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Dismantling Education's "Wicked" Problems

By
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Claremont Graduate University

2023

Approval of the Dissertation Committee

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Amanda Castillo as fulfilling the scope and quality requirements for meriting the degree of Doctor of Philosophy in Education.

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Abstract

Dismantling Education's "Wicked" Problems

By

Amanda Castillo

Claremont Graduate University: 2023

The following papers, presented as a three-paper series format, discuss the implications of targeting three key, foundational problems within K-12 education. Designing solutions for policy or systemic problems requires more than just creativity. Since public education faces a myriad of crises, it falls under the term "wicked problem" first coined by Horst W.J. Rittel and Melvin M. Webber, to identify challenges that not only seem immune to conventional solutions but are often exacerbated by standard techniques. These papers are in no order of importance, nor are they issues educators might consider highest priority. The presented papers, however, provide suggestions for high-level impact that undo the corrosion of educational systems and improve the conditions for millions of students, rather than one classroom.

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Introduction

I was twenty-one years old when I entered the public education profession and was largely surrounded by colleagues who were of similar age. Most of us had just recently graduated from college, an undisputed privilege that was indicative of the fortune many of us had growing up. I am a product of the public school system and emerged at the top of my class, rarely facing challenges that interfered with my love of school and learning. My passion for being a good student was second only to my deep admiration of my teachers. The systems and structures of schools were safe and reliable, and my young colleagues and I had thrived within them.

After about one month in the classroom, it was clear that everything had changed. It became commonplace for at least one of us to break down in tears at staff meetings; many of us could barely make it through a lesson without students causing interruptions; we were putting in 18 hours a day and our students were still dreadfully behind. Yet there was another almost imperceptible shift that began to crack our outlook of what we were up against. The US public education system, something that few of us could find fault in before, was now emerging as a hopeless cause. A faculty mentor explained our disillusionment in a memorable way: for the first time in many of our lives, we had our faith in the system betrayed and were heartbroken that, for once, there were challenges that our hard work could not solve.

I wish I could say that my experiences as a new teacher eventually turned into a peaceful acceptance of the problems within K-12 education in America. Instead, it made me crazy. I still adhere to my belief in the transformative power of education, and it bewildered me as to why it was so difficult for millions of children to experience the same experience as I once had. Being in the field, on the ground for over ten years was exhausting due to the hundreds of tiny dilemmas educators face daily. As I graduated to a school administrator, the firehose of problems didn't end but my perspective did; now, instead of problem-solving my own singular classroom or one student at risk, I was confronted with how to navigate these challenges on a global level.

Designing solutions for policy or systemic problems requires more than just creativity. In no ways did I learn this more harshly than when having to present a solution or new recommendation to a room full of teachers, parents, or students. No matter how nimble the

design or foolproof the plan, failure to account for constituent and stakeholder opinion and reaction often left ideas dead on the table. Certainly, I wasn't faced with fixing the public education system on a nationwide level. Yet, in thinking of how to build a school where 400 students could feel safe and be successful, I was wading into the depths of systemic issues that have hindered the system for decades. As a novice teacher, that hopelessness I experienced was an indication of the systemic decay that grew long before my students but was annihilating their educational opportunities. After years in school leadership, the hopelessness turned into an inquisition and then a fascination into the wicked problem of public education in America.

I didn't know the concept of a "wicked problem" prior to graduate school but when reading the literature, I became convinced that public education fit all the criteria yet was largely unconsidered to be on the short list of social problems to solve. The term "wicked problem" was first coined by Horst W.J. Rittel and Melvin M. Webber, to identify challenges that not only seem immune to conventional solutions but are often exacerbated by standard techniques. In conveying why sociological problems defy the often used rational planning approach, Rittel and Webber theorized that:

the classical paradigm of science and engineering – the paradigm that has underlain modern professionalism – is not applicable to the problems of open societal systems..... The kinds of problems that planners deal with – societal problems – are inherently different from the problems that scientists and perhaps some classes of engineers deal with. Planning problems are inherently wicked. (Rittel & Webber, 1973, p. 160)

Rittel and Webber state that a tame, or non-wicked, problem can be summarized and presented in a formulaic but contained process. Yet with a wicked problem, an inherent and deep understanding of the crisis is pivotal for solutions planning. Moreso, those acquainted with the problem must have already brainstormed solutions that probably had minor to no effect, as "one has to develop an exhaustive inventory of all conceivable solutions ahead of time... in order to anticipate all questions (in order to anticipate all information required for resolution ahead of time)," (p. 161). Educators in the field, particularly those in the classroom, are experts in finding quick solutions for immediate problems. The ability to think quickly and seamlessly is a characteristic of a good teacher. But, as my novice colleagues and I rapidly discovered, applying

band-aid solutions was not only exhausting but prevented any reflection about the larger ecosystem; I could easily engage one child with the promise of a gold star sticker but in doing so, I may neglect to consider how lack of student engagement is indicative of a larger issue.

The following papers, presented as a three-paper series format, were selected because of their implications on how to target the foundational problems within K-12 education. These papers are in no order of importance, nor are they issues educators might consider highest priority. Educators often need solutions they can apply immediately; my colleagues and I usually scoffed at our education policy courses because we needed support that would yield immediate results. The presented papers, however, provide suggestions for high-level impact that undo the corrosion of educational systems and improve the conditions for millions of students, rather than one classroom. There is an unfortunate urgency to social problems, as delaying solutions usually mean humans suffer in the process. This was embedded in me from the moment I worked with students; every day I was ineffective in my job, was another lost day for a child, who was most likely already on a downward spiral due to social dysfunction.

The first paper discusses how we train classroom teachers in America, specifically in classroom management. Classroom management is an industry term that refers to the skills and techniques teachers employ to ensure their classroom is safe, efficient and free from disruption or poor engagement from students. When I was an administrator, I visited dozens of classrooms with the daily lesson plan in hand. When there was no effective classroom management, the lesson was moot as the teacher would struggle to make it through a thought without some disruption. In the worst cases, there were examples of verbal or physical altercations between students. Therefore, I have always deemed classroom management to be the highest priority skill for teachers to master; yet, it is the most overlooked in the traditional Teacher Education programs. Furthermore, the little research regarding classroom management states that teachers' beliefs have something to do with the way they manage or discipline their classrooms.

Labor unions have always been a complex layer in the Economics field and teacher unions are a contentious topic for anyone who has ties to K-12 education; administrators, parents and even students themselves most likely have a pressing opinion about unions. While mobilization, teacher representation and bargaining agreements are hefty topics in the research, teacher dismissal is rarely touched. The second paper is a policy brief presenting findings regarding the research about underperforming teachers and firing processes. The brief

demonstrates that the contention between school district and union is rarely due to teacher firings. The unions are largely onboard with dismissing poor talent and have laid out standard processes; the district end, the brief argues, is where the system begins to fall short.

Finally, no discussion around public education would be complete without a reference to money. As a young teacher, I would often get told by strangers that we should pay teachers more. Curiously, I was happy with my pay at the time but also not in need of supplies for my students. Meanwhile, a colleague at a school down the street is having to bring in reams of her own copier paper. The third paper examines how schools in California, a state that is mentioned at having a pioneering approach to school funding, spend their budgets and how it impacts their student achievement goals. Given the funding source (taxpayers) has historically equated to how much money the neighborhood school gets, California's funding formula gives an increase to schools who have the most disadvantaged students. If the formula is right, it stands to be a nationwide model for how to close the funding gap. The paper will take data from every school district over a span of six years to assess if and how much school funding impacts students.

Each paper aims to provide recommendations that would provide the most impact given that the results of US education, are steadily plummeting. What was once urgent is now dire, especially after the COVID-19 pandemic presented its own wicked problem. Students are even more behind than they were pre-pandemic, and the labor shortage is affecting school staffing. Given that online learning dominated during the 2020 and 2021 school year, the consensus around the importance of teachers was inspiring. Furthermore, the connection between how schools impacted the labor force and the economy was widely publicized creating an urgency to open schools safely. Policy makers and education leaders have an opportunity to ride this wave of momentum if they accept the complexity and "wickedness" of education and identify the most influential levers to shift the system. This dissertation aims to present ideas for those levers and meaningful recommendations to move forward.

Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy sciences*, 4(2), 155-169.

Predicting Presence: measuring teachers' beliefs and values about classroom management

Overview

Training for teachers in the area of classroom management is inadequate or scarce in teacher education programs and professional development. Not only does this have a negative impact on student achievement and teacher retention, but it has also left a void in academic research. Most classroom management practices are not empirically based and tend to be anecdotal (passed on from teacher to teacher) versus prescriptive. Furthermore, skills that are actionable, such as creating routines and classroom rules only yield partial results; teachers must have a presence that exudes authority yet also demonstrates compassion and belief in students. This study aims to uncover teachers' attitudes, beliefs and values as they relate to classroom management. It also attempts to initiate research about the concept of teacher presence by asking current, full-time teachers what they believe about presence, how much guidance they have received regarding it and if it is a prioritized aspect of growth.

Significance

Teacher quality matters. Research shows that up to “8.5 percent of the variation in student achievement is due to teacher characteristics...a much larger share than any other school characteristic” (Goldhaber, 2002, p. 52). However, the teaching profession has long been plagued by high attrition, specifically amongst newer teachers. In a longitudinal study following first year teachers, those who left the profession chose a lack of success with students as their main challenge. Interestingly, issues regarding students (ie., lack of motivation, disengagement in subject material, poor academic skills) were never cited as reasons for their perceived ineffectiveness; rather school climate, leadership, supportive colleagues and access to resources topped the list of challenges, reporting that their placement schools “left new teachers to sink or

swim” (Johnson & Birkeland, 2003). Newer teachers are most likely to struggle hence most likely to burn out fast. Despite teacher education and training, new teachers are struggling in execution, specifically in the area of classroom management.

A recent study done by Flowers, McKenna and Haring (2017) used survey methodology to poll teacher credentialing programs on their incorporation of classroom management instruction in their curriculum. While 87% of all programs claimed to address what was labeled “universal methods” (rules, routines, management of student assignments, parent communication), only about half of all programs “reported providing content concerning reductive strategies” (p. 165). Of those who did offer reductive strategy guidance, error correction was the most frequently covered subject; most concerning was that only 38% of alternative certification programs offered support around reductive strategies, meaning that teachers already likely to be in the classroom, learning on the ground, were the least supported in developing the ability to stop poor behavior. The illogical omission of classroom management in teacher preparation programs has been pointed out by the research community for decades yet there remains an abundance of work to be done when unpacking where classroom management instruction has fallen short, navigating what it should look like and also considering what evidence suggests as best practice.

Literature Review

Inconsistent teacher training, especially in the area of classroom management, results in new teachers struggling to grow fast enough to help students who (in most cases) don’t have time to lose. Recent data reveals that teacher attrition, specifically amongst novice teachers, remains constant; more than 44 percent of new teachers leave the profession within their first five years (Ingersoll, Merrill, Stuckey & Collins, 2018). In their recent report, Ingersoll et al. found that in

addition to high attrition, the teaching force is made up of far more new teachers than seasoned. With newer teachers making up most of the workforce, yet also being the bulk of those that depart, the most frequently cited reasons for leaving include “dissatisfaction with any of a variety of school and working conditions, including salaries, classroom resources, student misbehavior, accountability, opportunities for development, input into decision making, and school leadership (Ingersoll et al., 2018). The cost of teacher turnover has remained steadily and frighteningly felt by the most vulnerable schools: almost half of all public-school teacher turnover takes place in just one quarter of the population of public schools...high-poverty, high-minority, urban, and rural public schools (p. 18).

While most researchers agree that classroom management is an essential component of teaching (Freeman et al., 2014; Flower, McKenna, Haring, 2017), nobody has ventured to name it as the most crucial aspect for beginning teachers. Even in the most successful teacher credentialing programs, classroom management and how to approach this realm is often nebulous and anecdotal. Often bucketed under classroom culture or student relationships, classroom management (as it will be referred to in this paper) presents a large undertaking for emerging teachers.

Yet there is no one model for classroom management, as empirical backing as well as overall expertise in this area, is severely lacking. As Jere Brophy (1988) so aptly describes, “advice to teachers about classroom management was confined mostly to oversimplified aphorisms such as “Don’t smile until Christmas,” experience-based “bag of tricks” suggestions of unknown validity and generalizability, and principles drawn mostly from the animal learning laboratory or the psychotherapist’s office rather than the classroom” (p. 5). Outside of teacher preparation programs, academia is also slow to engage in defining successful management

practices; as Evertson and Weinstein (2006) describe “few researchers focus explicitly on classroom management...(as) exemplified by the pitifully small membership of the AERA Special Interest Group on classroom management... there are generally only two or three (AERA) sessions explicitly devoted to classroom management, and these tend to be poorly attended” (p. 3).

Some researchers have attempted to define an empirically backed classroom management system or framework (most notably, Simonsen, Fairbanks, Briesch, Myers, and Sugai (2008)), but the most popular techniques used in teacher education programs are written by senior classroom teachers. One of the most popular, *Teach like a Champion* (Lemov, 2010), claims to be based off of hundreds of teacher observations and espouses that good teaching is not innate but rather studied and practiced. When discussing classroom management, Lemov lists off factors that are echoed in the research: rewards for positive behavior, routines that maximize structure, consequences to deter poor decisions from students. Yet he also touches on components that, on the outset, seem subjective, ambiguous and more intrinsic. Lemov cites “control” and “influence” as two principles to successful classroom management. Although the connotations of the term “control” seem compliance based, Lemov argues that control is the capacity to cause someone to choose to do what you ask, regardless of consequences. Simply put, it is not what you say but how you ask that makes someone more likely to agree to do it. He explains further, “teachers who have strong control succeed because they understand the power of language and relationships: they ask respectfully, firmly and confidently but also with civility, and often kindly. They express faith in their students” (2010). He couples this aspect of with the ability to inspire students which he labels “influence” or a means to get students to “internalize

the things (teachers) suggest...although less visible than getting kids to behave, getting them to believe- to want to behave positively- is the biggest driver of achievement” (p. 149).

