



Performance-Based Licensure: Increasing Teacher Diversity and Effectiveness With Licensure Exam Alternatives

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Performance-Based Licensure: Increasing Teacher Diversity and Effectiveness with Licensure Exam Alternatives

Doctor of Education Leadership (Ed.L.D.) Capstone

Submitted by

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To the Harvard Graduate School of Education in partial fulfillment of the requirements for the degree of Doctor of Education Leadership.

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Dedication

To Josh: Thirteen years ago, almost to the day, I typed "i know it's been awhile and . . ." Those six words changed my life in every best way possible. You continue to change my life in every best way possible.

To my family: Your advocacy, creativity, humor, brilliance, support, and love are my hope for all children. You are my North Star.

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Like learning, teaching extends far beyond the four walls of a classroom. Whether in Gutman huddles, office hours, shared rides, group texts, Cambridge haunts, or (okay, fine) classrooms, I am beyond grateful for everything I learned from my incredible guides along this journey.

Countless thanks go to . . .

- . . . my committee members, who taught me to both trust my wild ideas and support them with compelling realities.
- . . . the Mississippi Department of Education, which showed me the importance of paying progress forward.
- . . . our Ed.L.D. faculty, staff, and network, who model a lifetime commitment to equity and excellence in education.
- ... the mighty Cgr8, PrinciPact, and my pod, where the power of challenging with care, processing the process, and laughing through tears somehow all combined to make me the leader and—more importantly—person I am today.
- ... my peer coach and partner in the pipeline, whose longstanding collaborations left me with zero doubt that context *always* matters and the future is female.
- . . . the fearless educators of Team Booker T. Washington, who offered daily lessons on the difference between qualified and certified that I will never forget.
- . . . my friends, who show me what it means to show up, live loudly, and love people for exactly who they are.
- . . . my Mississippi, where I first learned to both see and reimagine the binaries that bind.

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Abstract

The Mississippi Department of Education (MDE) is a state education agency that administers policy and performance systems to support the leadership and learning of Mississippi's approximately 466,000 public school students. Like states across the country, critical teacher diversity, geographic, and content area shortages have stymied the agency's efforts to ensure every school has effective teachers and leaders. In an effort to increase teacher diversity and effectiveness while mitigating teacher shortages, the MDE has launched the nation's first performance-based approach to educator licensure as an alternative to current standardized exam requirements.

Prior to the start of residency, I led district focus groups to prototype a performance-based licensure (PBL) model and co-authored a grant with senior MDE leaders for the W.K. Kellogg Foundation to fund the pilot. I then returned to the MDE to lead the planning, implementation, evaluation, improvement, and communications for the PBL pilot. This Capstone examines efforts within the MDE's Office of Teaching and Leading to: employ more equitable practices in human capital innovation, consider evidence in weighing future PBL pilot expansion, and support individuals in becoming licensed educators based on their demonstrated effectiveness. My work draws on research on the benefits of teacher diversity and the disadvantages of standardized exams used for licensure. Using John Kingdon's multiple streams theory and Caroline Hill, Michelle Molitor, and Christine Ortiz's equityxdesign framework to inform and analyze my work, I describe the implications of my residency for the American PreK-12 education sector, the MDE, and my personal leadership.

Introduction

The Mississippi Department of Education (MDE) administers policy and performance systems to support the leadership and learning of Mississippi's approximately 466,000 public school students. The MDE's vision is "to create a world-class educational system that gives students the knowledge and skills to be successful in college and the workforce, and to flourish as parents and citizens" ("Mississippi Board of Education Strategic Plan," 2018). In pursuit of this vision, the Mississippi State Board of Education outlined the following six strategic goals for 2016-2020.



Figure 1. State board of education goals. From *2019 Strategic Plan Status Update*, by the Mississippi Department of Education, 2019, https://www.mdek12.org/sites/default/files/ Offices/MDE/SSE/2019 strategic plan status update web.pdf.

The MDE's Office of Teaching and Leading (OTL) has primary responsibility for reaching Goal 4 to ensure that every school has effective teachers and leaders (Figure 1), as that office administers statewide policies and programs for educator talent acquisition, preparation, licensure, and effectiveness ("Teaching and Leading | The Mississippi Department of Education," n.d.). Unfortunately, the OTL's efforts remain hampered by critical teacher shortages in such content areas as math, science, and special education.

Fifty-four of Mississippi's 149 school districts are also designated "geographic shortage areas" (The Mississippi Department of Education, n.d.). A geographic shortage area is generally defined as a Mississippi public school district wherein more than 10-15% of teachers are not appropriately licensed. Of those 54 districts, over 75% serve student bodies that are over 75% Black or African American ("District and School Data," n.d.). Within the last two years, increased public pressure to mitigate teacher shortages both in general and specifically with regard to racial/ethnic diversity combined to generate an impetus to reimagine educator licensure pathways at the MDE. One concrete result has the OTL, under the leadership of Executive Director Dr. Cory Murphy, piloting several innovative strategies to diversify and improve Mississippi's educator pipeline. Performance-based licensure (PBL) is such a strategy.

