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RAYMOND ARTHUR ABBOTT, et al.,

Plaintiffs,

v.

FRED G. BURKE, et al.,

Defendants.

SUPREME COURT OF NEW JERSEY

Docket No.

Civil Action

EXPERT CERTIFICATION OF KATHARINE OMENN STRUNK

I, Katharine Omenn Strunk, of full age, hereby certify that:

## I. INTRODUCTION AND QUALIFICATIONS

1. I am an Associate Professor of Education and Policy at the University of Southern California, Rossier School of Education. I hold a joint appointment in the Rossier School of Education and the Price School of Public Policy. My C.V. is annexed hereto as Exhibit A.

- 2. I graduated from Stanford University in 2007 with a PhD in Administration and Policy Analysis from the School of Education and with a MA in Economics. I received my BA in 1999 from Princeton University with a major in Public Policy. I am the recipient of several prestigious awards, including the New Scholar Award from the American Education Finance Association, a National Academy of Education/Spencer Foundation postdoctoral fellowship, and the Junior Scholar Award from the American Educational Research Association.
- 3. I have received several honors, and have received external grant funds to study teachers' unions and CBAs and how CBAs and policies intended to change unions' collective bargaining rights impact teacher labor markets and school and student performance. I also have received external grant funding to study issues related to teachers and school district reform initiatives.
- 4. I am a member of several learned societies, including the Association for Public Policy Analysis and Management, the Association for Education Finance and Policy and the American Education Research Association. I am also or have been a member of certain school review committees, including the Rossier School of Education Performance Review Committee, the University of Southern California Committee on Academic Review, the University of Southern

California Research Committee, and the Rossier School of Education Seniority, Promotions and Tenure Committee.

- 5. I am an associate editor of the peer-reviewed journal Education Finance and Policy, and serve on the editorial boards of three other top education journals. I served on the board of the Association for Education Finance and Policy, and sit on several advisory boards, including the CORE School Districts' Growth Model Technical Advisory Group and the National Accountability Advisory Board for the California Charter School Association.
- 6. I have published extensively on the topic of teachers' unions and collective bargaining agreements ("CBAs"). A CBA is a contractual agreement between an employer and a labor union, governing certain terms and conditions of employment for the employees, particularly wages and working conditions.
- 7. My work examines the contents of school district teacher CBAs, the degree to which CBAs constrain school district administrators' actions and policymaking, and the relationship between CBA restrictiveness and district operations and student performance on standardized tests. I co-authored a thorough and objective review of the literature on teachers' unions and their impacts on student achievement and district operations (see Cowen & Strunk, 2015, attached hereto as Exhibit B).

- 8. I have also widely studied issues of teacher policy including Reductions in Force (RIFs), multiple measure teacher evaluation systems, teacher compensation and teacher tenure. I have also studied school district reforms, and in particular initiatives intended to turn around persistently low-performing schools and districts.
- 9. I understand that Article VIII, section IV, paragraph 1 of the New Jersey Constitution provides: "The Legislature shall provide for the maintenance and support of a thorough and efficient system of free public schools for the instruction of all the children in the State between the ages of five and eighteen years." I further understand that the New Jersey Supreme Court has deemed this Constitutional right to a "thorough and efficient" education to have paramount importance, and has recognized thirty-one districts with special needs ("SDA Districts"), which are under the Court's purview to ensure this constitutional mandate.
- Department of Education ("DOE") in this action to provide expert support for their application for modification of the Supreme Court of New Jersey's prior orders, including those of Abbott v. Burke, 199 N.J. 140 (2009) ("Abbott XX") and Abbott v. Burke, 206 N.J. 302 (2011) ("Abbott XXI"), as related to these SDAs. I understand that the Commissioner of Education is seeking to confirm his

authority to suspend those provisions of certain education statutes, exclusively in the SDA districts, which the Commissioner finds to be impediments to achieving a thorough and efficient education in those school districts. I have been retained to opine on the effects of specific impediments in certain Collectively Negotiated Agreements ("CNAs") on student achievement and the effect on student achievement when seniority is the sole basis for determining teacher layoffs in the event of a reduction in force.