Lemov’s assertions sound contrary to his belief that great teaching can be learned; the talent of being influential and commanding seem to provoke discussion about one’s personality, demeanor or overall presence. As arbitrary and potentially biased as these factors might seem to a teacher’s work performance, Lemov is not unfounded in his observations of nuance in teachers’ traits. In his 2002 article, Dan Goldhaber also alluded to the intangible qualities that excellent teachers possess. Not only are these qualities hard to measure, he discusses, but they are elusive: “Only about 3 percent of the contribution teachers made to student learning was associated with teacher experience, degree attained, and other readily observable characteristics. The remaining 97 percent of their contribution was associated with qualities or behaviors that could not be isolated and identified (p. 53).

Despite Lemov’s and others attempts to propose that good teaching can be taught, there seems to be an intangible, mysterious *je ne sais quoi* about successful teachers that is connected to an innate characteristic. Even students seem to know that some teachers have valuable traits that transcend actual skill. Wendy Moore collected student responses and asserted that good teaching “must be complemented by certain dispositions, which students rated at a high level of importance in order to help them learn best” (2019, p. 64). Of these dispositions, “high expectations” and “nice/warm” topped the list. Seemingly simple, most new teachers have a difficult time finding a balance between holding students accountable while also displaying care. The dichotomy of the warm/strict persona is one that has been heavily cited in literature about culturally relevant pedagogy. As Franita Ware describes, warm demanders are both authority

figures and care-givers, they can successfully navigate balance in raising their voice while still expressing affection (2006).

How to convey authority while still embodying kindness is the question many new educators grapple with and is an area that comes uncomfortably close to being too personal. “Harder” skills such as creating a rewards systems and classroom rules are ones that can be studied and taught while “softer” skills such as voice intonation and posture are more prone to subjectivity. In a scour of the canon, teacher “demeanor,” “presence,” and “persona” yield few results with most guidance on effective classroom management centering on studied and often anecdotal snippets of what occurs in highly effective classrooms. Yet all researchers, administrators and even seasoned teachers agree that presence (as it will be termed in this paper) is the omnipresent force that drives effective classrooms, even if it is something that’s been reported as “something you can only see and cannot replicate” (Goldhaber, 2002).

As with most other professions, COVID-19 has impacted teachers at an alarming rate. Not only were teachers expected to adapt all instruction to fit remote or hybrid learning models, many were also forced to return to work, despite the ongoing threat of the virus. These challenges have prompted an unprecedented number of teachers to leave the profession altogether, in high-need schools, “where teacher shortages have been at crisis levels for years, this could be catastrophic for students, teachers, public school systems and teacher education programs alike,” (Audrain et.al, p. 363). Not only will students be more likely to have inexperienced teachers, teacher education programs could face programmatic cuts if there is a lack of enrollment, further diminishing any training teachers receive about classroom management.

Research questions

Given that classroom management is an under-researched yet crucial component for teacher success, this study seeks to understand how teachers view classroom management and what aspects they deem most high leverage. Secondly, in an attempt to strengthen the relationship between teacher presence and effective management, the study engages teachers in what they believe about presence, how much guidance they have received regarding it and if it is a prioritized aspect of growth.

Methods

The initial sampling plan for the study was to survey teacher candidates currently enrolled in a teacher education program. Three universities were contacted seeking engagement of which two responded. San Diego State University agreed to distribute to instructors, after which the instructor could make the decision to ask their respective classes to participate. Claremont Graduate University was hesitant to allow current candidates to participate but offered to distribute to their alumni mailing list.

Thus, the decision to expand the sample to credentialed teachers rather than just teaching candidates was presented. I opted to use credentialed teachers' input in the sample to gauge whether or not dispositions about classroom management and teacher presence shifted depending on years of experience. As the research indicates, classroom management training is lacking in teacher education programs, with the assumption that candidates will pick up these skills in

student teaching practice. If that assumption holds true, mastery over these skills should improve over time, perhaps presenting variation in beliefs and values in this area.

The survey was created in Qualtrics and then distributed via email (see Appendix A). A total of thirty-four responses were collected. It's unknown how many potential participants were given the link to participate, as program administrators emailed an internal mailing list or asked instructors to use their own discretion in asking for participation. Unfortunately, I was not given access to the mailing list nor put in direct contact with the instructors; however, I am confident that the survey link was only disseminated to full-time teachers who are or have been in the chosen teacher education programs.

Nineteen questions are included in the survey and were created in an attempt to capture a.) beliefs about classroom management b.) skills prioritized by the teacher to be a better classroom manager and c.) training or support given to the teacher to be strong in classroom management. The majority of questions were statements that asked participants to use a five-point Likert scale to respond (one being 'Strongly Agree', five being 'Strongly Disagree'). There was one question that asked participants to choose an answer that best reflected their belief. Four questions were included to capture demographic information about the sample. The breakdown of the questions is as follows:

Item on survey	Measured by	Intention or purpose of item
1. I am a strong classroom manager	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Gauge of success of training or professional development

2. Having an authoritative presence while teaching is something that is innate and cannot be learned	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Beliefs or dispositions about teacher presence
3. Having meaningful consequences are important for my teaching to be effective	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Investment or prioritization of skills as related to classroom management
4. A robust rewards system is important for my teaching to be effective.	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Investment or prioritization of skills as related to classroom management
5. Having an authoritative presence is important for my teaching to be effective.	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Investment or prioritization of skills as related to classroom management
6. Administration support with student behavior is important for my teaching to be effective.	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Support as it relates to classroom management
7. High and clear expectations are important for my teaching to be effective.	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Investment or prioritization of skills as related to classroom management
8. Relationships with students are important for my teaching to be effective.	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Support as it relates to classroom management
9. Out of total hours spent in your teacher education program, less than 25% of hours is	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Support as it relates to classroom management

spent talking about classroom management.		
10. Would you be interested in more feedback about your teaching presence?	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Investment or prioritization of skills as related to classroom management
11. It is important that my students find me warm.	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Beliefs or dispositions about teacher presence
12. I believe some students respond differently to different teachers	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Beliefs or dispositions about teacher presence
13. I dislike speaking loudly in front of my class	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Beliefs or dispositions about teacher presence
14. It is important to me that student not interrupt me while I am speaking	Likert Scale: <i>Strongly Agree=1Strongly Disagree=5</i>	Beliefs or dispositions about teacher presence
15. Teacher presence can best be defined as	<ul style="list-style-type: none"> • A persona that a teacher creates to entertain and engage students • A demeanor that a teacher has when giving direct instruction • The vocal and physical qualities a teacher embodies to maintain control of the classroom 	Beliefs or dispositions about teacher presence

16. My gender is	male OR female OR other	Demographic information
17. My total years of being a full-time teacher are:	(1-3) (3-5) (5-10) (over 10 years)	Demographic information
18. My age is	(22-25) (26-30) (31-36) (37-45) (45 or older)	Demographic information
19. My ethnicity/race is	(White) (Black) (Hispanic/Latino) (Asian) (mixed race) (Other)	Demographic information

All responses on Likert scale items were coded as follows:

- strongly agree=1
- agree=2
- neither agree nor disagree= 3
- disagree=4
- strongly disagree=5

Results

The final sample consisted of 34 responses. The frequency distributions for gender, age, professional experience and race/ethnicity are as follows:

Table 1. Gender

Gender	Frequency	Percent of total
Male	14	41.2
Female	20	58.8
Other	0	0

Table 2. Age group

Age	Frequency	Percent of total
25 or younger	6	17.6
26-30	7	20.6
31-36	7	20.6
37-45	4	11.8
45 or older	10	29.4

Table 3. Total years of full-time teaching

Years of experience	Frequency	Percent of total
1-3	16	47.1
3-5	5	14.7
5-10	4	11.8
Over 10 years	9	26.5

Table 4. Race and ethnicity

Race	Frequency	Percent of total
White	11	32.4
Black	0	0
Hispanic/Latino	17	50
Asian	1	2.9
Mixed Race	4	11.8
Other	1	2.9

Regressions

The primary dependent variable, “I am a strong classroom manager” was tested in a stepwise regression model, whereas any missing data was replaced with the mean. Here is the initial regression output:

Table 5: Prediction of DV “I am a strong classroom manager”

Independent Variable	Beta	t	Sig t
My total years of teaching are	-.470	-3.060	.004

R= .470, R2=.221, F= 9.363, Sig F= .004, N=34

While the R squared suggests that there is a lot of variation that is not captured by the model, the Beta triggered some concerns as it suggests that the less experienced teachers actually report being stronger classroom managers. Given that the literature, observation and experience suggest otherwise, I did a crosstabulation between the two variables to get a sense of how novice teachers were rating themselves as opposed to their more experienced counterparts.

Table 6. Crosstabulation: “I am a strong classroom manager” and Years of Experience

		My total years of full time teaching are				
I am a strong classroom manager		1-3	3-5	5-10	Over 10 years	Total
	Strongly Agree	1	0	1	6	8
	Agree	11	4	3	2	20
	Neither agree nor disagree	3	1	0	1	5
	Disagree	1	0	0	0	1
Total		16	5	4	9	34

As shown, novice teachers not only make up the majority of the sample, they also tend to rate themselves high in classroom management. Furthermore, of the sample, only one participant disagreed with the statement and not one strongly disagreed. Clearly, this sample population has a more successful perception of their practice.

Without observation or achievement scores to validate their evaluations but intuitively knowing the output was skewed, I recoded the professional experience variable to reflect three ranges rather than four. Given that the literature states that after five years, teacher effectiveness stagnates and “there is little evidence that experience beyond the first couple of years in the classroom makes one a better teacher” (Goldhaber, 2002), I grouped all who had over five years of experience into one subset. The revised frequency distribution demonstrates that although novice teachers are still the majority, there is more of a balance between the least and most experienced, which might offer a more accurate prediction.

Table 7. Revised frequency distribution for total years of full-time teaching

Years of experience	Frequency	Percent of total
1-3	16	47.1
3-5	5	14.7
Over five years	13	38.2

Using “I am a strong classroom manager” as the dependent variable, the stepwise regression was ran again, with all missing data replaced with the mean. The two best predictors are “I am interested in more professional development about developing teaching presence” and “It is important that my students find me warm” with the R squared a .406 and both variables significant at the p value of .01. The coefficients of the variables imply an interesting and complicated narrative. The “professional development” variable has a coefficient of -.509 meaning that those who strongly agree or agree with wanting more training about teacher presence also thought themselves to be stronger classroom managers. Interestingly, those who thought themselves to be better at classroom management were less likely to prioritize a warm persona. The “important that my students find me warm” variable produced a coefficient of .425

meaning that those who were stronger with classroom management disagreed more with this statement.

Table 8. Prediction of DV “I am a strong classroom manager”

Independent Variable	Beta	t	Sig t
I am interested in more professional development about developing teaching presence	-.509	-3.666	.001
It is important that my students find me warm	.425	3.065	.004

R=.637, R2=.406, F=10.606, Sig F= 0.00, N=34

As the second research question asks about presence, a stepwise regression was ran (Table 9), utilizing the variable, “having an authoritative presence is important for my teaching to be effective.” The variable, meant to capture how highly participants valued the idea of presence alongside other classroom management skills, was best predicted by one variable: “a robust rewards system is important for my teaching to be effective.” While the R2 was a bit lower in this model (.23), the coefficient was highly significant (0.004). The beta for this variable was .485, meaning that the more participants devalued rewards for students, the more likely they were to prioritize presence.

Table 9: Prediction of DV “Having an authoritative presence is important for my teaching to be effective”

Independent Variable	Beta	t	Sig t
A Robust rewards system is important	.485	3.136	.004

for my teaching to be effective			
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R=.485, R2=.235, F= 9.834, Sig F=.004, N=34

The participants were given no guidance as to what was meant by the term “presence” as the survey aimed to capture pre-existing notions or ideas about this concept. However, a group of questions were designed to measure these beliefs, specifically as they relate to presence as a classroom manager (see question breakdown). A stepwise regression was ran, using the same dependent variable “Having an authoritative presence is important for my teaching to be effective” and including these belief questions as independent variables. However, none of the variables were entered into the equation. Due to the similar nature of some questions, the stepwise regression was rejected most likely due to issues of multi-collinearity. Ideally, there would be enough nuance in each question to make them perfectly independent; however, as researchers know, “independent variables like these, are almost always correlated, often substantially so” (Kerlinger 1979). Thus, it was worth running a manual linear regression just to see the relationship between the variables despite any issues of shared variance.