First Fellowship, Then Residency

Through a summer 2018 Gordan M. Ambach Fellowship, I presented research to Dr. Murphy and a program officer with the W.K. Kellogg Foundation indicating that: (1) students benefit from having same-race teachers; (2) licensure exam requirements limit the supply of teachers of color; and (3) any benefits of using licensure exams as an entry requirement are more than offset by the costs of limiting the supply of teachers of color. I complemented this research with evidence from interviews I had conducted with aspiring teachers of color who frequently cited Praxis exams as the single biggest educator pipeline barrier, particularly in regions like the Mississippi Delta where an overwhelming majority of public school students identify as Black. Delta administrators shared similar frustrations with me that the Praxis exams amount to both an impediment to aspiring Black educators and a major contributor to teacher shortages in majority Black districts. A former

administrator highlighted their underlying concern with legislation and policies requiring Praxis exams: "They're saying you're not smart enough to teach your own children" (personal communication, June 8, 2018). Based on these findings, I recommended piloting a performance-based approach to licensure using value-added measures and observations of teacher practice as an alternative to Praxis scores.

Members of the OTL and I then applied design thinking with stakeholders to prototype a performance-based model for Mississippi that same summer of 2018. A series of empathy interviews and ideation sessions with educator preparation program administrators, community organizers, teacher assistants, education majors, administrators, and parents began the effort. I then led a series of district focus groups with superintendents, principals, human resource directors, teachers, potential PBL candidates, parents, and students to rapid prototype and adapt the PBL model based on end-user feedback. Using this model with the approval of the State Superintendent and Board of Education, an OTL Bureau Director and I subsequently crafted a successful \$4.1 million grant proposal to the W.K. Kellogg Foundation to increase teacher diversity and effectiveness through residency- and performance-based licensure pilots.

By the time I rejoined the OTL for residency in summer 2019, OTL senior leadership had been regularly asked to expand the PBL pilot by district superintendents because of statewide teacher shortages. The initial PBL cohort of 35 shifted to 50 and later to over 70 before program launch as a result. At the same time, OTL leadership is cautious about expanding the program for the 2020-2021 school year without first answering the inevitable question, "Does it work?" While conversations initially focused on student outcomes as the primary indicator of whether PBL works, subsequent discussions revealed

Dr. Murphy's openness to using improvements in educator retention, diversity, candidate learning, and/or administrator learning as indicators of program effectiveness. In addition to overall effectiveness, the OTL is open to learning from several innovative components of the model, including cohort kickoffs, cohort-wide literacy development, and co-observation/calibration sessions between district and MDE staff to align on the Mississippi Educator Professional Growth System.

Overview

When I joined the Doctor of Education Leadership program, I knew I wanted to increase marginalized students' access to empowering learning environments through talent recruitment, development, and retention. My strategic project subsequently set out to challenge licensure exams as a key barrier in the educator pipeline and to offer performance-based credentialing as an alternative. What follows is an exploration of underlying factors behind both successful and challenging components within the PBL model and early indications of its promise in facilitating a more diverse, effective teacher workforce. After sharing the research that guided my theory of action, I describe the strategic project, the key decisions that shaped the model, and the actions I took to lead the program. I then analyze the extent to which PBL met its intended objectives by February 14, 2020, and how it did so. Although policy implementation of a performance-based alternative to standardized licensure exams extends beyond the scope of this work, implications for self, site, and sector nevertheless offer useful reflections, revelations, and recommendations for strengthening our educator workforce for all students in Mississippi and beyond.

Review of Knowledge for Action

As an elementary school principal in the Delta, I generally knew who our strongest teachers were within the first two months of school. So did fellow teachers, students, and their families. By every measure of student proficiency and growth, our strongest teachers often identified as Black or African-American, women, mothers, Delta natives, and career educators. Every year, I knew their students would average over a year of growth on both reading and math assessments. I knew I would rarely see their students with discipline referrals. I knew they loved their students, and their students loved them. I knew their homes were within a half mile of the school, and that they would return the following year. At the time, I did not know that one of my strongest teachers had attempted her Praxis licensure tests seven times before finally passing. Even worse, I also did not know whether my very best teacher would be eligible for one more year on an emergency license in lieu of meeting Praxis score requirements. She was not. Ultimately, she became a long-term substitute in the same classroom she once led.

Collaborative Inquiry

These experiences influenced my decision to apply to the Ed.L.D. program. As I wrote at the time, "thousands of substitute-led classrooms across Mississippi made me eager to join the EdLD program and hopefully dig into policies that could increase student access to exemplary teachers" (personal communication, August 21, 2017). During a yearlong collaboration with Mariel Novas (a fellow member of Ed.L.D. Cohort 8), we investigated the following lines of inquiry: Do students benefit from having a same-race teacher? Do licensure exam requirements limit the supply of teachers of color? And do standardized licensure exam requirements ensure teacher quality? Conversations with

educator preparation programs, nonprofits, and fellow state education agency employees during residency raised two more questions: Are performance-based assessments a better method for ensuring teacher effectiveness and diversity than standardized licensure exams? And, how might a performance-based credentialing approach be designed to maximize benefits if current licensure exams are indeed problematic?

Do students benefit from having a same-race teacher?

A growing body of research demonstrates that students benefit from teachers who share their racial/ethnic identity. In his seminal study of test score data from Tennessee's Project STAR class-size experiment, Thomas Dee found consistent evidence of the connection between same-race teachers and student achievement (2004). Project STAR used a 4-year experimental design comprised of 79 schools and approximately 11,600 students across urban, suburban, and rural Tennessee schools. Teachers and students in participating schools were randomly assigned to either a small class size of 15, a regular class size of 22, or a regular class size of 22 with a teacher's aide. Students were randomly assigned in kindergarten to one of the three types with the intention that each student would remain in her or his class type through third grade (Dee, 2004, p. 198).