11. I understand that teachers in the New Jersey public schools, including the SDA Districts, do not have the right to collectively bargain, but have the right to collectively negotiate, pursuant to the New Jersey constitution, N.J. Const., art. I, ¶ 19, and the New Jersey Employer-Employee Relations Act ("NJEERA"), N.J.S.A. 34:13A-1, as amended by the School Employees Contract Resolution and Equity Act ("SECREA"), N.J.S.A. 34:13A-31. Thus, CNAs, and not CBAs, govern the working relationship between New Jersey school districts and their employees, including teachers. However, I will use the terms interchangeably.

#### II. CNAS RESTRICT ADMINISTRATOR AUTONOMY TO IMPLEMENT POLICY

- 12. CNAs are critically important documents in local district and school governance. Nearly every aspect of teachers' work and school operations is negotiated into teachers' union contracts, leading one prominent scholar to note that unions' contracts are the most important policy document governing school district operations [Hill, P. T. (2006). The Costs of Collective Bargaining Agreements and Related District Policies. In J. Hannaway, & A. J. Rotherham (Eds.), Collective Bargaining in Education (pp. 89-109). Cambridge, MA: Harvard Education Press].
- assignment and transfers, teacher evaluation, class size, grievance procedures, leaves, association rights, student placement, instructional time, school day and year schedules, non-instructional duties, and more [e.g., Strunk, K. O. (2012). Policy Poison or Promise? Exploring the Dual Nature of California School District Collective Bargaining Agreements. Educational Administration Quarterly, 48 (3), 506-547 ("Strunk, 2012")].
- 14. Although CNAs are an indispensable part of public employment in New Jersey, there is no question that CNAs can and do obstruct district and school administrators' attempts to implement policies, many of which they believe are necessary and/or in the interest of improving student achievement. In fact,

CNAs or CBAs are intended, as documents, to restrict administrators' autonomy and authority to implement policy [see, for example, McDonnell, L., & Pascal, A. (1979). Organized Teachers in American Schools. Santa Monica, CA: RAND; Johnson, S. M., & Kardos, S. M. (2000). Reform bargaining and its promise for school improvement. In T. Loveless (Ed.), Conflicting Missions? Teachers unions and educational reform (pp. 7-46). Washington, DC: Brookings].

### III. RESTRICTIVE CNAS ARE ASSOCIATED WITH LOWER STUDENT PERFORMANCE

15. My own research and that of others shows that districts that have negotiated more restrictive CNAs (in that the CNA constrains administrators' actions) have lower student achievement and lower graduation rates, and that the negative relationship between CBA restrictiveness and student achievement is amplified in schools and districts with higher proportions of minority, lowincome and low-achieving students [See, for examples, Moe, T. M. (2009). Collective Bargaining and the performance of public schools. American Journal of Political Science , 53 (1), 156-174; Strunk, K. O. (2011). Are Teachers' Unions Really to Blame? Collective Bargaining Agreements and Their Relationships with District Resource Allocation and Student Performance in California. Education Finance and Policy, 6 (3), ("Strunk, 2011"); Strunk, K. O., & McEachin, A. (2011). Accountability Under Constraint: The Relationship Between

Collective Bargaining Agreements and California Schools' and Districts' Performance Under No Child Left Behind. American Educational Research Journal, 48 (4), 871-903 ("Strunk & McEachin, 2011")]. For example, my work in California shows that one standard deviation increase in CBA restrictiveness is associated with approximately a 6.5% decrease in districts' Academic Performance Index (API) score, and with a 1.3% decrease in district graduation rates (Strunk, 2011). I also find that contract strength is positively associated with the likelihood that schools and districts are in Program Improvement and at higher levels of Program Improvement under the No Child Left Behind Act, such that a district with a contract that is 1 standard deviation more restrictive has a 7.7% greater likelihood of failing to achieve NCLB targets and being placed in Program Improvement (Strunk & McEachin, 2011).

#### IV. APPLICATION TO THE NEW JERSEY CONTEXT

16. Although I am aware of no studies based on New Jersey CNAs similar to my own studies based on California CBAs, there relationships found little reason to believe the is California should differ in the SDA districts. The New Jersey Education Association ("NJEA") maintains that "[s]chool boards are required to negotiate with an employee representative over" http://wlbea.org/files/2015/03/NJEAtopics. least 70 at Collective-Bargaining-Manual.pdf at page 6-7.