Table 10: Prediction of DV “Having an authoritative presence is important for my teaching to be effective”

Independent Variable	Beta	t	Sig t
Having an authoritative presence while teaching is something that is innate and cannot be learned	-.032	-.177	.861
I am a strong classroom manager	.096	.506	.617
It is important that my students find me warm.	-.425	-2.048	.050

I believe some students respond differently to different teachers	.237	1.230	.229
I dislike speaking loudly in front of my class	-.054	-.297	.769
It is important to me that student not interrupt me while I am speaking	.277	1.549	.133

R=.459, R2=.211, F=1.201, Sig F=.336, N=34

Table 10 shows the output table for that linear regression and it's clear that most variables are insignificant statistically. Yet the betas for each independent variable are interesting to note as they display possible trends in participants' thinking about presence. One variable, "it is important that my students find me warm," made a reappearance as the key predictor, having a Sig T of .050, which is still significant albeit on the higher end. The beta coefficient for this variable is -.425 which is, interestingly, almost exactly inverse of the coefficient in the first regression output discussed (see Table 8). Perhaps this contradiction is a result of an imperfect regression model or perhaps it is hinting as a more nuanced understanding participants are building about themselves as classroom managers and the most effective methods.

Discussion

In looking at the raw data, about half of the survey participants were in their first three years of teaching. Interestingly, most of this group scored themselves high as classroom managers which is contradictory to what the research suggests occurs in the field. On the whole, mostly all participants scored themselves as strong or somewhat strong classroom managers. While the sample is certainly small, it is diverse enough to suggest that teachers a.) either are

strong classroom managers or have perceptions of themselves as being strong or b.) it is unclear what strong classroom managers look like to participants; without a standard of excellence (nor evaluation data to corroborate their rating), perhaps they are unaware of what “strong” looks like.

The relationship between professional development and classroom management is also worth noting. Countless articles have been written about demoralization, apathy and stagnation of teachers, especially in their tenured years (Santoro, 2011). Not only is professional development scarce for tenured teachers, many are not required to utilize it due to contract or union stipulations. While the majority of the teachers claiming to want professional development are in their first three years, there were few experienced teachers who outright disagreed with wanting it if offered. Given that this variable (table 8) was highly significant and the R2 fairly high, the interest could be an indicator that professional development, specifically about building presence, has a.) not been offered and/or b.) is a priority for teachers.

The issue of being warm resonates with the discussion in the literature review. Many teachers in training are presented with the warm/strict persona without given specific support on how to accomplish that type of demeanor. It is unclear how participants interpreted the word “warm” in the question “It is important that my students find me warm,” and if this provoked the concept of warm/strict from any training received. However, it worth noting that some sort of relationship is occurring between teachers’ perception of warmth and their feelings about classroom management. This is further highlighted by the regression output in Table 9 and the “rewards system” variable. Giving out rewards can certainly be coupled with the image of a warm, kind teacher, especially for students. Seeing that in two out of three regressions, participants who disagreed with being warm and deprioritized rewards was correlated with being stronger in classroom management is a key finding. Much of the literature indicates that newer

teachers especially struggle with towing the line between being too kind and having high expectations. These results seem to imply that teachers are no concerned with the former and know the importance of having authority over rather than favor with their students.

Finally, there is still much to understand and define about teacher presence, as demonstrated by the gap and the literature and the tenuous results demonstrated when measuring participants’ beliefs. To summarize how most participants actually defined teacher presence, the following question was included asking teachers to select a response that best captures their idea.

Teacher presence can best be defined as:

- *A persona that a teacher creates to entertain and engage students*
- *A demeanor that a teacher has when giving direct instruction*
- *The vocal and physical qualities a teacher embodies to maintain control of the classroom*

Lemov, amongst others, would argue that the last option is the most accurate answer, especially when examining presence through the lens of classroom management. Below is a summary of what participants believe:

Table 11: Frequency distribution of “Teacher presence can best be defined as”

Response	Frequency	Percent
<i>A persona that a teacher creates to entertain and engage students</i>	11	32.4
<i>A demeanor that a teacher has when giving direct instruction</i>	8	23.5
<i>The vocal and physical qualities a teacher embodies to</i>	15	44.1

<i>maintain control of the classroom</i>		
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Undoubtedly, there is still room for researchers, educators and teachers to engage with on the topic of presence. A common definition, as to provide more training and support is the next indicated step towards building better practice.

Limitations of Study and Recommendations for Future Research

Admittedly, the sample size was very small and not controlled. For future research, it is highly recommended that a random, large sample is obtained. Ideally this would ensure that teachers with varied levels of experience are represented evenly as opposed to novice teachers being the majority. It is also recommended that teachers from different schools, districts and regions be surveyed so that a group attending one training program with its set of particular values (Claremont Graduate University's emphasis on social justice, for example) is not outweighing the background of other participants. Finally, self-reported measures are always difficult to validate but, in this case, the sample's perception that they were strong classroom managers seems unusually high. Outside data, such as student achievement scores, administrator or program evaluations or even student surveys, should be incorporated to corroborate self-reported scores, especially when these values are used as the dependent variable.

Finally, the respondents were not asked to reflect on the impact of COVID-19, while the emerging literature reports teacher dissatisfaction through the pandemic era. A recent study regarding teacher burnout revealed that most of the teachers "mentioned in the comments that their coping strategies are no longer effective... without the support of their coping strategies, some teachers feel helpless and as if "nothing seems to work"," (Powers, p. 320). With low teacher morale coupled with a generation of students who lost years of education, the education

system should be prepared for some blows. Analyzing teacher perception on effective training and job satisfaction in the pandemic era should be more thoroughly designed.

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Appendix A

Dear Prospective Participant,

The following survey is part of a class project for Education 468, Multiple Regressions in Empirical Research. The intention for this survey is purely an exercise for building regression models and results will not be published nor shared with any parties outside of the class. Your opinion and experience are highly valuable and would be a strong contribution to the overall findings.

Should you have further questions, please feel free to reach out to me directly at Amanda.castillo@cgu.edu. I sincerely appreciate you taking a few minutes to assist me in my learning.

All the best,

Amanda Castillo
PhD student
School of Educational Studies

Survey

- 1.) I am a strong classroom manager - 4

Strongly Agree=5....Strongly Disagree=1

- 2.) Having an authoritative presence while teaching is something that is innate and **cannot** be learned - 3

Strongly Agree=5....Strongly Disagree=1

- 3.) Having meaningful consequences are important for my teaching to be effective. 5

Strongly Agree=5....Strongly Disagree=1

- 4.) Efficient classroom routines are important for my teaching to be effective. 5

Strongly Agree=5....Strongly Disagree=1

- 5.) A robust rewards system is important for my teaching to be effective. 4

Strongly Agree=5....Strongly Disagree=1

6.) Having an authoritative presence is important for my teaching to be effective. 4

Strongly Agree=5....Strongly Disagree=1

7.) Administration support with student behavior is important for my teaching to be effective. 5

Strongly Agree=5....Strongly Disagree=1

8.) High and clear expectations are important for my teaching to be effective. 5

Strongly Agree=5....Strongly Disagree=1

9.) Relationships with students are important for my teaching to be effective. 5

Strongly Agree=5....Strongly Disagree=1

10.) Out of total hours spent in your teacher education program, less than 25% of hours is spent talking about classroom management. 2

Strongly Agree=5....Strongly Disagree=1

11.) Would you be interested in more feedback about your teaching presence? 3

Strongly Agree=5....Strongly Disagree=1

12.) It is important that my students find me warm. 3

Strongly Agree=5....Strongly Disagree=1

13.) I believe some students respond differently to different teachers 5

Strongly Agree=5....Strongly Disagree=1

14.) I dislike speaking loudly in front of my class 3

Strongly Agree=5....Strongly Disagree=1

15.) It is important to me that student not interrupt me while I am speaking 3

Strongly Agree=5....Strongly Disagree=1

16.) Teacher presence can **best** be defined as

- A persona that a teacher creates to entertain and engage students
- A demeanor that a teacher has when giving direct instruction

- The vocal and physical qualities a teacher embodies to maintain control of the classroom

17.) I am male OR female OR gender non-conforming

18.) The total years of full-time teaching are

(1-3) (3-5) (5-10) (over 10 years)

19.) I my age falls in

(22-25) (26-30) (31-36) (37-45) (45 or older)

20.) My ethnicity is (please select all that apply)

(White) (Black) (Hispanic/Latino) (Asian,non-Pacific Islander) (Other, please identify)

Due Process Matters: Teacher tenure and improving district practices

Executive Summary

In early 2012, the Superintendent of the second largest school district in the nation faced a crisis. John Deasy, head of the Los Angeles Unified School District, enacted an unprecedented “zero-tolerance” policy for teacher misconduct due to a host of allegations towards teachers, ranging from verbal abuse to sexual misconduct. The ensuing investigations sparked outcry from LAUSD teachers, claiming, “the district had become overzealous...using any allegation to get rid of instructors they disliked. Minor infractions, they said, suddenly became grounds for dismissal and unproven allegations were enough to keep a teacher from ever returning to work” (Blume 2015).

While the overall toll of the scandal resulted in over 300 teachers being removed from their classrooms, the time, funds and manpower devoted to the investigation were significant. LA Unified had to abide by labor laws and collect thorough documentation to proceed with firings, resulting in “(them) assembling an 11-member Student Safety Investigation Team, at a cost of \$1.8 million annually” (Blume 2015). LAUSD’s success in removing teachers with egregious behavior simultaneously reignited the discussion regarding how to fire ineffective, tenured teachers.

While the American labor force continues to adapt to the COVID-19 pandemic, most American workers remain at-will employees meaning that they can be dismissed without cause. The teacher labor force is a large exception to this reality, as unions have maintained their power over teacher tenure despite policy reform efforts by various states and districts. Whereas dismantling teacher tenure altogether is highly improbable, it is critical that schools maintain the right to efficiently remove teachers who pose a threat to children, be it physically and

emotionally, or in regards to student achievement. In order to strengthen this ability, policy makers should re-examine the “due process” that every tenured teacher is afforded, evaluate why due process often fails and appoint and train specific personnel to lead documentation, intervention and eventual dismissal proceedings for teachers who are unfit to succeed.

This policy brief aims to

- Discuss the ramifications that ineffective due process proceedings have, not only on teacher quality, but school district and administrative authority
- Detail other tenure reform efforts, examining their value and analyzing key shortcomings.
- Propose a detailed policy to strengthen district capacity to handle due process related matters in order to effectively (both in terms of cost and time) handle teacher performance issues

Context and Importance of the Problem

In 1971, Dr. Robert Sherman wrote a paper defending the value of teacher tenure against an increasing barrage of attacks from political and academic constituents: “Tenure is marked as the cause of most of what is wrong with education and, by implication, society” he wrote. “The president of one state senate has said, eliminate the evil of tenure and you’ve taken a giant step in towards solving the problem of education” (Sherman, 1971, p. 3). Over forty years later, the criticism of unions was just as intense until the COVID-19 pandemic pushed unions into a more pivotal role. Claiming to advocate for both teachers and students, unions were at the forefront of negotiations regarding school reopenings. So influential were the unions in this discourse that “teachers’ union strength, more so than the changes in COVID-19 infection rates or the

accessibility of private school options, were the strongest predictors of reopening (schools) for in-person instruction...” (Marianno et al., 2022).

While unions have undoubtedly established their relevance during the pandemic years, the discourse around teacher quality and thus teacher firing remains muted; practices have only recently seen modification, and only on a state-by-state basis. As most of the workforce is non-unionized, the esteem and value of tenure is relegated to few professions; yet the word itself connotes a respect that contributes to its seemingly impenetrable power, which can be traced back to the origins of unions themselves.

The labor struggles of the early 19th century were widespread; while manual laborers fought for safe working conditions and fair pay, the mostly female teaching force sought out job protection as nepotistic and sexist practices often threatened teachers’ positions. Furthermore, teachers were required to conform to parents or administrators ideas on curriculum thus negating their own autonomy and talent. Due to the constant job instability, the topic of tenure was priority at the first ever National Educator’s Association conference in 1887 (Stephey 2008). Union organizing and collective advocacy gave way to the first teacher tenure law passing in New Jersey in 1909.

However, as tenure policy evolved, it served as more than legal protection. Many proponents saw it as a means to attract talent to the teaching profession. Others saw it as an extension of the university system, in which tenure is granted to faculty to protect their “academic freedom.” Yet unlike university faculty, who historically go through robust vetting and competitive selection processes, most K-12 teachers do not have to pass evaluative criteria to gain tenure. Tenure is granted to mostly everyone (regardless of talent) who remains in the position for (on average, amongst states) two years. Advocates argue that, despite the absence of

consistent teacher evaluation, tenure is still well-earned given that the pathway to receiving a degree, credential or license in teaching is both costly and arduous.

The automaticity of job security, while beneficial to the teacher force, actually removes control and power from the districts and school, as they have no choice about personnel decisions with tenure policies in place. State statutes mandate the following regarding tenure:

- The length of the probationary period preceding tenure
 - What constitutes valid cause for dismissal of a tenured teacher
 - The required due process procedures that must be followed in the event such cause arises
- (Miller, 2008, p. 14)

Ideally, these mandates should benefit both teachers and districts; retaining talented and fulfilled teachers for the entirety of their careers is the ideal scenario that tenure was supposed to create. However, the third mandate has proven to be the most ambiguous component in the chain of processes to remove underperformers.

Unaddressed incompetence is no secret amongst school personnel. 91% of administrators and 68% of teachers strongly agree that dismissing poor performance is important to maintaining high-quality instruction. In a survey of four districts, 81% of school leaders and 57% of teachers report that there is a tenured teacher in their school who delivers poor performance. And finally, 68% of teachers in these districts believe that poor performance is overlooked by school administration; confirming their assumption, 86% of administrators say they do not pursue dismissing a teacher even if it is warranted (Weisberg, 2009, p. 17). While the survey data emphasizes issues of teacher quality, there is no part of tenure laws or policy that states a teacher

cannot be fired. Teacher unions constantly reiterate that poor teachers *should* be fired...granted they “know why a discharge is being sought...and a right to have the issue decided by an impartial body” (Kahlenberg, 2015, p. 5). Will dismissing underperforming teachers should be seemingly simple, the complex and often unpredictable due process procedures hinder transitioning out underperformers.