The overall results from Dee's study indicated that assignment to a racially congruent teacher increased math and reading achievement by 2 to 4 percentile points among Black males, Black females, White males, and White females as compared to students assigned a racially incongruent teacher (2004, p. 196). More specifically, samerace matching was associated with a 3 to 6 percentile-point increase in reading scores for White males, Black males, and Black females. In math, assignment to a racially congruent

teacher was associated with a statistically significant increase of 3 to 5 percentile points across all subgroups (2004, p. 202).

Employing a similar randomization feature used for over half of the nearly 3,000 teachers sampled within the Bill and Melinda Gates Foundation's Measures of Effective Teaching project, Anna Egalite and Brian Kisida (2018) found there are also important benefits for students' academic perceptions and attitudes (APA) when those students are assigned to a demographically congruent teacher. The authors used student data from Tripod surveys administered in grades 4-8 to measure student reports of personal effort, happiness in class, feeling cared for and motivated by their teacher, the quality of student-teacher communication, and college aspirations (Egalite & Kisida, 2018, p. 60).

The study's results indicate that some of the largest effects were demonstrated when White female, Black male, and Black female students were assigned to demographically congruent teachers, as compared with their non-matched peers. The findings also varied across grade levels in instructive ways. Elementary students matched with a same race and gender teacher were more likely to report that they understood the content and teacher's explanations. Middle school students experiencing the same match were more likely to report college aspirations. While causal certainty was limited in the randomized sample due to substantial noncompliance with classroom assignments (27-66% across participating districts), the direction and magnitude of effects remained consistent when the authors used a classroom fixed effects strategy to analyze the full MET sample—thus providing assurance that results were not biased by nonrandom student assignment to teachers (Egalite & Kisida, 2018, pp. 74–75).

While empirical evidence is often limited to the relationships between Black and White students with Black and White teachers, recent studies indicate that ethnic matching with Latino¹ teachers is associated with a greater likelihood of Latino student representation in elementary gifted and college STEM classes. Using Schools and Staffing Survey (SASS) findings and survey data collected by the Office of Civil Rights (OCR) across 2,170 schools, researchers from Vanderbilt University studied the connection between students of color in gifted programs and access to racially/ethnically diverse teachers. Within the study, White students were nearly twice as likely to receive gifted services as were Latino students (Grissom et al., 2017, p. 405). However, representation within gifted classrooms shifted significantly in the presence of Latino teachers: "the coefficient on percent of teachers who are Hispanic ($\beta = 0.3$, p<.01) means that a 10% increase in Hispanic teachers is associated with a 3.1% increase in Hispanic gifted students" (Grissom et al., 2017, pp. 408–409). Even as the authors did not find the presence of racially/ethnically diverse teachers either decreased or increased access to gifted classrooms for White students, they did note that a "critical mass" of 20-30% Latino staff may be required to increase Latino students' access to gifted services (Grissom et al., 2017, p. 416). Additionally, early findings from a Center for Analysis of Longitudinal Data in Education Research (CALDER) study using the Florida Department of Education's K-20 Education Data Warehouse suggest that Latino students are more likely to take at least one STEM course as college freshman if they were exposed to Latino secondary math and science teachers (Sass, 2015, p. 12).

¹ The terms Latino and Hispanic are used interchangeably as are Black and African American as cited in the original text.

While the education sector has yet to determine why racial congruence between teachers and students matters, a 2015 report by the Center for Education Data & Research found three common theories across existing literature. The first is that students of color benefit from seeing adult role models whose position of authority then increases the value placed on academic success. The second is that teachers of color have higher expectations for students of color and are thus less likely to advance "a self-fulfilling prophecy" in which negative stereotypes perpetuate poor performance. Lastly, differing interpretations of behavior and the potential for negative stereotypes across teachers of varying races/ethnicities are thought to generate increased disciplinary action against students of color and Black students in particular (Goldhaber et al., 2015, p. 2).

Do licensure exam requirements limit the supply of teachers of color?

A substantial body of evidence confirms that students of color who have racially or ethnically congruent teachers enjoy such benefits as achievement gains, increased college aspirations, access to gifted services, and participation in college STEM coursework. But do licensure exams serve as a significant barrier for aspiring educators of color? Historical context as well as current trends begin to answer the question by exploring the roots and implications of a prevalent practice within the education establishment.

The use of exams to certify teachers dates to the early twentieth century (Cubberley, as cited in Agostino & Powers, 2009, p. 147), yet notable upticks in teacher testing coincide with two landmark events in American public education history: *Brown versus Board of Education* and the publication of *A Nation at Risk* (Baker, 1995; D'Agostino & Powers, 2009). Shortly after the announcement of the *Brown* decision in 1954, the head of the National Teacher Exam, Arthur Benson, made one goal of the exam perfectly clear when

he "pointed out to Southern school officials that black and white teachers tended to score differently on the teacher examinations. He suggested that with the use of the exams 'the South [could] face its future with confidence'" (Wilson, 1984, p. 306 as cited in Haney, Madaus, & Kreitzer, 1987, p. 181). Subsequent research found the use of teacher certification exams increased by 65% in the year following the *Brown* decision as White elites sought legally defensible means of discriminating against Black teachers. And in fact, "by 1959, teachers and principals in almost every major Southern city— including Baltimore, Washington, D.C., Richmond, Raleigh, Charleston, Atlanta, Miami, Montgomery, New Orleans, Nashville, St. Louis, Tulsa, and Dallas—were encouraged or required to take the [National Teacher Examination]" (Baker, 1995, p. 64).

