center for American Progress, Washington, DC. Retrieved from <http://www.americanprogress.org/wp-content/uploads/2012/11/TeacherAbsence-6.pdf>.

Miller, R. (2014). Teacher Absence, Leading Indicators, and Trust. *Education Week*, August 8, 2014. Retrieved from <http://blogs.edweek.org>.

Miller, R.T., Murnane, R.J., & Willett, J.B. (2007). Do Teacher Absences Impact Student Achievement? Longitudinal Evidence from One Urban School District. *National Bureau of Economic Research Working Paper 13356*. Retrieved from <http://www.nctq.org/nctq/research/1190910822841.pdf>.

National Council on Teacher Quality. (2009). *Human Capital in Hartford Public Schools: Rethinking How to Attract, Develop, and Retain Effective Teachers*. Retrieved from <http://>

[www.nctq.org/dmsView/Human Capital in Hartford Public Schools NCTQ Report](http://www.nctq.org/dmsView/Human_Capital_in_Hartford_Public_Schools_NCTQ_Report).

National Council on Teacher Quality. (2014). *Roll Call: The Importance of Teacher Attendance*. Retrieved from [http://www.nctq.org/dmsView/RollCall\\_TeacherAttendance](http://www.nctq.org/dmsView/RollCall_TeacherAttendance).

Owen, A.T. (2010). *Leadership Practices That Influence Teacher Attendance in a Low and High Teacher Absentee School*. Electronic Theses & Dissertations, Paper 326, Georgia Southern University, Statesboro, GA. Retrieved from <http://digitalcommons.georgiasouthern.edu/cgi/viewcontent.cgi?article=1326&context=etd>.

Pitkoff, E. (2003). School District Practices That Encourage Teacher Absenteeism. *School Administrator*, 60(6), 34. Retrieved from <https://aasa.org/SchoolAdministratorArticle.aspx?id=9166>.

Porres, A. (2016). *The Impact of Teacher Absenteeism on Student Achievement: A Study on U.S. Public Schools, Using Results of the 2011-2012 Civil Rights Data Collection*. Thesis submitted for Master of Public Policy, Georgetown University, Washington, DC. Retrieved from [https://repository.library.georgetown.edu/bitstream/handle/10822/1040835/Porres\\_georgetown\\_0076M\\_13267.pdf?sequence=1](https://repository.library.georgetown.edu/bitstream/handle/10822/1040835/Porres_georgetown_0076M_13267.pdf?sequence=1).

Portland Public Schools. (2012). *Teacher Absences at Portland Public Schools: Opportunities for Saving*. Retrieved from [http://www.pps.net/cms/lib8/OR01913224/Centricity/domain/219/performance\\_audits/PA\\_Teacher-Absences.pdf](http://www.pps.net/cms/lib8/OR01913224/Centricity/domain/219/performance_audits/PA_Teacher-Absences.pdf).

Riddile, M. (2014). *Teacher Attendance and School Culture – Revisited*. National Association of Secondary School Principals, Reston, VA. Retrieved from <http://blog.nassp.org/2014/08/10/teacher-attendance-and-school-culture-revisited/>.

Rogers, F. H., & Vegas, E. (2013). No More Cutting Class: Reducing Teacher Absenteeism and Providing Incentives for Performance. In J. Kirk, M. Dembélé, & S. Baxter (Eds.), *More and Better Teachers for Quality Education For All: Identity and Motivation, Systems and Support*. Retrieved from [https://moreandbetterteachers.files.wordpress.com/2013/09/more-and-better-teaching\\_september-2013.pdf](https://moreandbetterteachers.files.wordpress.com/2013/09/more-and-better-teaching_september-2013.pdf).

Scott, L., Vaughn, C., Wolfe, M., & Wyant, C. (2007). *Reducing Teacher Absences in North Carolina*. A Report for the North Carolina Department of Public Instruction, Terry Sanford Institute of Public Policy, Duke University, Durham, NC. Retrieved from <http://www.dpi.state.nc.us/docs/intern-research/reports/teacherabsences.pdf>.

Shifrer, D., Turley, R.L., & Heard, H. (2013). *Houston Independent School District's ASPIRE Program: Estimated Effects of Receiving Financial Awards*. Retrieved from [https://kinder.rice.edu/uploadedFiles/Kinder\\_Institute\\_for\\_Urban\\_Research/Programs/HERC/ASPIRE\\_Evaluation.pdf](https://kinder.rice.edu/uploadedFiles/Kinder_Institute_for_Urban_Research/Programs/HERC/ASPIRE_Evaluation.pdf).

Smith, G.G. (2001). Increasing Teacher Attendance. *SubJournal*, 2(1). Retrieved from <http://88pgz2md3zt3enasi4b54xk180s.wpengine.netdna-cdn.com/wp-content/uploads/2014/08/IncreasingTeacherAttendance.pdf>.

Sparks, S.D. (2016). 1 in 4 Teachers Miss 10 or More School Days, Analysis Finds. *Education Week*, June 27, 2016. Retrieved from <http://www.edweek.org/ew/articles/2016/06/27/1-in-4-teachers-miss-10-or.html>.

Sutton, M. (2016). Education Matters: Tracking Teacher Absences. *Del Mar Times*, August 25, 2016. Retrieved from <http://www.delmartimes.net/our-columns/sddmt-education-matters-tracking-teacher-absences-2016aug25-story.html>.

Wert, A. (2013). The Teacher Absenteeism Hype – And How Districts Should Respond. *Frontline Education*, April 12, 2013. Retrieved from [https://www.frontlineeducation.com/Bl/og/April\\_2013/The\\_Teacher\\_Absenteeism\\_Hype\\_And\\_How\\_Districts\\_Should\\_Respond.html](https://www.frontlineeducation.com/Bl/og/April_2013/The_Teacher_Absenteeism_Hype_And_How_Districts_Should_Respond.html).

Wisconsin Association of School Boards. (2008). *Addressing Teacher Absenteeism*. Retrieved from [http://wasb.org/websites/meetings\\_events/File/2013Regional\\_Meetings/WASBAddressing\\_TeacherAbsenteeism.pdf](http://wasb.org/websites/meetings_events/File/2013Regional_Meetings/WASBAddressing_TeacherAbsenteeism.pdf).