The media coverage of tenure struggles has painted a grim picture of ineffective, lengthy and highly expensive trials in which teachers are rarely removed. The terms “rubber room” or “dance of the lemons” are widespread in the lexicon around teacher removal, contributing to the ire directed towards teacher unions for their so-called “blind protection” of its members. The media’s portrayal of the cost and time devoted to due process are, unfortunately, not off the mark here. A study done by the New York State school board, found that teacher dismissal proceedings “takes an average of 520 days from the date charges were brought to the date a decision was issued, at an average cost of \$128,000” (NYSSBA, 2008). Perhaps unsurprisingly, charges claiming “pedagogical incompetence” took even longer (830 days) and cost over twice as much; while it’s somewhat easier to dismiss a teacher for gross misconduct, it seems twice as hard to fire a teacher for being unable to actually teach.

The legal definition of due process is the fundamental guarantee that any legal proceedings in a court of law will be fair, and all citizens have the opportunity to be heard before the government takes away ones’ life, liberty or property. This constitutional right, outlined in the Fourteenth Amendment, applies to any citizen regardless of profession or status. In the case of teachers, “property” is not limited to real estate or land; the term “property” encompasses the benefits that a person can acquire including job protection, giving teachers a legitimate claim of entitlement. The Supreme Court solidified this claim in the early 1980s by ruling that “a written

contract with an explicit tenure provision clearly is evidence...(supporting) a teacher's claim to entitlement unless sufficient 'cause' is shown" (Stelzer, 1980, p. 8). However, the 'causes' referenced in the ruling, have proven to be quite ambiguous and consequentially problematic.

State law (not school or district policy) dictates the conditions or reasons tenured teachers may be dismissed. With the exception of lay-offs or reducing the teacher pool due to lack of placement, causes for dismissal are purposely open-ended. While states vary, the "faults" most commonly cited for firing are "immorality, incompetence, neglect of duty, inefficiency, insubordination and incapacity" (Stelzer, 1980, p.6). A few states have also reserved the right to "just cause" as the only reason needed for discharge and termination. Due to the legal hearings teachers are entitled to, thorough documentation, proof and evidence of any dismissal cause, be it criminal or merely incompetence, is compulsory to move forward. This is where due process proceedings quickly fall apart.

The underlying pitfalls of due process procedures are, perhaps, the biggest cause for concern in the discussion around tenure. However, it is arguably the most easily remedied. Prior to highlighting potential solutions to alleviate due process, it is crucial to examine other tenure reform efforts to gain understanding of the current climate.

Policy Options to Address the Problem

The issue of tenure has historically raised concerns as outlined above; therefore, attempts to reform or change tenure laws have been implemented across states to varying success. This section highlights three of the most recent and notable attempts for reform.

In 2008, change hit Washington DC Public Schools in the form of chancellor Michelle Rhee. As a Teach for America alumna and political favorite amongst the Obama administration,

Rhee was unapologetic in her quest to raise the dismal student achievement statistics, even if it meant dismantling some of the most cemented district and union policies. Backed by the research of economist Eric Hanushek, Rhee rationalized that firing the worst ten percent of teachers would push failing schools exponentially. “If someone told you as a business, that if you removed the bottom 6 percent of your performers, that you would move from 25th in the market to top 5, you would do it in a heartbeat. You would not even think twice about it” (Hopkinson, 2010).

Thus, Rhee proposed an alternative system to tenure; rather than abolishing tenure outright, which would have taken years of active battling with unions, Rhee gave teachers a choice to give up their seniority rights in exchange for a substantial salary increase. While enticing to some of the teaching force, it wasn’t until 2010 that unions were able to approve “a contract that weakened teachers’ seniority protection, in return for 20 percent raises and bonuses of \$20,000 to \$30,000 for teachers who meet certain standards, including rising test scores” (Lewin, 2010). After the negotiations, with both unions and district council engaged in discussion around student test scores and teacher evaluation, Rhee took the opportunity to dismiss 241 teachers, mostly based on poor performance.

However, the win over loosened seniority rights were short-lived, as Rhee officially resigned in October of 2010. She acknowledged in an interview that much of the change she instituted was perhaps “too much and too fast.” Yet Rhee’s reform efforts brought out two significant findings in its short time: 1.) That teacher unions could and did relinquish some tenure rights and 2.) that teachers within DC Public Schools were interested and excited about the prospect of higher salaries, even if at the expense of job security.

In no other state has the war on unions been more evolved than in Wisconsin. In 2011, Governor Scott Walker passed and signed the Wisconsin Budget Repair Bill otherwise known as Act 10. Amongst other legislation, this bill drastically limited union members' ability to collectively bargain by putting caps on wages, limits on improving health and retirement benefits and essentially tossing the promise of tenure aside. Thus, the utility of unions in Wisconsin has shriveled and so has the union workforce; the Wisconsin Education Association Council (WEAC)—the state's largest association of local teachers' unions and an affiliate of the National Education Association—counted about 98,000 members in 2010. Now it has fewer than 40,000 and has recently sold its Madison headquarters to cut expenses.

What was once considered impossible amongst education reformists, now appears to be an unprecedented stark reality. With unions having virtually no control over district and state mandates, idealists anticipated student achievement would thrive as schools took back control over teacher performance. Yet faced with no job security or union protection, teachers who could retire early did so, thinning out the teacher workforce considerably. Ironically, the original intention of tenure—to enhance the attractiveness of the teaching profession—has been corroborated as enrollment of teacher training programs has fallen by 28 percent over the last five years (Caldwell, 2017) due to the unstable market. While student enrollment remains the same, the declining work force coupled with extreme budget cuts (Walker also defunded K-12 education by 792 million dollars) has increased the burden of extra periods, larger class sizes and less resources on the current teaching pool. Certainly, it is easier to dismiss an ineffective teacher in Wisconsin more so than anywhere else in the country. Yet, in the process of eliminating job security, Act 10 has left a large hole in the education system and made the profession of teaching less desirable and valuable.

Finally, no discussion around teacher protection is complete without examining the case of Vergara v. California. In May of 2012, nine public school students advocated for their own rights by filing a lawsuit against the state claiming that their constitutional right of learning from effective teachers and having equal opportunity to succeed were being infringed on by state law.

Here are the laws that the plaintiffs sought to change:

- Permanent Employment Statute, which forces administrators to grant permanent employment to teachers after an evaluation period of about 16 months.
- Dismissal Statutes or due process, which requires the state and/or the district to provide documentation, adequate notice and other mandates to teachers on notice.
- “Last in, first out” layoff statute, requiring districts to make lay-off choices based on seniority and not performance.

On August 28, 2014 after months of hearings, it seemed like California law would be radically changed as Judge Rolf M. Treu found that all challenged statutes were unconstitutional and imposed substantial harm. “There is no dispute that there are a significant number of grossly ineffective teachers currently active...the dismissal statutes present the issue of uber due process...the court is confident that the independent judiciary of this state is no less dedicated to the protection of reasonable due process rights than it is or protecting the rights of children...” However, just two years later, the appeals court reversed the trial court’s decision, once again diminishing potential judiciary reform.

The legacy of Vergara v. California, although halted in appellate court, has wide reaching cultural implications. That students were able to advocate for such reform (with the assistance of independent non-profits and investors) tied the educational inequity crisis directly to those teachers responsible for perpetuating the achievement gap. Furthermore, the case brought and

still garners much needed media attention and public criticism against what reformists have been battling against for the last half century.

All three efforts detailed above, while resulting in different outcomes, have made notable shifts towards the elimination of teacher tenure. Though not completely undoing the longstanding job security afforded to the profession (although Wisconsin is verging closer to this effect), all have invoked reasonable arguments and alternative solutions of the problems associated with tenure. Yet, union representatives and tenure enthusiasts have maintained an obvious truth: the goal of job security was never intended to protect ineffective teachers. Additionally, these parties argue that moving towards replacement employment models (such as renewable contracts for instance), would not remove the threat of incompetency from schools but merely bring about the same issues in a different context. “It is not clear how fewer bad habits would be developed if the teacher has to do the same thing for contract renewal (as he does) for tenure...tenure and the probationary period are not the places to look for the causes of” incompetency and lack of teacher accountability (Sherman, 1971, p. 13). Indeed, if tenure reform is solely to gain power to dismiss the ineffective minority, the focus should be less on the system (and the majority of solid teachers that benefit from it) and more on the injunctions that leave bad teachers in the classrooms.

Analysis and Recommendations

The barrage of media attention regarding teacher tenure, most of it accompanied by alarming headlines detailing select cases of unethical teachers who are able to keep their positions, usually paint a picture of a district or principal handcuffed to union threats and state laws. Yet academic literature has consistently-- albeit subtlety-- refuted this narrative; authors often conclude that administrators simply lack time and resources to properly engage with due

process requirements. Other studies, however, reveal more contentious justifications for administrators inactivity, one finding that “the inclination of administrators to tolerate and protect, rather than confront (incompetency) is shaped by a combination of situational and personal factors” (Bridges, 1992, p. 20). Based on data from his study of California school districts’ responses to ineffective teachers, Bridges also found that “two of the most important situational factors are the legal employment rights possessed by the majority of California teachers and the difficulties inherent in evaluating the competence of classroom teachers. The most important personal factor is the deeply-seated human desire to avoid the conflict and unpleasantness which often accompany criticism of others” (Bridges, 1992, p. 20).

Compounding the problem for administrations, is the lack of valid evaluation tools and systems, without which any potential firing is arguably unjust, tenured or not. Without objective performance standards in place, teachers and school staff are subject to irrelevant and perhaps biased feedback from evaluators, a risk that harkens back to why unions were created in the first place. In addition, a group of Rand researchers specified that the knowledge and skill of the evaluators is crucial to good evaluation, yet...”found administrator competency in evaluation to be “moderate at best” (Painter, 2000, p. 254). The question then, of *administrator* incompetence, is a game-changer. For all the limitations district and school administration cite as hindrances to teacher removal, there is just as much evidence to suggest these are merely excuses.

Perhaps due to the inexperience of administrators combined with union strong-arming, most evaluation systems reflect little to no variation amongst teachers. Ironically, in an attempt to measure individuals’ strengths and weaknesses, teacher evaluation has done the opposite by primarily using “a binary rating system for assessing performance; teachers are categorized as either “satisfactory” or “unsatisfactory.” There are no shades of gray to describe nuances in

performance” (Weisberg, 2009, p. 14). Undoubtedly, this is a flawed system, one that boxes evaluators into either being too lenient or too harsh, both of which might be entirely inaccurate. Yet in a study of five school districts, evaluators were given a broader range of ratings, in hopes that they would more accurately capture the performance differences amongst teachers. Still, evaluators in all districts rated the majority of teachers in the top category; “70 percent of tenured teachers still received the highest rating. Another 24 percent received the second-highest rating...almost no teachers are identified as delivering unsatisfactory instruction” (Weisberg, 2009, p.11). Unsurprisingly, the high teacher ratings stood in sharp contrast to the low student performance data.

As alluded to above, administrators have a large hesitancy around teacher dismissal for a variety of reasons, one being conflict avoidance and the other workload. There is no question that school administration teams are pulled in far too many directions; all too often, logistical or operational work (budget, facilities, scheduling) take place of management responsibilities. On top of these conflicting duties, administrators lack support and coaching around how to deal with performance issues, most likely resulting in fear, anxiety or lack of confidence. The absence of this guidance is especially troublesome for administrators “as the burden of proof rests on them to demonstrate a teacher is incompetent. Successful dismissal of a tenured teacher...hinges upon (his) ability to persuade an impartial third-party that he has (such) proof” (Bridges, 1992, p.7). To make matters worse, more often than not, “most school systems simply do not have the information necessary to back up claims of incompetence” (Sherman, 1971, p. 12).

Do we then face a teacher effectiveness problem or a teacher evaluation problem? The answer is resoundingly both, as it is difficult to discern where one problem ends and another begins, similar to the ageless chicken vs. egg quandary. However, based on the study above, a

solid evaluation system means very little if those using it do not possess the observation and instructional skills to measure teachers. If ineffective teachers can be accurately identified, administrators will likely make more confident and urgent decisions to have them removed. After all, “it is the process of evaluation, rather than the substantive judgments that an administrator makes about a teacher’s performance that can be grieved and subsequently reviewed by arbitrators or the courts” (Johnson, 2005, p. 34). Therefore, it is highly recommended that districts pause in their search for external solutions to the teacher dismissal challenge and look inward.

States and local districts must ensure that administrators are highly qualified to evaluate and observe teaching staff. This should be absolute priority before engaging in other issues relating to teacher performance. A baseline proposal for what this training could resemble is as follows:

- Administrators attend multiple evaluation trainings per year either done internally or through the use of outside consultants. The primary goal of this training should be on observational techniques, gathering objective evidence and making objective claims about teacher performance *regardless of the evaluation system or tool*.
- Administrators form small Professional Learning Communities and do quarterly walk-throughs of other schools. PLC meetings should also be used to norm on evaluative standards so principals and other leaders are not scoring teachers completely off mark.
- If the principal or other administrative staff are not the primary evaluators within the school building, there should be quarterly meetings held between them and evaluation staff so there is general understanding of how teachers are performing. These meetings should be thoroughly documented and made public to district officials.