Less than thirty years after *Brown*, the Reagan administration published *A Nation at Risk* (1983). The report begins by famously asserting that "the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" (National Commission on Excellence in Education, 1983). From this opening image of a destructive flood to concluding visions of a future forfeited, the report paints a bleak picture of declining educational standards at the hands of underprepared or unskilled teachers. A subsequent review by the Department of Energy, the Sandia Report (C. C. Carson et al., 1993), found that claims of declining SAT scores made by *A Nation at Risk* willfully masked consistent gains for historically marginalized subgroups such as people of color, women, and low-income students (Kamenetz, 2018). Nevertheless, the loss of confidence in preservice program rigor caused by *A Nation at Risk* became so widespread that "states relied on paper-pencil tests to ensure public protection from poor practice" (D'Agostino & Powers, 2009, p. 149). Standardized teacher licensure

exams were later required by federal law through the Higher Education Act amendments of 1998 and the No Child Left Behind (NCLB) Act of 2001.

Since NCLB required new teachers to pass both subject matter and reading, writing, mathematics skill tests, most states quickly adopted the successor to the National Teacher Exam, the Praxis. In response to ongoing questions about the Praxis' predictive validity and disproportionate screening rates for educators of color, the National Education Association and the Educational Testing Service (ETS) conducted a study in 2011. It looked into the initial teacher licensing process and the challenges marginalized candidates face with teacher licensure assessments. Ultimately, the study captured data from 300,000 test takers. The following results chart the pass rates of White, African-American, Hispanic, Asian, and Native American test takers across three subsections of the Praxis I test: Mathematics, Reading, and Writing.

Daga/Ethnicity	Praxis I Tests			
Race/Ethnicity	Mathematics	Reading	Writing	
Gap between African-American and White test takers	-41.4%	-40.8%	-35.3%	
Gap between Hispanic and White test takers	-21.0%	-16.8%	-16.5%	
Gap between Asian and White test takers	-7.0%	-24.3%	-16.3%	
Gap between Native-American and White test takers	-18.7%	-16.4%	-22.2%	

Figure 2. Differences in pass rates on Praxis I tests by race and ethnicity. From *Toward Increasing Teacher Diversity*, by L. Tyler, 2011, https://www.ets.org/Media/Research/pdf/ETS-NEA-2011-01.pdf

In accordance with NCLB, states required candidates to pass all three sections, so the table effectively demonstrates that White candidates were over 40% more likely to become licensed teachers than their African American counterparts. By the same token,

they were over 20% more likely to become licensed teachers than their Hispanic, Asian, and Native-American counterparts. The original intent and practical implications of standardized licensure exams consistently demonstrate the adverse screening impact on prospective teachers of color.

Do standardized licensure exam requirements ensure teacher quality?

Unfortunately not. Research demonstrates that standardized licensure exams serve as a weak signal of teacher effectiveness (D'Agostino & Powers, 2009; Goldhaber et al., 2015, 2017; Goldhaber & Hansen, 2010). In 2009, Jerome D'Agostino and Sonya Powers conducted a meta-analysis examining the degree to which teacher tests and preservice GPAs are predictive of teacher performance. They found "that no teacher test type led to significantly greater or lesser average weighted effects [on principal/supervisor evaluations, student test scores, student evaluations, and other sources of performance data] . . . however, that GPAs taken together yielded a .11 greater effect than all teacher tests combined, which was statistically significant, p < .01" (p. 161).

Dan Goldhaber and Michael Hansen (2010) subsequently examined changes in students' pre- and post-test results across licensure cut scores and teacher demographics using licensure testing and student achievement data from North Carolina. Employing statewide data spanning 11 years, the sample was limited to self-contained classrooms in grades 4 through 6, each of which featured valid math and/or reading pre- and post-test scores, a classroom size of 3-28 students, and a teacher with valid Praxis II scores. These restricting criteria generated a data set of 4,051 teachers, 9,760 classrooms, 174,828 students, and 193,725 student-teacher observations. Regarding Praxis exams' ability to predict teacher performance, findings showed them to be unbiased across demographic

groups yet mixed as a screener for teacher effectiveness. Estimates comparing classrooms with teachers who passed the Praxis exams and those who did not (but taught under grandfathering or temporary licenses) showed that those who passed were modestly more effective in math. There were no differences between teachers who did and did not pass when using student achievement in reading as the outcome (Goldhaber & Hansen, 2010).

When they evaluated the Praxis exams' ability to signal teacher quality as measured by student outcomes, the authors found that sections of the test function differently across demographic groups. The performance of White candidates on multiple-choice sections of the test was significantly correlated with teacher effectiveness, whereas Black candidates' performance on essay-based sections of the test was significantly correlated with teacher effectiveness. When they gauge the extent to which teacher diversity influences student achievement in light of licensure exam requirements, Goldhaber and Hansen conclude: "Same-race matching effects dwarf most any information conveyed through the licensure test signal. We wish to point out that when teaching Black students, Black teachers in the lower end of the teacher test distribution are estimated to have impacts that are approximately the same as White teachers at the upper end of the distribution" (2010, p. 238). One extrapolation of this finding is that Black teachers with higher, but still not passing, Praxis scores could be more effective with Black students than White teachers with lower, yet passing, scores.

Are performance-based assessments a better method for ensuring teacher effectiveness and diversity than standardized licensure exams?