- 17. Of particular concern to the New Jersey Department of Education are a number of contractual provisions in CNAs that they believe can impact or otherwise impede a thorough and efficient education, including (1) length of the school day, (2) instructional time; (3) length of the school year; (4) teacher assignments; and (5) dictating the beginning and end of the school day.
- 18. As I will discuss below, provisions limiting instructional time (including both the length of the school day and year) and teacher assignment may in fact impede districts' abilities to provide a thorough and efficient education in the SDA Districts.
- 19. Many CBAs restrict the amount of instructional time allowed during the school day. For instance, my own analysis of California CBAs shows that 61% of California school district CBAs restrict the amount of time teachers can work in a given day and 42% of CBAs specifically restrict the length of instructional time in a school day (Strunk, 2012). Similarly the CNAs in many SDA districts preclude a lengthening of the school day instructional time. For example, the Asbury Park CNA (in effect through June 2011) requires that the teacher work day at district elementary, middle and high schools cannot exceed six hours and forty minutes, six hours and forty-five minutes, and seven hours, respectively (Article IX, Section F, Work Day). These hours

include mandatory preparation time and other duties, and as such restrict the amount of time devoted to student instruction, absent further negotiation between the district and the teachers' association. Similar provisions can be found in other SDA district CNAs.

- 20. Such provisions make it difficult for administrators to increase the amount of time students spend in schools, and particularly "seat time" in which they are receiving instruction. However, given the achievement difficulties faced by students in SDA districts, increased instructional time may well be an important intervention that could help to improve their achievement and learning. To that end, numerous studies demonstrate the connection between increased instructional time and improved student achievement.
- 21. In a meta-analysis of fifteen relatively high-quality studies that examine the relationship between instructional time and student outcomes, Patall et al. (2010) show that increasing the amount of time students are in school can improve student learning outcomes, especially for students who are most at risk of school failure. [Patall, E. A., Cooper, H., & Allen, A. B. (2010). Extending the school day or school year a systematic review of research (1985-2009). Review of educational research, 80(3), 401-436.]

- 22. Some of the most recent work on the topic, using the international PISA dataset, finds that achievement increases with instructional time, and that increased instructional time is particularly effective in countries in which schools had autonomy over budgetary and teacher staffing decisions [Lavy, V. (2015). Do differences in schools' instruction time explain international achievement gaps? Evidence from developed and developing countries. The Economic Journal, 125(588), F397-F424; Rivkin, S. G., & Schiman, J. C. (2015). Instruction time, classroom quality, and academic achievement. The Economic Journal, 125(588), F425-F448].
- 23. Recent work that examines extended school time in charter schools in the United States, where administrators have increased flexibility to change the school day and year schedule, similarly finds that enhanced instructional time is associated with student achievement gains. For instance, Dobbie and Fryer (2013), examining 39 charter schools in New York City, show that schools that increase instructional time by 25% have annual gains that are 0.50 standard deviations larger in math achievement. [Dobbie, W., & Fryer Jr, R. G. (2013). Getting beneath the veil of effective schools: Evidence from New York City. American Economic Journal: Applied Economics, 5(4), 28-60]. Kraft (2015), looking at extended learning time used for individualized tutoring in a charter school in Boston, finds that student achievement on

tenth-grade English language arts exams increased by 0.15 to 0.25 standard deviations per year for enrolled students. [Kraft, M. A. (2014). How to make additional time matter: Integrating individualized tutorials into an extended day. Education Finance and Policy].

Importantly, flexibility to use increased instructional time effectively is critical to the efficacy of such intervention. This entails providing administrators with the autonomy to change scheduling within the school day by, instance, expanding the length of certain class times. For example, in two related papers, Cortes and Goodman (2014) and Cortes, Goodman and Nomi (2015) study "double dose algebra," an intervention implemented in Chicago Public Schools that required lower-performing ninth grade students to take two periods of (implemented alongside professional development algebra algebra teachers). [Cortes, K. E., & Goodman, J. S. (2014). Ability-tracking, instructional time, and better pedagogy: The effect of double-dose algebra on student achievement. The American Economic Review, 104(5), 400-405; Cortes, Κ. Goodman, J. S., & Nomi, T. (2015). Intensive math instruction and educational attainment long-run impacts of double-dose algebra. Journal of Human Resources, 50(1), 108-158]. authors find that students enrolled in double-dose algebra performed significantly better in both short term achievement and

longer term test scores, math coursework, high school graduation and college enrollment rates.