In addition, districts should hire personnel to assist in coordinating observations, evaluation meetings and documentation of interventions so there is systematic preparation in place should a teacher dismissal be warranted. *It cannot be assumed* that school administrators have the capacity to handle the additional workload of due process preparation. Having a designated district employee to streamline these efforts, will solve the grievances of teacher intervention being a burden rather than an opportunity.

It is recommended that districts engage in this proposal for at least the duration of one school year, after which administrators will give feedback on how to improve the efficacy of trainings or the overall process. The district should also analyze any teacher performance data made available throughout the year to gauge if school administrators are proactively giving feedback about instruction and if/how this preempted any causes for dismissal.

Conclusion

Teacher tenure policies have, undoubtedly, made conditions for removing ineffective teachers alarmingly difficult. However, as the original intention of tenure was to attract bright, talented professionals, the amount of quality teachers who were brought in under the promise of security is most likely innumerable. Just as in any group dynamic, the actions of few have the potential to harm the whole.

However, as the arguments in this brief demonstrate, there are multiple players involved in the past, present and future of teacher tenure. Dismissing teachers is ultimately a reactionary tool and administrators must improve their practices in order to be proactive with teacher performance and talent management. As the efforts to improve tenure policy and law spin forward, it would be imprudent for districts to involve themselves in ambitious efforts when they

have the ability to control teacher effectiveness internally. Finally, it is crucial to end this brief with an urgent call for research and attention to fair and robust teacher evaluation systems. If we are unable to define teacher quality as a nation, we will not be able to improve conditions for students, no matter how many teacher are dismissed.

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**Peering into the black box: an evaluation of Local Control Funding Formula (LCFF)
funding in California**

Abstract

School funding in America has historically raised issues of equality and adequacy. In the 20th century, states were challenged with finding funding solutions that both addressed the gaps between rich and poor communities while also holding districts and schools to high standards. In 2013, California passed a unique funding law called the Local Control Funding Formula (LCFF), that uses a weighted formula to fund schools while also giving back local control to Local Education Agencies (LEA). As the shift is recent, few studies have done a thorough analytical evaluation of the efficacy of LCFF, particularly measuring the impact it has had on student achievement. Furthermore, the convoluted and often incomplete tracking of school funding makes it difficult to align fiscal efforts to student outcomes. This study also aims to shed transparency on LCFF spending and budgeting practices and gives recommendations on fund allocations for the future.

Statement of the Problem

School funding is consistently deemed by political leaders, educators and tax payers as a main source of educational failing, specifically in terms of poor student achievement.

Historically, funding of districts and schools that serve high-poverty and high-need schools has been hit or miss. Several federal initiatives, such as Title 1, have attempted to remedy the extreme needs and often inequalities that educators in high poverty schools face. However, no effort is as widespread and targeted as California's Local Control Funding Formula which was implemented in 2013. Under this law, schools with a higher proportion of poor, English Language Learners and/or foster students would receive more funding versus schools with a lower proportion. While stakeholders have always criticized the lack of transparency in school funding, LCFF has only added to this confusion. Not only is the funding formula created by the California Department of Education difficult to interpret, the allocation of funds is virtually impossible to track. Given that extra funding (upwards to 1.4 times the base amount) is being

allowed to educate high-risk students, it is critical that districts track spending in order to evaluate how efforts relate to achievement and to also avoid fund mismanagement.

Purpose of the Study

This study will utilize both linear and multiple regression models to unpack the effects of LCFF funding on student achievement while also probing how funding is allocated to schools. While district and school budgets should be public record, there is ambiguity around budget categories and limitations with teacher pay and development due to union statutes. This study will also aim to describe how money is being spent on students and incorporate this detail into the evaluative model.

Research Questions

- How does LCFF impact student achievement, mainly on state administered Math and English Language Arts assessments between the testing years of 2014 through 2019? If LCFF, did not directly improve student results, what other factors (e.g., teacher demographics, school characteristics, previous school performance) contributed to student academic outcomes?
- How do LEAs allocate funding, particularly as it relates to services for high-need services? How are these expenditures coded, tracked, and evaluated?

Literature Review

As with most dealings related to education, school and district finance is mostly provided and regulated by the state. While funds delegated to schools can vary by several factors, school revenue is often simplified using a per pupil number, which is the dollar amount spent on a student in the given school year. Historically, the states have always provided a portion of school

funding; data as early as 1890 suggests that 19th century state governments contributed at least 20% towards schools (Augenblick & Anderson, 1997). While that percentage state aid is higher today, school finance has consistently raised concerns due to the role of local property taxes in K-12 public education.

School districts in their earliest form, resembled community-based schoolhouses that were funded through local partners and by student families. In the early 1800s, states granted communities authority to tax local services and provisions to offset schooling costs. This tax supplement became even more crucial when states began to adopt clauses mandating that education be universal and publicly provided. While states had and still have the deciding power over education policy, it is unclear when authority over education structures was delegated to local government. As community schools transformed into districts, oversight of school budgets and spending fell on the shoulders of elected county and city officials. This transition of power to the local level coincided with the rise of property taxes in America, which dates back to as early as 1849.

The history of property taxes need not be described in detail other than to note that the core component revolved around the value of the property itself, not necessarily the neighborhood, county and location of the property as it is today. Some critics argue that the change in formula and valuation of property tax helped to usher in 20th century eras of segregation and poverty riddled neighborhoods. However, policymakers seemed to anticipate this issue as early as 1900. Property taxes of highly assessed land, would always secure better resources for the wealthy who lived there. In order for poorer areas to attain quality resources, residents would have to succumb to higher taxation despite limited wealth (Mintrom, 1993).

Alternatives to property tax funding have been explored throughout the past century. These funding formulas (as they are technically termed) were adopted by a number of states in the mid 20th century and some are still utilized today. Some notable examples include:

- Foundation Programs which require local government to tax at a baseline minimum rate; if property taxes are insufficient to meet a state appointed per pupil amount, the state contributes the funds to cover the difference.
- Categorical funding provides money for specific budget costs such as text books, curriculum and other resources impoverished districts might be unable to obtain or replenish.
- Pupil Weights are counted by the cost of services needed to teach students. For example, if a student needs additional resources which costs 30% more than the base program, the student receives a weight of 1.30. The weighted counts are then incorporated into a foundation or other baseline formula to account for differing student needs.

In addition, federal funding programs have attempted to bridge the resource gap between rich and poor districts most notably with the Title I program, the Individuals with Disabilities Education Act and providing aid for school lunch programs. As of 2016, federal support only accounted for 12% of overall K-12 school funding; because of the need-based nature of federal grants, the amount given to districts and states fluctuates greatly.

While the average citizen might support increased school funding, raising taxes, particularly property taxes which are a critical consideration in purchasing residences, is

typically a hard sell. Mintrom (1993) details this dilemma describing it as a problem that not only repels taxpayers but legislators as well. He states that revisions to tax policies or redistribution of funds is a balancing act for politicians; “state legislators will avoid such a divisive policy option, unless a large number of their constituents are to benefit and only a few to lose, or unless losses could be spread thinly across a large group” (p. 849).

With many taxpayers being future and current parents of children in local schools, the concern for quality schools has become a real estate issue. School district data is now used in sales pitches for potential properties and it’s certain that some neighborhoods are more costly due to the local services. With privileged home buyers able to select their district, an economical conundrum plays out that undermines equitable taxing. In 1956, Charles Tiebout observed and predicted the core issue that has fueled the inequity in school district funding and their subsequent performance. When goods and services are decentralized, it opens up a market for the consumer to pick and choose: “the consumer-voter moves to that community whose local government best satisfies his set of preferences. The (more) communities and the greater the variance among them, the closer the consumer will come to fully realizing his preference position” (p. 418). Therefore, variance or discordances amongst schools actually encourages inequality as taxpayers can choose which district to support.

Education, albeit a public good/service, has become an increasingly privatized market. While this study will not address school vouchers and school choice, the market of options available to residents in a community is ever expanding. The crux of school quality then, falls somewhat on where taxpayers put their dollar. “One could argue that such movements are against the public interest because of their willingness to sacrifice important public outputs of

schooling in order to obtain increased private outputs” (Levin, 1987). Certainly, taxpayers understand that investment into education will yield public benefits; but parents seek the immediate and personal benefit of a good education for the well-being of their own.

Lack of wealth, however, does not suggest poor residents are any less invested in premium services. On the contrary, researchers point out multiple examples of communities and certain states that have adopted higher property taxes in lower valued areas simply to even out the funding gaps amongst schools. Augenblick et al. found that in “six states (Arizona, Mississippi, Montana, Nevada, New Mexico and Wyoming), residents of districts in the poorest quintile paid at least twice as much of their income in local taxes as did residents in the wealthiest quintile” (1997, p. 67). Taxing the poor for public services deemed to be free and universal already raises questions of ethics and justice. However, overtaxing poor communities for services that still remain subpar compared to services provided to wealthier counterparts sparked multiple debates about constitutionality.

Statewide school funding litigation is an area of research in and of itself, with supreme court cases dating back to the 1950s and 60s (Morgan & Pelissero, 1989). However, one of the most notable cases, *Serrano v. Priest*, occurred in California in 1971. The plaintiff John Serrano (a parent of a student in a Los Angeles school) directed concerns of disparity in educational access towards the state (or Judith Priest, then state treasurer). Although California used a foundational model to support schools at the time, the statistics cited by the court proved wealthier districts were able to spend up to three and sometimes four times the amount than poor districts (Goldstein, 1972). The state supreme court ruled that “as a direct result of the financing scheme . . . substantial disparities in the quality and extent of availability of educational

opportunities exist and are perpetuated among the several school districts of the State” (Goldstein, 1972, p. 509). While the case was not a federal one, California’s policy was indicted based on federal statutes, a milestone considering that 49 of the 50 states followed the foundational funding model.

In response to Serrano, California legislature passed Senate Bill 90 in 1972 which introduced the concept of revenue limits, or ceilings for the amount that each district could raise through property tax. It also enacted “a sliding scale of increases to revenue limits designed to bring lower-spending districts up to the level of higher-spending ones over time” (EdSource, 2009, p. 5). This process, deemed “leveling up” is a common tactic used but highly criticized as it still places the onus for school quality on residents of the community. As Berke and Callahan posit in their analysis of the Serrano outcome, the misdiagnosis of assisting the poor in order for them to compete with the wealthy misses the point of equality under the constitution: “the (inequity) prohibited by the equal protection clause in the cases to date encompasses only one aspect of the injustice inherent in the way we currently finance elementary and secondary education in most states of the nation, and there is some question whether even that aspect is appropriately described in the law” (1972, p.66).

A key oversight that many researchers have since explored, was the litigation around equality amongst district spending rather than access to quality education throughout the state. The foundation funding model was thought to be a chief equalizer, meant to help poor districts reach the base minimum amount that would equip students for success. Yet the foundation model, nor its subsequent funding solutions, do not control for the extreme differences amongst school settings and how this variance produces unique needs for educating diverse students. As

legal scholar Peter Enrich observed, “the possibility that these clauses might ground a separate claim of failure to satisfy the constitutional mandate to provide children with an adequate level of educational services, if raised at all, was only noted in passing...” (1995, p. 136). This oversight, or frank misunderstanding, would pave the foundation for future reform movements.

All tax equalizing efforts were for naught, with the “taxpayer revolts” of the late 1970s. Inflation throughout the decade raised property taxes and income tax bracket “creep” resulting in a wave of change nation-wide. California’s passage of Proposition 13 was another landmark piece of legislation which dictated that property tax rates could not exceed 1 percent of the assessed value. This virtually eliminated all of the funding accessible through property tax, requiring the state to mitigate districts’ revenue loss. With the state assuming more financial responsibility, it also took over budgetary control from the local level. As SB 90 had already set the precedent of revenue limits, it was left to the state to determine each district’s revenue limit rather than local leaders. Backed by the recent legal rulings calling for equalization in funding, new innovation for financing schools began to take shape nationally and at the state level.

Although schools function in a market based system now more than ever (considering the rise of charter schools, the omnipresent force of parochial schools and the allure of private or homeschooling), the pressure for schools and districts to compete amongst themselves was a new concept in the early 1980s. While the 1970s could be termed the decade of equalization, the 1980s would mark a shift in funding based on reform. The rise of incentive or competitive based funding was less about adequately resourcing schools and more about ensuring standards of compliance were met.

Researchers trace this pendulum swing to the 1983 report by the National Commission on Excellence in Education. Aptly named “A Nation at Risk”, the report detailed the failing of American schools and called for more federal oversight, stating that prioritizing education needed to start at the very top. Not since the 1966 Coleman Report had a single document shifted the conversation around schools; with sweeping calls to action, A Nation at Risk called on all citizens to assist in school funding, simply asserting that “excellence costs. But mediocrity costs more” (1983, p. 33).

This report was not alone in reporting the deterioration of school systems. Jonathan Kozol, a well known education writer, published multiple indictments of the school system all with fiery names such as *Savage Inequalities* and *Death at an Early Age*. *Savage Inequalities* in particular painfully details the dilapidated, often dangerous school conditions that poor children face. Kozol argues that the outward inequalities pale in comparison to the systemic failures: “Unless we have the wealth to pay for private education, we are compelled by law to go...to the public school in our district. Thus the state, by requiring attendance but refusing to require equity, effectively requires inequality. Compulsory inequity, perpetuated by state law, too frequently condemns our children to unequal lives” (Kozol, 1991).