Given ongoing validity concerns with standardized tests like the Praxis, 18 states have moved to incorporate open-response exams—termed performance-based

assessments—like the Teacher Performance Assessment, or edTPA, as a part of their effort to better evaluate teacher preparation. A recent CALDER study examining the predictive validity of the edTPA found similarly mixed results, as passing the exam is significantly predictive of teacher effectiveness in reading but not in mathematics. It is interesting to note that the edTPA appears to complement previously observed validity gaps in the Praxis; unfortunately, the assessment's adverse screening impact on educators of color remains consistent. The same study found that Hispanic candidates were more than three times likely to fail the edTPA than White candidates (Goldhaber et al., 2017). Meanwhile, data provided by the New York State Department of Education revealed that Black candidates were nearly twice as likely to fail the edTPA as were White candidates from 2013 to 2016 (Barnum, n.d.). Finally, as a purely practical matter, the edTPA's cost at \$300 per assessment is prohibitive to education majors, teacher assistants, and limited service (substitute, emergency-licensed, etc.) teachers in Mississippi, where monthly take-home pay averages between \$0 for an education major and \$1,200 for a long-term substitute.

How might a politically viable performance-based licensure alternative be designed if current exams are indeed problematic?

While licensure exams with poor predictive validity continue to screen out large numbers of potential teachers of color, performance-based licensure represents a viable policy alternative to increase both teacher diversity and effectiveness. Still, performance-based licensure represents only one approach in a seemingly endless array of alternatives for improving the educator workforce. The central challenge is elevating the importance of performance-based licensure on the policy agenda.

In his seminal work on agenda setting and policy formation, Kingdon describes public policy to be "a set of processes, including at least (1) the setting of the agenda, (2) the specification of alternatives from which a choice is to be made, (3) an authoritative choice among those specified alternatives, as in a legislative vote . . . and (4) the implementation of the decision" (2011, p. 3). He goes on to define an agenda as "the list of subjects or problems to which governmental officials, and people outside of government closely associated with those officials, are paying some serious attention at any given time" (2011, p. 3). The MDE is a bureaucracy designed to both administer policy outlined by the legislature and provide support for student learning as outlined by the State Superintendent, an appointed government official. Kingdon's work therefore provides a useful frame for understanding the first two stages in the policy process, agenda setting and alternative specification, which are more likely than the other two stages to unfold during my residency.

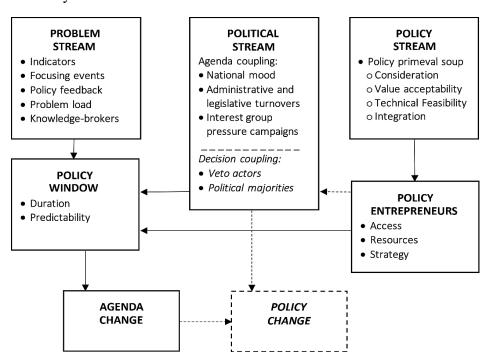


Figure 3. John Kingdon's multiple streams framework. From *Multiple Streams, Multiple Couplings*, by D. Sanjurjo, 2019.

Kingdon's multiple streams framework holds that agenda setting occurs when problems, policies, and politics align during a "policy window" (2011, p. 88). As a result, one important part of the policy process is demonstrating that the lack of teacher diversity is a problem to which performance-based licensure can be attached. Kingdon also argues that advocates, or policy entrepreneurs, for a particular proposal must "soften up" both policy communities such as the MDE and large, influential public organizations such as school districts by building acceptance through awareness of the issue. The intersection of problematic licensure exams, performance-based alternatives, and broad political buy-in is critical during "policy windows." These windows are often created by spillover effects from the passage of landmark legislation such as the Every Student Succeeds Act in 2015 or a change of administration such as Mississippi's 2019 gubernatorial election (Kingdon, 2011, p. 195).

While useful as a tool in understanding the policy process, Kingdon's framework is largely descriptive, rather than prescriptive, in nature. It is also value neutral in that it measures success largely by issue formation and subsequent policy adoption regardless of impact. America's history of educational inequity on the basis of race and ethnicity renders a value-neutral policy framework insufficient, however instructive it may be. This is particularly the case in a place like Mississippi, whose racial violence remains emblematic of our country's long history of racial subjugation. Therefore, Christine Hill, Michelle Molitor, and Christine Ortiz's charge to "maintain a fully developed relationship with our own racial identity, an intimate knowledge of the history of oppression and current manifestations of inequality, and the personal comfort and initiative to see, call out, and

actively fight hegemonic systems" (2016, p. 2) through equityxdesign beliefs and principles is critical to PBL program and policy development.

By merging the consciousness of racial equity work with the methodology of design thinking, Hill, Molitor, and Ortiz argue that the education ecosystem must be fundamentally redesigned to achieve equity (Hill et al., 2016, p. 1). Their framework is built on three beliefs: (1) the historical context surrounding a particular design matters; (2) radical inclusion in design requires bringing diverse stakeholders together; and (3) an inclusive design process feeds equitable design (2016, pp. 6–7).

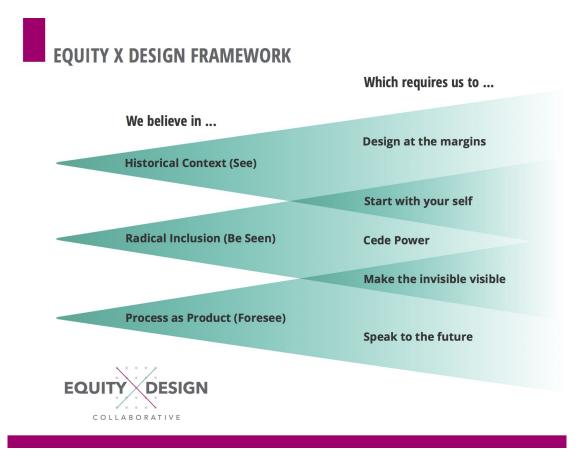


Figure 4. The Framework. From *equityxdesign: A Practice for Transformation*, by C. Hill, M. Molitor, & C. Ortiz, 2016.