- Another area of particular concern to the New Jersey Department of Education is the impediments to teacher staffing that exist in many SDA district CNAs. In particular, CBAs can restrict the ways in which state policy makers and district and school administrators can staff their schools with teachers, and very restrictive CBAs can make it impossible for administrators or policy makers to implement reforms intended to staff districts and schools with the most effective teachers (e.g., Strunk & McEachin, 2011). Given that consistent exposure to high quality teachers is the largest school-based contributor to increased student achievement, restrictions on teacher staffing may in turn contribute to schools' and districts' inability to meet performance standards. [Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. Econometrica, 73(2), 417-458 ("Rivkin, Hanushek and Kain (2005)"); Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014) ("Chetty, Friedman and Rockoff (2014)"). Measuring the impacts of teachers II: Teacher value-added and student outcomes in adulthood. The American Economic Review, 104(9), 2633-2679].
- 26. Several studies have documented the ways in which CBAs constrain how administrators staff their schools and districts with teachers. For instance, in my own work I have shown that

15% of California CBAs contain provisions that require that seniority (i.e., the length of time a teacher is employed by the district) dictates which teachers are involuntary transferred (this occurs when teachers must be moved to new positions within the least experienced In these districts, the districts). teacher much be involuntarily transferred, regardless of the teacher's effectiveness or fit with the new or old position (Strunk, 2012). Such provisions are not uncommon: approximately 70% of the largest districts in the country have CBAs that include similar provisions [National Council on Teacher Quality. from Retrieved database. contract (2014).Teacher http://www.nctq.org/districtPolicy/contractDatabaseLanding.do] Not only does this simply remove administrators' autonomy in making what they believe are the appropriate staffing decisions for their districts and schools, but, as Goldhaber et al. write: "To the extent that more senior or more effective teachers advantaged students (and empirical to teach more choose evidence... suggests that more senior teachers tend to do so), seniority transfer protections may help these teachers move out of disadvantaged schools and stay in more choice placements, and may therefore contribute to the inequitable distribution of teacher experience and effectiveness within school districts" [Goldhaber, D., Lavery, L., & Theobald, R. (2016). Inconvenient truth? Do collective bargaining agreements help explain the mobility of teachers within school districts? Journal of Policy Analysis and Management]. In other words, given what we know from decades of research about how senior teachers self-select into more advantaged schools, seniority transfer provisions found in CBAs likely exacerbate the inequitable distribution of teachers across schools within districts.

27. A number of studies have examined if CBAs do indeed exacerbate the inequitable distribution of teachers across schools within districts - both by experience and measures of teacher quality. Although the early literature on this topic provides mixed evidence as to whether or not CBA seniority transfer provisions do contribute to existing patterns of inequity (e.g., Moe, 2005; Koski & Horng, 2007; Cohen-Vogel et al., 2013; Anzia and Moe, 2014), the most recent and rigorous restrictive this topic finds more that examination of involuntary seniority transfer provisions in CBAs "contribute to teacher quality gaps between advantaged and disadvantaged schools (Goldhaber et al., 2016)." [Moe, T. M. (2005). Bottom-up structure: Collective bargaining, transfer rights, and the plight of disadvantaged schools. Stanford University working Koski, W. S., & Horng, E. (2007). Facilitating the teacher quality gap? Collective bargaining agreements, teacher hiring and transfer rules, and teacher assignment among schools in California, Education Finance and Policy, 2(3), 262-300;