Undoubtedly, the public pressure for reform was mounting. Ironically, spending on education had never been greater with funding increasing 26% between 1980 to 1988 (Picus, 1991). The use of incentives can be inferred as a logical consequence of the time as the money put into schools was yielding too few results. Most economists would agree that competition through incentives is a reliable tool to promote higher performance. In such a system “schools that cling to costly bureaucratic methods, that do not attract and utilize talented people, that fail

to encourage collegial and productive relationships among their members, or that lack strong leadership toward clearly defined educational goals- that is, schools that look like many of today's public schools-would tend to go out of business” (Chubb & Moe, 1986, p. 28).

One clear benefit of incentive programs or grants is the ability to enact categorical funding through merit. Rather than distributing lump sums to districts, the state could guide districts to focus on key areas (curriculum, for example) by offering grants to be used on that purpose only. California’s first response to the education reform movement, the Hughes-Hart Education Act of 1983, did just that. The bill required that revenue be attached to student performance rather than equalization, that teacher performance be prioritized and that rigorous high school standards and a core curriculum be established (Picus, 1991).

In addition to targeted funding, the federal and state governments began offering incentive grants for districts willing to take on larger shifts such as smaller class sizes, developed teacher pathways or new standardized assessments. Albeit an appealing way to invest districts in reform, equality gaps began to manifest again as more established and resourced districts were more poised to take on such challenge. In addition, the criteria for grant approval was general and large autonomy was given to districts to create reform as they saw fit. Thus, universalizing incentive grants, made “most jurisdictions eligible for the grant...thereby reducing the potential targeting of the program” (Morgan & Pelissero, 1989, p. 117).

Early incentive funding functioned on concepts derived from market theory and business practices; by funding opportunities to innovate, governments were viewing districts and schools as private entities that would respond to the challenge by improving their own effectiveness (Lubienski, 2005). As economist Eric Hanushek notes, reform is not just about securing more or better resources. Despite the ebbs and flows in legislation around state aid, spending on schools,

particularly in California only increased from 1970 thru 1990. There was a “considerable inefficiency in schools that, if eliminated, would release substantial funds for genuine improvements in the operation of schools,” Hanushek notes. Funding for new initiatives, without proper guidance or criteria, only served to widen the educational approaches across states. Perhaps foreshadowing the federal legislation to come, Hanushek concludes that “there also is a case for holding down funding increases to force schools to adopt a more disciplined approach to decision making” (1995, p. 30).

The concept of parents and families shopping around for schools has never been a modern concept; the entire property tax divide can partially be attributed to families of means wanting quality schools in their neighborhoods. The private and parochial schools at the time offered options but nothing like what would be seen with the emergence of charter schools. State governments and education boards acknowledged that public schools had historically had the monopoly on education and were immune to market forces; charter schools, legally required to be free and open to everyone, went beyond incentive grants by “creating competitive pressures on public schools, increasing the incentive for innovation and continuous improvement,” (Lubienski, 2005, p. 473).

The baseline count for how schools are funded has and is still influenced by total number of students enrolled. As many economists and school funding experts point out, “state school aid is something of a zero-sum game each year. Where states contain large numbers of school districts, each individual district is likely to receive proportionally fewer state dollars,” (Morgan & Pelissero, 1989, p. 115). While this statement may fluctuate in truth from state to state, the basic logic applies. Should a family opt into a charter school, their child and therefore, the money associated with that child, would leave the district. As the nation called for educational

reform, so did parents; charter schools enabled all parents, not just those with wealth, options on schooling. Charter organizations, free from bureaucracy of district mandates, were able to innovate freely and marketed themselves as such. As Lubienski says, “insofar as parents focus(ed) on enhancing a child’s achievement over time, the evidence most readily available at any one time is a school’s achievement,” and many charter schools pushed promises of academic success. (2003, p. 420).

With districts struggling to meet demands of the reform movement while also maintaining high enrollment, the federal government thoroughly increased the pressure by signing the No Child Left Behind into law in 2001. NCLB imposed hosts of reforms with heavy handed federal oversight. While noble in intention, the mandates placed on states were costly. Education researcher Linda Darling-Hammond states, “At a time when the percentage of Americans living in severe poverty has reached a thirty-two-year high, NCLB seeks to improve the schools poor students attend through threats and sanctions rather than the serious investments in education and welfare such an effort truly requires” (2007). In terms of investment, Darling-Hammond was not far off; NCLB funding only amounted to ten percent of total school budgets.

A later analysis by Dee, Jacob and Schwartz (2013) confirmed the lack of federal support in district revenue during the NCLB era. In short, NCLB required all states/districts to staff schools with “highly qualified teachers,” to implement new learning standards and assessments and also maintain a sufficient Adequate Yearly Progress (AYP) score to prevent intervention and possible school closure. The demands and stakes were undoubtedly high and costly. Dee et al. found that not only did education spending in states increase dramatically under NCLB but it did so more rapidly in states that had not previously adopted strict reform measures. Federal

legislation stated that “states and school districts would not be required “to spend any funds or incur any costs not paid for under this act; (yet) a survey of superintendents and principals found that nearly 90% agreed with the “unfunded mandate” characterization of NCLB” (Dee et al., p. 263). Several states would go on to pursue legal action against NCLB because of the dire financial burden placed upon them.

As evidenced throughout this discussion about school funding, equalization of resources has always been a concern for state and district leaders. NCLB, aimed towards solving the achievement gap between rich and poor students, was clearly aligned with the mission of equality. While “the law prompted an across-the-board funding response regardless of its targeted population...the absolute dollar increase in poor districts may have been larger than in other districts” which harkens back to the problems of the 1970s (Dee et al., 2013, p. 266). Furthermore, poorer schools were typically challenged with more ESL and low socio-economic students, making the goal of “100% proficiency” much further out of reach than wealthier, whiter districts. The costs and end goal of NCLB may have been universal, but the starting points of districts were drastically different. The price tag of playing catch up would hinder some districts and shutter some schools for good (Hayes, 2015).

Though the obstacles and criticism of NCLB were clear, the lessons gleaned from a high-stakes federal law are long lasting. Certainly, the federal legislation had overlooked the massive costs needed for the overhaul and perhaps overestimated the states capacity to supplement funding. As Michael S. Hayes observes in his analysis:

NCLB did not consider how states would fund the expenditures needed to comply with the law. States had at least four possible mechanisms with which to increase education funding: borrowing, raising taxes, extracting revenue from local governments’ tax bases

(e.g., counties and municipalities), and moving funding from a noneducational to educational programs. It is possible that these actions conflicted with other priorities and goals of federal government, as well as affected state and local policy goals. (2015, p. 68).

Yet the relationship between country and state does not address the persistent issue of funding and control at the local level. Seeing that states were still imposing binding tax and expenditure limitations (TELS) on districts, schools lacked the ability to create revenue and spend on their own accord (Hayes, 2015).

In addition, school funding still remained somewhat of a mystery even to districts themselves. California's schools fared somewhat better in equity; in 2012, school districts with a poor student demographic received 36% more funding than districts who had a non-disadvantaged population. Curiously, there was still variation in revenue amongst schools with the same poverty level, due to the myriad of formulas and grants that went into school finance (Rose & Weston, 2012). As post-NCLB educators called for decentralization and transparent funding, Governor Brown passed the Local Control Funding Formula (LCFF) in 2013.

LCFF is not novel in its concept as the model uses pupil weights to determine how to properly fund schools. However, it's unique in that it clearly defines the criteria for need, it gives extra funding to schools with the highest need and it allows districts or local education agencies (LEAs) to decide how to use the funding. Students who demonstrate need either qualify for free or reduced lunch (demonstrating low SES), are an English Language Learner and/or are foster youth. The amount of students in any or all categories is termed the LEA's "unduplicated pupil percentage." On top of the base amount per students, LEAs receive an additional 20% of funding (supplemental grant) for each high need student. If an LEA has an unduplicated pupil percentage of 55% or more, it receives an additional 50% of the base amount (concentration grant) for each

student. While full implementation of the plan is projected for 2020-2021, hypothetically, an LEA that “has 100% high need students will receive 1.425 times the funding of a similar-sized district that has no high-need students” (Affeldt, 2015, p. 4).

In a stark contrast in tone to its NCLB predecessor, LCFF relies on districts to essentially measure themselves on progress to goals. While the state does provide criteria for evaluation, it asks LEAs to provide a Local Control Accountability Plan (LCAP) to recap and assess how it is allocating funds. Yet “the LCAP does not prescribe measures or benchmarks for any of the target areas or detailed spending guidelines. Instead, school districts are responsible for not only determining outcome measures, benchmarks, and goals independently, but also deciding how to disburse supplemental funding” (Zarate & Gandara, 2019, p. 159). The state prescribes eight basic areas that LCAPs must address with general detail on quality or rigor of services:

LCFF’s Eight State Priority Areas & Required Progress Metrics (excerpted from Affeldt, 2015)

Basic Services

- Fully credentialed teachers
- Teachers properly assigned to teach the subject and any special student population.
- Student access to standards-aligned instructional materials.
- Facilities in good repair.

Implementation of State-adopted Standards

- Implementation for all students of academic standards adopted by State Board, including but not limited to Common Core State Standards, and, for ELLs, English Language Development standards.

Course Access

- Student access and enrollment in all required areas of study.

Parental Involvement

- Efforts to seek parent input in decision-making.
- Promotion of parental participation in high need and special ed. programs.

Student Engagement

- School attendance rates.
- Chronic absenteeism rates.
- Middle school/High school dropout rates.
- High school graduation rates.

School Climate

- Student suspension rates.
- Student expulsion rates.
- Other local measures, including parent, student and teacher surveys.

Student Achievement

- Performance on standardized tests.
- Score on Academic Performance Index.
- Share of students that are college and career ready.
- ELL reclassification rate.
- Share of students that pass Advanced Placement exams with 3 or higher.
- Share of students determined prepared for college by the Early Assessment Program.

Other Student Outcomes

- Other indicators of student performance in required areas of study. May include performance on other exams.

The verdict on the efficacy of LCAPs is limited to few reviews given the recent enactment of LCFF. However, most of the literature states that LCAPs merely add to the ambiguity of spending and lack rigorous standards despite being labeled as an accountability tool. Perhaps due to the desire to give back local control, LEAs are not required to justify expenses or even provide complete details about interventions and activities. Some districts did not distinguish between supplemental, concentration and base funding, making oversight nearly impossible for

stakeholders (Zarate & Gandara, 2019). The ambiguity in the LCAP reporting has continued to emerge as a problem in recent briefs.

For the past four years, the Education Trust-West (a non-profit research firm) has published briefs evaluating LCFF progress. For three consecutive years, it observed LCAPs were not correctly categorizing expenditures or distinguishing by type of grant as mentioned by others. The most recent brief mentions that tracking by grant “would not require a significant overhaul of the existing accounting system.” In another brief, it goes on to describe how districts double-count expenditures: one “LCAP includes 15-line items, each specifying a different activity, with the same exact expenditure amount of \$6,303,709...(it’s) unclear whether they plan to spend \$6,303,709 on each activity — for a total of more than \$75 million — or whether a single pot of \$6,303,709 funds all activities” (Chen, 2016). Typically, LEAs have an in-house accounting staff to assist with budget reporting which makes the unclarity and obvious mistakes all the more puzzling.

Despite the large attention to high-need students, multiple reports conclude that instructional design around Common Core State Standards remain inconsistent. LCFF intentionally veered away from categorical funding to allow for LEA control but the needs of vulnerable student populations still remain quite diverse. Even though ELL students are given the same funding as foster youth, these grant dollars might not cover the additional supports need for English language acquisition. By grouping high-need students together, the adequacy component of funding that is much emphasized in the literature is overlooked (Zarate & Gandara, 2019).

Compounded with the issue of resource allocation is that of mismanagement. In recent years, lawsuits against large school districts (Los Angeles and Long Beach, specifically) have made news with advocates claiming that supplemental or concentration grant dollars were being spent elsewhere. Given the hazy nature of LCAP reporting, reputable costs such as teacher professional development is often categorized as an “activity” expense, making it difficult to discern and therefore measure efficacy (Blum & Knudson, 2016). In a report commissioned by PACE (Policy Analysis for California Education), findings revealed that most LEAs addressed CCSS expectations by merely purchasing new curriculum and textbooks rather than creating robust systems for proper instructional execution.

Given that LCFF is a recent shift for California and school funding in general, few studies explore the efficacy of this funding model. Furthermore, due to inadequate budget reporting, the state has unintentionally made evaluation of spending and its impact on student achievement difficult to measure. While this study may not be able to fully establish relationships between fiscal allocation and student achievement growth, the data collected will inevitably show student achievement outcomes throughout the LCFF period. Student results are admittedly only one component of the LCAP, and there a number of critical factors important to school quality; but the history of school funding has proven that, despite valiant attempts, federal, state and local actors have yet to see sustainable, equal and meaningful results from spending efforts.

Data and Methods

The dataset utilized for this study was created using public tools available at ed-data.org, cde.ca.gov, and district- and school-specific websites. The data were pulled for six school years, ranging from academic years 2013-14 through 2018-2019 (school years typically start in August and conclude in May of the following year). As the state used a redesigned achievement test for the academic year of 2013-14, there are no math or ELA results for that year. Similarly, suspension, expulsion, and chronic absenteeism data were not available for years 2013-14, 2014-15 and 2015-16. No imputation of missing data was performed; results presented here are from analyses using complete-data cases.

Financial data were compiled from ed-data.org—an official website open to the public and whose data are collected from the CDE website. The data collected for the present analyses is the result of all districts submitting their financial revenue and expenditure information to the CDE prior to their annual audit at fiscal close. Once these data are corrected and audited, it is then pulled by ed-data.org. Other guidance from the ed-data website on the financial reports, specifically as to why the numbers sometimes do not agree, are listed in the appendix. Table 1 lists and describes the dependent and independent variables used in the analysis.