These three beliefs then lead to five design principles which require: positioning the marginalized as designers, engaging in ongoing identity development, sharing power,

creating reflective space, and speaking equity into existence. The process places codesigners in conversation with both their own and others' identities in order to foster equitable systems through inclusive innovation. Ultimately, Kingdon's multiple streams framework helps to describe agenda setting at the MDE even as it necessitates a more prescriptive guide for the PBL pilot like equityxdesign.

Theory of Action

To develop a theory of action, I began with a review of the benefits of teacher racial/ethnic congruence as outlined previously. Then I factored in the clear evidence that current licensure exams reduce teacher diversity while doing a poor job of guaranteeing quality. This suggests the value of using the policy window created by changes in federal legislation and state administration to present performance-based alternatives as a solution to the problem of teacher diversity shortages as imposed by traditional licensure exams. The resultant theory of action represents not just my own narrow strategic project but the broader implications of performance-based licensure if Mississippi's pilot proves successful:

If I...

- Partner with students, parents, prospective PBL candidates, teachers,
 principals, superintendents, and OTL staff as co-creators of PBL
- Develop a series of formal process evaluations within the PBL pilot to assist the MDE in learning about educator diversity, growth, performance, and retention

Garner support from large public organizations like the MDE for PBL as a
valuable opportunity to increase teacher diversity and effectiveness by
weaving the model into existing state education agency priorities

Then...

- The OTL will employ more equitable practices in human capital innovation
- The MDE will consider evidence on the extent to which PBL increases educator diversity and effectiveness in weighing future pilot expansion
- The PBL pilot will succeed in assisting individuals who demonstrate effectiveness as educators to become licensed teachers

So that...

- Districts increase student learning by increasing the quantity and quality of certified teachers who share students' racial/ethnic identities
- Every school has effective teachers and leaders

The Strategic Project

Description

In a press release announcing the Human Capital Highways grant from the W. K. Kellogg Foundation, Dr. Carey Wright, Mississippi's State Superintendent of Education, outlined the purpose of PBL as follows: "This project is part of a statewide strategy to diversify the teacher pipeline to ensure all students have access to teachers who are well-prepared, appropriately licensed and serve as role models for success" (The Mississippi Department of Education, 2018). According to Dr. Murphy, "the performance-based teacher licensure pilot study will use information gathered over a three-year period, beginning in school year 2019-2020, to inform policy recommendations to the Mississippi

State Board of Education [SBE] regarding criteria for establishing an alternative route, performance-based teacher licensure pathway" (personal communication, December 6, 2018). PBL candidates are issued a special three-year pilot license for the duration of the study. Dr. Murphy envisioned candidates could be eligible for standard teacher licensure pending policy recommendations to the SBE based on student achievement and PBL candidate evaluation data collected during the study. He also indicated a willingness to recommend standard licensure—a renewable license similar to that which graduates of traditional educator preparation programs receive—to the SBE based on emergent trends in educator retention, diversity, and/or learning (C. Murphy, personal communication, December 6, 2018.)

In my role as the Bureau Director of Innovative Programs for the MDE, I led the planning, implementation, evaluation, improvement, and communications for the PBL pilot. I was empowered by Dr. Murphy and other senior MDE officials to lead the planning and implementation independently with input from fellow OTL Bureau Directors and district stakeholders. Meanwhile, he asked me to collaborate with the aforementioned groups on the program's evaluation and improvement strategy while working with the MDE's Communications and Government Relations team on any external communications. Within that broader charge, my objectives were as follows:

- Ensure that all PBL stakeholders have a shared understanding of key pilot highlights, growth areas, and emerging trends
- Monitor the program's impact relative to candidate diversity, performance, learning, and retention (as data become available)

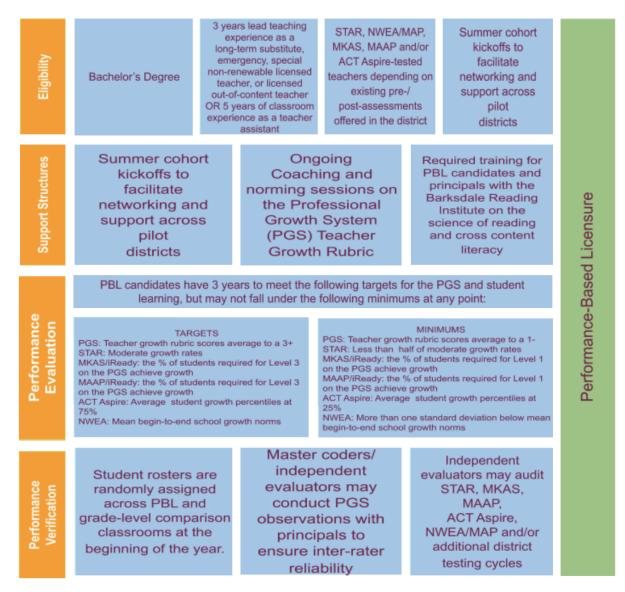
- Build a learning infrastructure to support future innovative human capital pilots and programs
- Lead strategic communications for SEAs, nonprofits, philanthropies, and legislators interested in PBL

The first three objectives were clear when I started with the MDE, while the fourth objective emerged later in response to ongoing information requests from external organizations.