Cohen-Vogel, L., Feng L., & Osborne-Lampkin, L. (2013). Seniority provisions in collective bargaining agreements and the "teacher quality gap." Educational Evaluation and Analysis, 35(3), 324-343; Anzia, S. F., & Moe, T. M. (2014a). Collective bargaining, transfer rights, and disadvantaged schools. Educational Evaluation and Policy Analysis, 36(1), 83-111; Goldhaber, D., Lavery, L., & Theobald, R. (2016). Inconvenient Truth? Do collective bargaining agreements help explain the mobility of teachers within school districts? Journal of Policy Analysis and Management.] Similarly, Grissom et al. (2014) show that, when school site principals in Miami-Dade County Public Schools were given the discretion to involuntarily transfer teachers out of their schools, they transferred "less productive teachers who were unlikely to leave otherwise." [Grissom, J. A., Loeb, S., & Nakashima, N. A. (2014). Strategic involuntary teacher transfers and teacher performance: Examining equity and efficiency. Journal of Policy Analysis and Management, 33(1), 112-140]. These appeared to gain in productivity in their new schools, and the teachers who replaced them in their old schools were also more productive. The authors concluded that "on the whole, involuntary transfer policy [giving administrators discretion over whom to transfer] appears to improve equity along the dimensions we examine, with some gains to efficiency

as well."

- 28. In short, it is clear from numerous studies such as those cited above that the rigidity and restrictiveness inherent in many CBAs' staffing provision constrains administrators from implementing policies that have great potential to improve student achievement. This may be one reason that CBA restrictiveness is consistently associated with lower student achievement.
- 29. Based in the belief, pursuant to evidence such as that cited above, that restrictive CNAs can impede a thorough and efficient education, education reformers across the country are seeking a way to circumnavigate those restrictions. To that end, federal programs like Race to the Top and the Teacher Incentive Fund incentivize states to reform the way teachers traditionally evaluated, compensated, and retained, requiring alterations to CBA policies. Most states have proposed new reforms to teacher tenure, evaluation, and dismissal statutes [Marianno, B. D. (2015). Teachers' Unions on the Defensive?: How Recent Collective Bargaining Laws Reformed the Rights Teachers. Journal of School Choice, 9(4), 551-577 ("Marianno, 2011 and 2013, every state Moreover, between legislature in the nation heard, and in some cases, enacted, new laws restricting teachers' unions' rights to collectively bargain [Freeman, R. B., & Han, E. (2012). The war against

public sector collective bargaining in the US. Journal of Industrial Relations, 54(3), 386-408]. Teachers' rights to tenure, seniority-based layoffs and due process, along with unions' rights to collect membership dues were the subject of highly publicized court challenges in California (Vergara v. California;), New York (Wright v. New York) and even in the U.S. Supreme Court (Friedrichs v. California Teachers' Association).

30. Overall, my research and that of others cited here, shows that there is a negative relationship between contract While achievement. student restrictiveness and conclusively say that more restrictive contracts cause lower student achievement, it is clear that the association exists. Moreover, based on some of my current work in progress that examines multiple iterations of CBAs in California, it relationship between CBA negative the evident that restrictiveness and achievement continues to exist over time. While not every single provision within a CBA can or should impact the ability of educators to improve student achievement, I have highlighted two sets of regulations -- specifically, seniority-based transfer rights and provisions that restrict administrators' abilities to increase and make more flexible instructional time = that, based on extant research, would seem to constrain administrators from implementing policies that might enhance student learning.

# IV. THE IMPORTANCE OF TEACHER QUALITY AND THE EFFECT OF LIFO

- 31. I understand that New Jersey teachers' employment is governed by, among other things, the Tenure Act, N.J.S.A. 18A:28-1, including a provision that the DOE refers to as the LIFO statute, N.J.S.A. § 18A:28-10, which is found within the Tenure Act. LIFO mandates that, with certain limited exceptions, school districts in New Jersey must conduct district-wide layoffs in reverse order of seniority (i.e., lastin, first-out). I further understand that teachers are evaluated, and can be dismissed due to inefficiency, on an individual basis after a hearing, pursuant to TEACHNJ, N.J.S.A. 18A:6-117.
- 32. Here, I understand that the Commissioner is seeking authority to engage in RIFs in certain SDA Districts, where necessary, based on factors other than seniority. As I will detail below, studies have determined that LIFO-based RIFs can harm students and schools, and that the elimination of LIFO in RIFs has increased student performance.
- 33. As noted above, there is extensive research that shows that individual teachers are the most important school based-factor in predicting student achievement on standardized tests as well as longer-term outcomes [e.g., Rockoff, J. E. (2004). The impact of individual teachers on student achievement:

Evidence from panel data. American Economic Review, 247-252; Rivkin, Hanushek & Kain, 2005; Chetty, Friedman & Rockoff, 2014]. Research suggests that the effect of a one standard deviation improvement in teacher quality, as measured by the teachers' "value-added" contribution to student achievement on test scores, is greater than the effect of reducing class size by ten students. [Jepsen, C., & Rivkin, S. (2009). Class size reduction and student achievement the potential tradeoff between teacher quality and class size. Journal of human resources, 44(1), 223-250; Rivkin, Hanushek & Kain, 2005]. Moreover, there is great variation - within schools and within districts - in teacher quality (Hanushek & Rivkin, 2010), and quality does not correlate perfectly with teacher experience, especially after the first several years teaching. [Hanushek, E. A., & Rivkin, S. G. (2010). Generalizations about using value-added measures of teacher quality. The American Economic Review, 100(2), 267-271; Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2006). Teacher-student matching and the assessment of teacher effectiveness. Journal of human Resources, 41(4), 778-820; Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. Economics of Education Review, 26(6), 673-682; Papay, J. P., & Kraft, M. A. (2015). Productivity returns experience in the teacher labor market: to

Methodological challenges and new evidence on long-term career improvement. Joual of Public Economics, 130, 105-119; Rivkin et al., 2005; Rockoff, 2004].

- 34. Despite this, a great majority of districts, including those in New Jersey, rely upon LIFO to determine the order by which teachers are targeted for layoffs. Multiple studies, some of which I have authored, suggest that LIFO-based layoffs adversely impact both schools and students, and that this negative impact of LIFO on students and schools can occur through multiple pathways.
- 35. First, LIFO-based layoffs have been shown to have a direct adverse impact on schools and students as they alter the quality composition of the workforce by removing more effective teachers from schools than would be the under case an alternative layoff process, such as layoffs based on measures of effectiveness (Boyd et al., 2011; Goldhaber & Theobald, 2013; Kraft, 2015).
- 36. Researchers find that in New York City (Boyd et al., 2011) and Washington State (Goldhaber & Theobald, 2013), the use of a LIFO layoff process rather than a performance-based system that relies on value-added measures of teacher effectiveness requires districts to lay off substantially more and higher quality teachers (20% 26% of a standard deviation in student achievement) to reach equivalent budget savings. [Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., &

Wyckoff, J. (2011). The Influence of school administrators on teacher retention decisions. American Educational Research Journal, 48(2), 303-333; Goldhaber, D., & Theobald, R. (2013). Managing the teacher workforce in austere times: The determinants and implications of teacher layoffs. Education Finance & Policy, 8(4), 494-527.

- 37. The need to lay off more teachers when using LIFO occurs because inexperienced teachers, when paid on a salary schedule such as those that exist in nearly every single district in the country, are less expensive. If budgetary pressures require districts to meet specific reductions in cost, districts will need to lay off more junior teachers than they would senior teachers to reach equivalent budget reductions. The lay off of higher quality teachers, on average, via LIFO layoff procedures occurs because teacher experience and effectiveness regardless of measure used to determine effectiveness - are not perfectly correlated. In other words, there can be very effective teachers who are less experienced than some very ineffective teachers, who may be more experienced. If layoffs occur based solely on seniority, with the least experienced teachers getting laid off before more senior teachers and without attention to quality, then, on average, districts will remove higher quality teachers than if they were to execute layoffs based on performance.
- 38. Kraft (2015), when examining the impacts of a non-LIFO layoff process executed in the Charlotte Mecklenburg (North Carolina) school

district, found that when administrators can take other factors, such as teacher quality, into account in layoffs, layoffs actually *increased* student achievement over what it would have been had seniority been the sole determining factor, and simultaneously decreased the number of teachers that the district had to lay off. [Kraft, M. (2015). Teacher layoffs, teacher quality, and student achievement: Evidence from a discretionary layoff policy. Education Finance and Policy, 10(4), 467-507].