Table 1. Description of Variables

Category	Variable Description	Coded as
A. Dependent Variables: Student achievement outcomes (at the district level).	Percentage of students scoring exceeded or met standard) in (1) English Language Arts, and (2) Math Smarter-Balanced Assessments (the formal California proficiency exam).	Math_proficient English_proficient
B. School district characteristics	Total students enrolled Average Daily Attendance of district Unduplicated pupil rate and number refers to the count of <u>pupils who (1) are English learners, (2) meet income or</u>	Enrollment ADA Disadvantaged_rate Grad_rate Suspensionrate Expulsionrate Chronic absence

	<u>categorical eligibility requirements for free or reduced-price meals under the National School Lunch Program, or (3) are foster youth. *Note: as the variable is coded “disadvantaged,” to avoid confusion, unduplicated students will be referred to as disadvantaged in the analysis. *</u> Graduation rate Suspension and Expulsion rates Absent rate refers to the amount of students who were absent at least 10% of the school year	
C. District academic performance indicators for disadvantaged (unduplicated) students	Graduation and drop-out rates for disadvantaged students Suspension and expulsion rates for unduplicated count/disadvantaged students English and Math proficiency rates for ELL, poor and foster students	Disadvant_suspension Disadvant_expulsion Engproficient_disadvant Mathproficient_disadvant
D. School district teacher-related indicators	Total number of teachers in the district Total number first year teachers in the district Average salary of teachers in district Average years of experience of teachers in district Total number of in-service days which is a combined sum of instructional days and teacher development days Average teacher-to-pupil ratio by district	Teachers_n Firstyears Teachsal Teachexpavg Teacherinservice Perpupilratio
E. LCFF-specific district financial indicators	Education expenditure per student Total expenditures Total revenue Percentage of budget spent on instruction Percentage of budget spent on instruction-related services	totalexpenditures totalrevenue Expense_instruction Expense_irs Expense_pupilservices Expense_admin Salariesperstd LCFFperstd

	Percentage of budget spent on pupil-related services	
	Percentage of budget spent on administrative costs such as legal services, audit cost and public relations	
	Average teacher salary per student	
	Amount of funding per student based on amount of disadvantaged (unduplicated) students in district	

Table 2: Summary statistics.

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
enrollment	5,659	6,482	22,861	3	653,826
ada	5,599	5,737	18,446	3	526,883
disadvant_rate	5,659	59.39	25.20	0	100
grad_rate	2,200	86.82	13.01	0	100
ratio	5,642	20.02	4.323	0	87
firstyears	5,642	20.06	77.48	0	2,454
teachsalary	4,678	71,429	11,965	35,500	136,478
teachers_n	5,636	311.4	1,152	0	32,817
teacherinservice	4,678	184.3	3.367	0	200
teachexpavg	5,642	10.33	3.401	1	34
suspensionrate	3,757	3.403	2.953	0	28.20
disadvant_expulsion	3,762	5.763	16.19	0	192
disadvant_suspension	3,757	238.4	518.7	0	6,191
expulsionrate	3,762	0.0667	0.167	0	2.600
chronicabsence	2,801	11.72	7.947	0	78.60
math_proficient	4,594	36.87	18.01	0	91.09
english_proficient	4,596	47.50	17.06	0	92.31
expense_instruction	5,612	59.22	7.186	5	83
expense_irs	5,612	11.17	4.019	1	88
expense_pupilservices	5,612	7.342	3.740	0	89
totalexpenditures	5,602	6.581e+07	2.394e+08	109,694	7.347e+09
totalrevenue	5,602	6.741e+07	2.492e+08	150,655	7.542e+09
expense_admin	5,612	7.952	3.339	0	63
salariesperstd	5,602	5,218	2,107	1,430	38,051
LCFFperstd	5,602	10,466	5,767	5,784	113,340
engproficient_disadvant	3,598	52.08	20.38	0	169
mathproficient_disadvant	3,605	40.74	22.52	0	176.7

Results

As the primary research question raises specific points regarding student achievement and LCFF funds, the initial multivariate regression model utilized the English and Math scores for each district between the academic years of 2015 and 2019. . Using the district unduplicated rate as a control variable, independent variables capturing funding allocation were selected to determine if there was substantial and statistical significance Table 3 demonstrates that all variables in the model hold predictive power over student achievement. Perhaps most distressing, although not surprising, is that the control variable, “undup_rate,” which captures the district’s most vulnerable student population, has the largest coefficient. As the unduplicated count goes up, achievement in both ELA and math drops by over half a percentage point; while these districts might benefit from LCFF funds, an increase in high need students threatens the overall achievement of all students.

Table 3. Regression parameter estimates

VARIABLES	(1) english_proficient	(2) math_proficient	(3) engproficient_ disadvant	(4) mathproficient_ disadvant
disadvant_rate	-0.542*** (0.00596)	-0.538*** (0.00640)	-0.476*** (0.0115)	-0.509*** (0.0125)
expense_instru ction	0.160*** (0.0294)	0.385*** (0.0316)	0.229*** (0.0642)	0.509*** (0.0697)
expense_irs	0.221*** (0.0525)	0.395*** (0.0564)	-0.167 (0.116)	0.188 (0.126)
expense_pupils ervices	0.179*** (0.0572)	-0.369*** (0.0615)	-0.387*** (0.127)	-0.906*** (0.138)
expense_admin	-0.526*** (0.0616)	-0.176*** (0.0661)	0.0523 (0.137)	0.493*** (0.148)
Constant	70.34*** (2.659)	45.55*** (2.855)	72.34*** (5.903)	43.06*** (6.403)
Observations	4,548	4,546	3,555	3,562
R-squared	0.673	0.662	0.370	0.391

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Still, the relationship between funding allocation and student achievement is quite evident. As the CDE data reporting continues to improve, there might be a variable that captures the achievement scores of students in the unduplicated count. As a proxy variable, the achievement levels of both English Language learners and economically disadvantaged students were combined; columns 3 and 4 in Table 3 reflect the ELA and math achievement of these two combined groups, respectively. The total unduplicated rate in the district still holds significance but two variables fluctuate when regressed against this student group's achievement. One variable, instruction related services, that formerly had much of the predictive power when using total student achievement, loses statistical significance in the latter regressions suggesting that either collinearity is occurring, or instruction related spending is not a strong explanatory variable in vulnerable student achievement.

Yet, spending on instruction seems to be a huge factor for districts with a higher unduplicated rate. The CDE defines spending on instruction as funding that pays for “any activity between teachers and students while instruction related spending is allocated for “anything that provides administrative, logistical or technical support of teaching such as curriculum development and staff development.”

The second model specifically tests the relationship between spending on instruction and student achievement. In the models, ELA and math rates had similar outputs, so Table 4 instead shows the model testing total math levels and then math levels of students in the unduplicated count. As spending allocated to instruction is typically comprised of salaries and benefits, the average teacher salary of the district and the total number of teachers in the district serve as a variable of interest and a control variable. Given that teacher salaries are typically intertwined with years of experience, it can be logically inferred that districts spending more on certificated salaries most likely have a more experienced teaching roster; similarly, the pupil to teacher ratio stands to be lower in districts with more teachers. To test these assumptions, the following regressions show the coefficients for the whole student population and the population of interest (unduplicated count).

Table 4. Math proficiency for all students and disadvantaged students

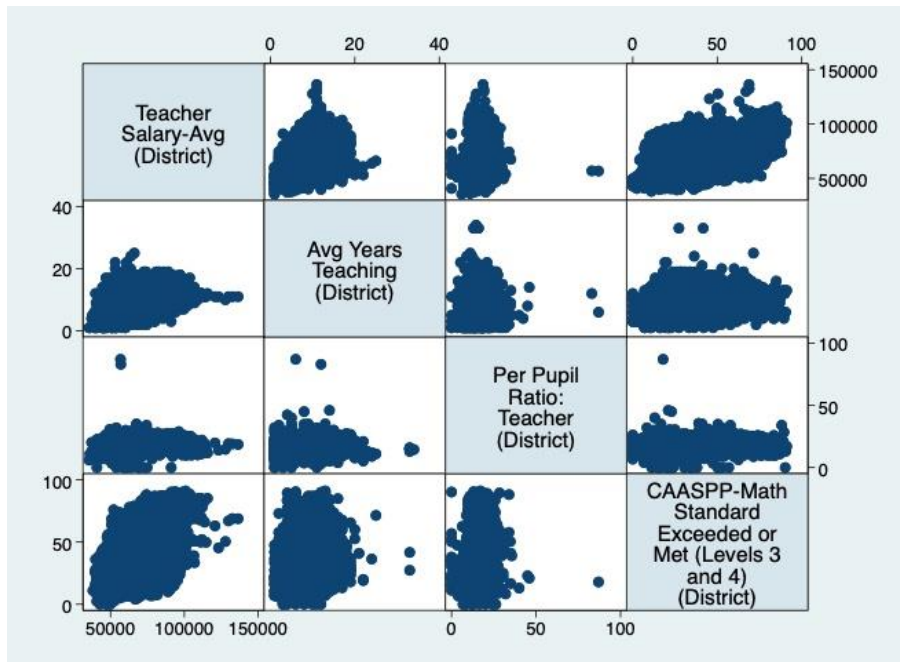
VARIABLES	(1) math_proficient	(2) mathproficient_disadvant
expense_instruction	0.801*** (0.0449)	0.994*** (0.0690)
teachsalary	0.000528*** (2.53e-05)	0.000685*** (3.77e-05)
teachexpavg	-0.459*** (0.102)	-0.688*** (0.157)
ratio	-0.750***	-0.729***

	(0.0799)	(0.129)
teachers_n	-0.000611***	-0.000742***
	(0.000205)	(0.000267)
Constant	-28.65***	-47.05***
	(2.684)	(4.504)
Observations	3,833	3,199
R-squared	0.220	0.184

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4 demonstrates that expense_instruction only gains more explanatory power when ran against variables that capture teacher demographics. This spending is even more powerful for students who are in the unduplicated count, suggesting that money spent on high quality teachers has substantial impact; it can also be inferred that hiring more teachers could be a solid solution to boost student scores. While increasing the number of teachers in a district (teachers_n) showed a small and negative impact, the ratio which illustrates teacher to number of students indicates that reducing the amount of students in a given classroom could result in increased scores; increasing a ratio by one student (perhaps maybe raising a classroom from 25 to 26 students per teacher) results in a loss of .72 for math achievement for vulnerable students. Perhaps most concerning, however, is the factor of teacher experience.

Figure 1

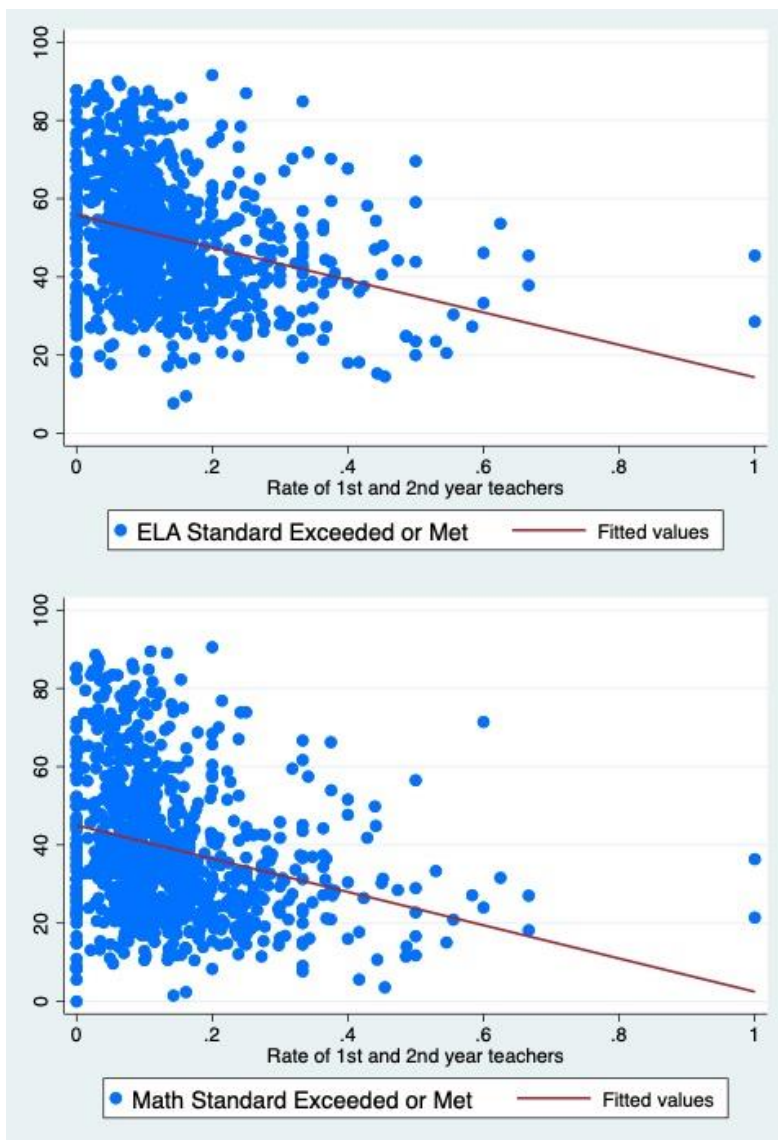


As stated before, typical teacher contracts consist of a pay scale dictated by years served. The data shows that this is not a perfectly correlated relationship however, with only a .43 correlation between average teacher salary and average years of experience. Furthermore, as the average years of experience increases within a district, the predicted achievement decreases at high rates, especially for unduplicated count students (-.68). Figure 1 illustrates the relationships between the main variables of interest and dependent variable of math achievement; as the mean experience in all districts across time is 10.3 years, it's meaningful that there is this amount of low achievement data for teachers on the latter end of this spectrum. However, this is not unusual according to the literature which suggests a stagnation in achievement results for teachers past year five in the classroom.