In the spring of 2019, I led a team of OTL staff members in selecting eight districts for the PBL pilot. Districts were selected for the pilot based on the following criteria: EITHER 1) the district or organization participated in a focus group to prototype the PBL model and submitted an approved application outlining its plan for meeting program requirements OR 2) the district is part of the Achievement School District, in which the Mississippi State Board of Education takes the place of local school boards in persistently under-performing school districts. One key distinction between the two groups is that Achievement School Districts were not required to submit an approved application to meet PBL program requirements, although the requirements were discussed in advance of pilot implementation. Of the eight local education agencies (LEAs), all serve majority Black student bodies; seven are in the Delta. Current academic accountability ratings of the eight range from "C" to "F". Of the 73 candidates involved in the pilot, all identify as Black or African American, 96 percent identify as women, and 46 percent hold a master's degree or higher. The 73 candidates average 7 years of classroom experience in their current districts.

Designing and Redesigning

The following graphic reflects three major decisions within PBL's development. It also depicts the final model as implemented in the pilot:



I facilitated the first major shift in PBL's design during district focus groups to rapid prototype the model in the summer of 2018. Heeding equityxdesign's charge to design at the margins (Hill et al., 2016, p. 7), I requested that prospective PBL teachers, teachers, parents, and students attend focus groups in any district that wanted to apply for

the program. I then tested one major risky assumption the MDE might make by developing an "earned autonomy" PBL model. It enabled districts to gain increased flexibility on the eligibility, support structure, performance evaluation, and verification requirements based on their A-F accountability rating. Parents, prospective PBL candidates, teachers, and administrators in both "A" and "F" districts resoundingly rejected this model for two reasons: 1) cut scores within the accountability system shift over time, and 2) PBL recruitment within low-performing districts might suffer with additional candidate eligibility, program evaluation, and performance verification requirements. Focus group feedback highlighted the stigmatizing impact of implementing tighter controls to "fix" low-performing districts based on a seemingly objective criterion. Therefore, I designed and prototyped a model divorced from the MDE's A-F accountability ratings in subsequent focus groups.

A second adjustment occurred during my transition to a full-time role with the MDE. The initial intent of the model was for districts to choose an optional support structure such as culturally responsive pedagogy, instructional rounds, or new teacher mentoring according to local needs. However, districts requested that professional development dates be set in advance of my start date, so it seemed prudent for an OTL Bureau Director to move ahead in scheduling professional development with the Barksdale Reading Institute (BRI) given the organization's alignment with the MDE's statewide literacy focus. Thinking that districts "needed some skin in the game", this Bureau Director required BRI development for all PBL candidates and their principals.

Like the shift from an "earned autonomy" model, the final PBL shift reflects userinformed design. iReady—a diagnostic test of student performance relative to state standards—was not originally approved as an assessment within the PBL pilot, yet several district PBL coordinators asked for its inclusion as it was already used as a paced interim assessment in their districts. After Dr. Murphy encouraged me to reach out to current i-Ready users, districts reported that the assessment's results closely mirrored performance levels on state tests while offering instructional resources that they perceived to be valuable. The assessment also had the potential to calculate more accurate current-year growth rates (versus using the previous year's state test scores), so we approved i-Ready as a PBL benchmark and developed targets that aligned with existing growth goals for state tests. Three out of eight districts ultimately chose to use i-Ready as an interim assessment for PBL candidates while all PBL candidates also were required to—and did indeed—teach in state-tested content areas.

Listening and Learning

My project required that I conduct several rounds of field observations and participant surveys across the eight participating districts to gauge the program's implementation. When I started with the MDE, I knew I wanted to understand the program's impact at several key points including summer orientation, fall professional development, winter assessment cycles, and spring Professional Growth System evaluations. Habit, efficiency, and power dynamics pushed me to consider quickly checking in on program progress with PBL superintendents and coordinators. Instead, I used a modified meta-empathy map (Hill et al., 2016) with interviews through August to first build a better understanding of PBL candidates' experiences. I decided to use a modified meta-empathy map because of the pilot's early success with user-driven design and redesign during district focus groups to create the PBL model. Hill, Molitor, and Ortiz

call for questions like "What are the important customs and practices at play in my user's experience?" and "What are the ways customs and practices work together to include or exclude your user?" in their approach to meta-empathy mapping (2016, p. 9). I decided to break Hill, Molitor, and Ortiz's questions into more finite events such as "How did you first learn about the PBL pilot?" and "Why did you decide to join?" (Appendix C) in order to have a deeper understanding of candidate journeys to and experiences with PBL.

As I listened to understand, I heard countless examples of candidates' isolation and stress in light of licensure exams. Many candidates described how alone they felt, and how they seemed to shut down during multiple Praxis attempts. Several questioned teaching as their calling; one remarked, "It's almost like you lose confidence in your ability to do what you know you can do" (personal communication, August 29, 2019). Another candidate became physically ill at the sight of our professional development building—which doubled as a Praxis testing center, unbeknownst to me. During interviews, many candidates frequently invoked their faith and a feeling of responsibility. Even as individuals consistently referred to the program as a spiritual blessing, the cohort shared a sense of responsibility for the program's success as evidenced by the following: "I hope that we as the first candidates can share our input and make [PBL] better than before" (personal communication, August 30, 2019).