- 39. In addition to these direct impacts of LIFO-based layoffs, the LIFO layoff process also has several indirect effects on teachers. First, in my own research, my colleagues and I show that laying off teachers via LIFO causes massive turnover within a district, as teachers are shuffled around the district [Goldhaber, D., Strunk, K. O., Brown, N., & Knight, D. S. (2016). Lessons Learned From the Great Recession Layoffs and the RIF-Induced Teacher Shuffle. Educational Evaluation and Policy Analysis, 0162373716647917].
- 40. This reshuffling occurs because inexperienced teachers are inequitably distributed across schools within districts (partly as a result of seniority transfer provisions found within CBAs). When LIFO-based layoffs require districts to let go of the least senior teachers first, certain (usually disadvantaged) schools with more junior teachers bear a heavier burden of the layoffs. As a result, these schools lose more teachers than necessary to meet their enrollment and budget needs, and teachers from elsewhere in the district must be moved into these open

vacancies. This churn is particularly problematic because teacher turnover may impact school culture and student achievement [Guin, K. (2004). Chronic teacher turnover in urban elementary schools. Education policy analysis archives, 12, 42. Retrieved March, 24, 2013 from http://epaa.asu.edu/ojs/article/view/197; Hanushek, E., & Rivkin, S. (2013). Teacher turnover and the quality of instruction in urban schools. Unpublished Manuscript; Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. American Educational Research Journal, 50(1), 4-36].

41. In addition, in related work, my co-authors and I show that teachers who are impacted by layoffs - either by being directly laid off or receiving a Reduction in Force (RIF) notice and then not being laid off - are less effective (as measured by VAMs) upon their return to teaching [Strunk, K., Goldhaber, D., Knight, D., & Brown, N. (2015). Are There Hidden Costs Associated With Conducting Layoffs? The Impact of RIFs and Layoffs on Teacher Effectiveness. 140). CALDER Working Paper Retrieved http://ww w. caldercenter. org/sites/default/files/Working% 20 Paper% 20140\_0. pdf]. This is particularly concerning given that, in additional related work, we show that it is the most disadvantaged children who are impacted by RIFs and layoffs [Knight, D. S. & Strunk, K.O. (2016). "Who Bears the Costs of District Funding Cuts? Reducing Inequality in the Distribution of Teacher Layoffs."]

42. In sum, the extant work examining the impacts of RIFs and layoffs - especially those executed in reverse seniority order through the LIFO layoff process - detrimentally impact schools and students, and in particular the most traditionally disadvantaged students.

#### V. THE EFFECT OF THE LOSS OF "LAST BEST OFFER"

- 43. I understand that the SECREA, N.J.S.A. 34:13A-33, has eliminated the school districts' use of the "last best offer" to permit administrators to effect reform within the schools when the union and district cannot settle on a new negotiated agreement. In other words, if the principal deems it in the students' best interest to change the length of class times from 40 minute blocks to 80 minute blocks, and seeks to institute this reform contrary to the terms of a CNA, the teachers' union can prevent the reform by refusing to accept this change during negotiation of a new CNA or otherwise. Instead, school boards and teachers' unions simply continue to operate under the expired CNA. Thus, despite studies that reform might enhance student performance, the schools are unable to implement it.
- 44. This lack of "last best offer" is not uncommon. However, when such regulations make it almost impossible to implement changes in CBAs because both sides cannot reach a resolution, the default is no change at all. If administrators and teachers cannot implement reforms that they believe are in the best interest of students because of such gridlock, then

students will be adversely impacted.

45. Given this cycle, it would be beneficial to institute some mechanism to help override an impasse. The Commissioner is requesting that an SDA district could be granted the ability to implement changes to specific areas of the CBA in cases where no resolution can be reached between the teachers' union and the administrators. This might help to overcome the impasse because it provides the incentive to both sides to come to a resolution, and 2) it enables the district, in the case of last resort, to unilaterally impose less restrictive terms in a CNA in order to implement changes believed to be in interest of students. Of course, ideally, SDA district administrators or school boards and the local teachers' unions would work together in the best interest of students. Should the commissioner be granted authority to enable changes to the CBAs in SDA districts when an impasse between the two negotiating parties does occur, attention must be paid to the potential unintended consequences of such actions, and efforts must be made to engage with the teachers' union to insure adequate implementation of the reforms.

I hereby certify that the statements made by me are true.

I am aware that if any of the foregoing statements are willfully false, I am subject to punishment.

Kathum Ohl.

Katharine Omenn Strunk, Ph.D.

Dated: August 23, 2016