While experienced teachers seem to predict a curious decrease in student outcomes, the newest teachers emerge as a larger threat. The number of first year teacher in a district

continuously pointed towards a notable predicted decrease in achievement in various models. Thus, a subset of data for the 2018-19 year was pulled to incorporate first and second year teachers as well as salary differences amongst districts. By generating a new variable to account for the percentage of new teachers, there was an opportunity to analyze the overall trend a newer teaching force has on student performance.

Figures 2 and 3



The regression line demonstrating the decrease in scores as new teachers rise holds a slope of about -.40, which is a significant drop in achievement as seen in the graphs. When incorporating other measures of school performance, it appears that a higher percentage of new teachers hold multiple implications on overall student wellness. Figure 4 depicts the relationship of the new teachers rate on math scores as well as graduation and suspension rates. Every graph with a declining slope can be attributed to the percent of new teachers within a district.

Figure 4.

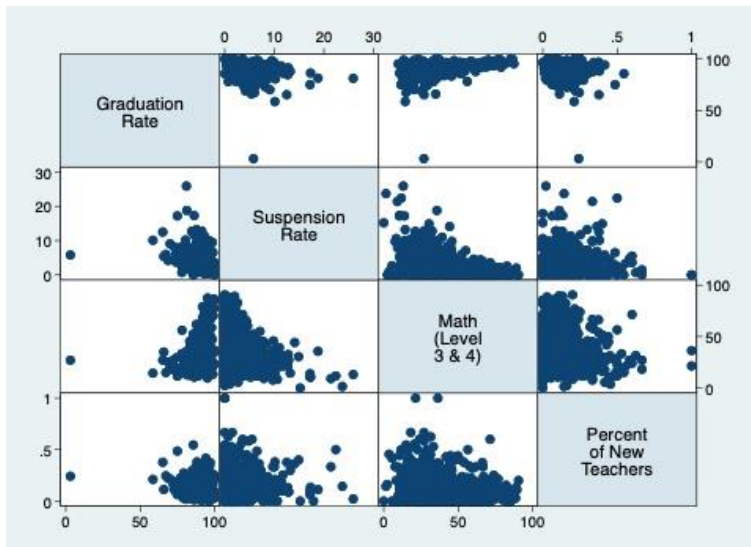


Table 5

VARIABLES	(1) suspensionrate	(2) disadvant_suspension	(3) expulsionrate	(4) disadvant_expulsion
expense_instru ction	-0.0886*** (0.00894)	5.740*** (1.549)	-0.00292*** (0.000524)	0.0706 (0.0497)
expense_irs	-0.0716*** (0.0158)	25.52*** (2.741)	-0.00263*** (0.000929)	0.453*** (0.0880)
expense_pupil services	0.204*** (0.0172)	34.72*** (2.987)	0.00798*** (0.00101)	0.908*** (0.0957)

expense_admin	-0.174*** (0.0185)	-48.36*** (3.209)	-0.00925*** (0.00109)	-1.346*** (0.103)
Constant	9.275*** (0.791)	-261.2* (137.0)	0.282*** (0.0464)	0.465 (4.394)
Observations	3,717	3,717	3,722	3,722
R-squared	0.121	0.156	0.062	0.107

As noted, regulations stipulate that LCFF dollars need to be allocated towards other measures such as increasing attendance and graduation rates while reducing suspensions and expulsions. The budget category, “pupil services” denotes any funds spent on “guidance and counseling, psychological, social work, health, transportation services and food services.” Using the same regression model to predict achievement, Table 3 shows how budget allocation impacts suspension and expulsion rates for the general student body and the unduplicated student count specifically.

While it’s clear that the unduplicated population is greatly affected by specific spending in proportion to the general population, an increase in pupil spending resulted in both statistically and substantively significant increases in rates across the board. Specific to the suspension and expulsion rates of the unduplicated population (undup_suspension, undup_expulsion), an increase of one percent in pupil services spending could cause a 34.7 increase in suspensions and a .9 increase in expulsions. The maximum percentage allocated to pupil services in the dataset was 89%; however, the mean was a mere 7.3% and it is the least funded budget variables.

As prior referred to, achievement predictions went down as the number of high-need students rose in a district. While this could be related to external factors (level of parent education, household income, neighborhood safety), the purpose of LCFF is to devote additional funds to filling gaps of support given the severity of external challenges for vulnerable students. The level of need amongst students fluctuates greatly from district to district; to better understand how large the variations are, districts were divided into quantiles based on how many students were counted in the unduplicated measure. Table 4 validates those districts with the highest amount of poor, ELL and foster students have a significantly lower graduation rate (a ten percent drop as opposed to five percent for districts with a low unduplicated count), less experienced teachers yet nearly double the revenue that low-need districts are given.

Table 6.

VARIABLES	(1) grad_rate	(2) suspensionrate	(3) teachexpavg	(4) totalrevenue
2.unduprate_low	-4.842*** (0.776)	1.452*** (0.130)	0.262** (0.128)	5.038e+06 (9.407e+06)
3.unduprate_mid	-6.288*** (0.746)	2.261*** (0.130)	-0.254** (0.128)	2.274e+07** (9.407e+06)
4.unduprate_high	-10.30*** (0.813)	1.928*** (0.131)	-0.333*** (0.128)	4.123e+07*** (9.383e+06)
Constant	92.20*** (0.570)	1.993*** (0.0921)	10.41*** (0.0905)	5.017e+07*** (6.636e+06)
Observations	2,200	3,757	5,639	5,599
R-squared	0.070	0.086	0.005	0.004

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Discussion

The results suggest a hierarchy in spending, with instruction being the strongest predictor of outcomes. Since this budget category is almost entirely spent on staff salaries, there are inherent challenges in determining recommendations. First, teacher salaries are based largely on years of experience rather than performance so high earners are not necessarily equated with high student outcomes. This deserves some attention; a correlation test revealed only a .16 increase in ELA achievement when tested against teacher annual salary. Yet, the percentage of funds put towards instruction show remarkable predicted increases in student achievement, especially for the unduplicated population, which showed a .99 predicted increase in math scores for every additional percentage spent on this category.

The discrepancy in outputs, one when using rate of spending on instruction and the other being average teacher salary by student, is most likely due to additional expenses not captured by salary alone such as employee benefits and classified employee salaries (all administrative, food and janitorial workers). “Books and supplies” is also listed in the instruction bucket yet the total cost districts spend on this item is under ten percent of total funds allocated to “instruction.” The additional money captured by the instruction category, namely the benefits for staff, could be a potential drain for district funds, as benefits increase in cost with a more senior and tenured staff. A quick model shows that for any time a district acquires even one more year to its average teaching experience count, their percentage spent on instruction stands to jump about .61%.

Still, the data related to teacher experience and student achievement was alarming at best. Table 2 demonstrated a negative impact on an experienced teaching staff and student achievement for both the general and unduplicated population. However, when re-running the model using only districts that had an average of over ten years of experience, the coefficient

predicted an increase of 4.27 and 3.42 for ELA and math achievement, respectively. This suggests that previous literature that tried to identify stagnation in teacher performance could be correct in assuming that performance declines past year five in the classroom, but those who stay longer than ten years, generally outperform the second tier of experience.

The first tier of experience, or newer teachers, is unsurprisingly detrimental to students, especially the most vulnerable ones. The literature has consistently discussed the sharp learning curve and high burnout rate for novice teachers and how this can be compounded in schools with a high percentage of poor students. Due to an evolving onset of challenges, districts with lower income students, usually receive the newer end of the teaching force and experience more teacher turnover than districts in wealthier communities. The rate of correlation between first year teachers and the unduplicated count is quite high at .94 but this is not surprising as it follows a decades long, national trend of the most high need schools receiving the least qualified instructors.

While the correlation between new teachers and high need school may be high, it's important to note that the spread of this data is affected by a very high outlier that is most likely misrepresenting the correlation. The outlier, Los Angeles Unified School District, is a dominant district in the state and country, with LASUD being the second largest school district in the nation. Excluding LAUSD from the state dataset would be omitting the data for over 650,000 students, the largest share of students in the state. Furthermore, given the missteps of large public districts in the past, observations of LAUSD and experimental funding is crucial to providing guidance for consistently underperforming schools.

Still, the nontransparent reporting of funds captured by district LCAPs might shield any useful discoveries. During the data collection process, the criticism that was reported in

previously stated literature, specifically the haziness around spending activity was also noted in the attempt to find percentage or dollar amounts spent on significant funding categories. As the results section outlines, “instruction related services,” produced fluctuating results, especially when included in model testing similar expenditure variables (such as “instruction”). There are a myriad of expenses listed under instruction related services but the most listed ones include, Instructional Supervision, Instructional Research and Curriculum Development; despite having the amount a district spend on any of these costs, there are no specific details on the kind of development or training utilized making suggestions far from replicable. Considering that a new teaching force most likely needs intensive training out of the gate and that teachers after year five and before year ten seem to be underproducing, instruction related services could help explain the gap between the district’s talent and the district’s performance.

More transparent justification of spending could also help why spending in “pupil services” seem to result in such poor outcomes for marginalized students. Student Engagement and School Climate (both categories with metrics including absenteeism, suspension, and expulsion) were included in the essential spending requirements for LCFF funds. The services included in this category are more apparent than those in the forementioned with clear descriptions such as social work, psychological and health services. It’s unclear if salaries are included in this expense item; however, the three districts with highest suspension rates amongst unduplicated students did not differ greatly from the district and statewide average. While the dataset used did not breakdown spending by type of pupil service, the variation amongst amount spent appears to be small. Rather, justification around spending and evaluation of cost and benefits could help reform this budget category as the regression outputs suggest that spending on pupil services is serving as a detriment to overall student wellness.

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Conclusion

One day when I was a college freshman, I took a very long walk. I had just gotten out of an English class and was rather shocked that I had scored a B minus on a term paper. The paper was about Richard Wright's *Native Son* and I believed that I had done a more than satisfactory job of arguing Bigger Thomas' guilt; he had killed another person and was therefore guilty, end of story. My professor wrote that I had missed the point of the novel, feedback that I had never received before. I had always had a perceptive yet accurate interpretation of literature and had plenty of teachers who had told me that, along with saying that I had a masterful voice in presenting my arguments. In two paragraphs of red ink, my professor, for the first time in my life, told me that I was wrong. And not just wrong but completely off. I spent the next two days rereading *Native Son* and thankfully was also placed in a discussion section where I got to hear from classmates who did get the point of the novel. Complexity and context matter, and can sometimes trump the basic facts. I did not understand this until I read a novel and my teacher gave me hard feedback. This is the point of education.

Another day not long after, I had a student in the high school English class I taught named Javier. He was primed to be the valedictorian of his class but struggled emotionally and mentally, so much so that it affected his attendance in school. When he did show up for my class, he was full of life and leadership and always stopped by my desk to thank me for the lesson. A few months later, I was driving home when I received an odd text. After reading it aloud, I immediately contacted my administrator fearing the worst. She called me later to thank me as the text was from Javier who was considering suicide. She told me that he was ok, receiving support and that I had probably saved his life. And this is also the point of education.

Five years later, I was an assistant principal at an elementary school and a boy named Elijah was constantly being sent to me for behavior issues. He would yell in class and sometimes tantrum when playing with his classmates. In my office, he said nothing and would stare at the wall. One day, after causing such a scene that I called his parents in to pick him up, Elijah sat in my office organizing number tiles. While watching him, I noticed that he organized the tiles by shape and color rather than numbers. When I asked him about it, he looked at me blankly; yet when I pointed and moved the tiles to convey my question, he lit up and proceeded to show me his process. I referred Elijah to our special education department based on a hunch; it turned out that Elijah was autistic and hearing impaired. He was in the third grade and had not received support for his diagnosis up to then. And this is why education matters.

Finishing this dissertation has forced me to come back to the “why” of education. When thinking about the systemic and policy challenges K-12 education faces, it’s easy to overlook the more personal and poignant moments that solidified my resolve to fix this system. Saying that it’s “for the kids” is not enough; education serves all of us, yet the system marginalizes many, leaving many students then turned adults feeling unprepared and anxious about the workforce. While fields like sociology, psychology and even economics are included under the umbrella of social sciences, education remains an outlier. The field has never formally been inducted beneath the social science umbrella and the empirical work about how to improve educational systems has suffered.

This dissertation is grounded in the idea that education is a “wicked” social problem and the analyses presented present a host of solutions that will alleviate some of the hard consequences that result from a broken system. While the issues presented may seem like a random selection, they are all problems that pose a huge threat to the future of education. My

experiences as an educator and as a student may not represent that totality to every student and teacher. However, until research catches up to education, my theories and analysis is best suited for the field. Education is an actionable practice making it a unique field if it were to be considered a part of the social sciences. In no other field, can you make immediate impact, on a school, on a class on a life than education. The topics I selected offer immediate impact and their recommendations could be a turning point in a student's life tomorrow if enacted upon today. This urgency and relevancy are, hopefully, indisputable.