After each round of interviews, surveys, and new information, I led the OTL leadership team and program stakeholders in deliberate inquiry through plan-do-study-act (PDSA) cycles. The point of the exercise was to elevate key learnings, intermediate outcomes, innovations, and outliers. I started by sharing trends from PBL candidate and administrator interviews with the OTL leadership team that might then guide our PBL

candidate and principal surveys in September. Armed with feedback from the leadership team and fellow Bureau Directors, I developed PBL candidate and principal survey questions to gauge diversity, experience, learning, retention, economic mobility (later termed "workforce development" to align with emerging state board priorities), and net promoter scores (a measure of an individual's likeliness to recommend a particular program) across the cohort. During our October leadership team meeting, I then shared our plan to provide aligned professional development across candidates and their principals along with an infographic illustrating cohort trends. The net-promoter score for PBL candidates was 70 percentage points higher than the score for principals, prompting an OTL Bureau Director to observe that the value-add might not be clear for PBL principals; meanwhile, the infographic led to a request to hear more stories from the PBL pilot.

Strategic Communications

Based on this conversation and several external information requests, I started building and testing a strategic communications plan for state education agencies, nonprofit organizations, and funders toward the end of October and into November. The plan evolved in response to conversations with organizations like the West Virginia Department of Education and The New Teacher Project but retained the following core messages across all audiences:

- (1) PBL meets federal requirements because the Every Student Succeeds Act (ESSA) creates flexibility to adjust certification and licensure requirements by eliminating No Child Left Behind's licensure exam requirements;
- (2) The OTL designed PBL with parents, teachers, and administrators to find a model that fit Mississippi;

(3) PBL is an unprecedented approach to increasing both teacher diversity and effectiveness, so the MDE piloted the program to better understand its impact before considering policy revisions.

With ongoing support and guidance from Dr. Murphy, I also worked with our communications team to feature PBL in the Human Capital Highways grant update video for the W. K. Kellogg Foundation (WKKF), and I presented the program during our December State Board of Education spotlight. I then incorporated elements of this presentation and trends collected from cohort surveys for a grant update presentation with regional and national chapter leaders from the WKKF at the end of January. Cohort trends in years of classroom experience and anticipated monthly salaries as a result of the pilot, which I labeled workforce development indicators, were of particular interest to WKKF chapter leaders. In light of monthly pay increases and a \$1,100 average cost per candidate, one national chapter leader remarked that PBL might have a higher benefit-to-cost ratio than the Mississippi Teacher Residency—an educator preparation program funded by the same \$4.1 million grant that financed PBL. The chapter leader also suggested that workforce development initiatives to increase racial/ethnic diversity in nursing might yield insights, particularly those that support internal advancement through career lattices that emphasize cross-functional skill development.

Beyond residency, the goal of this project was to develop a response to the "Does it work?" question that can inform policy recommendations to the Licensure Commission, the State Board of Education, and future legislative sessions. This is particularly salient since the PBL pilot may offer evaluation implications for several programs that are designed to diversify Mississippi's teacher pipeline. These programs include but are not

limited to: the Mississippi Teacher Residency, the Educators of Color Convening, and the Grow-Your-Own Initiative.

Evidence to Date

Initial evidence from the PBL pilot is encouraging. PBL may be able to strengthen the teacher workforce even as it signals a shift in the MDE's approach to human capital innovation. Since PBL teachers started in classrooms just seven months ago, and since the model was designed to fit Mississippi's unique context, any definitive conclusions about the program's effectiveness or potential in other states would be premature. Yet PBL's very existence combined with early insights from the program and commitments from senior MDE leadership offer a developing case that the program will ultimately help create more equitable pathways into teaching.

The current PBL model is the result of nine district focus groups that I facilitated between the summer of 2018 and spring of 2019. Focus groups comprised parents, prospective PBL candidates, teachers, principals, superintendents, and a representative from the OTL. As each focus group tested the prototype, we recorded all feedback and reflected on themes that would shape the next version (see Appendix A for examples). Using this process, I generated six distinct prototypes based on end-user feedback before our final focus group indicated that the model was ready to pilot. To gauge stakeholder satisfaction with the co-created PBL model, I asked candidates and principals during fall and winter survey administrations "How likely are you to recommend the PBL pilot to a family member, friend, or colleague?". PBL candidate responses to fall and winter surveys generated Net Promoter Scores (NPS) of 91 and 92 percent, respectively. PBL principal responses yielded lower yet increasing scores at 23 and 46 percent. 2019 NPS benchmarks

consider anything over 0 to be good, over 30 to be great, and over 70 as excellent (*What is a good net promoter score?*, 2019).

Casting a wider net, I used the fall and winter PBL surveys along with metaempathy maps (see Appendices B and C for examples) to assist the OTL in gauging educator diversity, growth, performance, and retention so that it could consider evidence in weighing future pilot expansion. The PBL candidate survey had a 96 percent response rate while the PBL principal response rate was 93 percent, so initial trends are representative of the cohort even though they rely on self-reported data.

Strengthening the Teacher Workforce

I designed survey questions specific to required professional development related to the science of reading for PBL candidates and principals. Fall and winter survey responses revealed the following trends in educator growth which align with the MDE's priority of improving student literacy outcomes:

Survey Question (7-Point Likert Scale Responses)	Change in Strongly Agree/Agree Candidate Responses	Change in Strongly Agree/Agree Principal Responses
I have a basic understanding of the simple view of reading.	+12%	+7%
I recognize the difference between language comprehension strategies and language comprehension products	+22%	+12%
I believe that all teachers are literacy teachers.	+16%	-8%
I recognize the indicators of decoding and/or language comprehension deficits.	+24%	N/A

Teacher diversity and retention data offer some of the most compelling evidence for PBL. With a view to the statewide teacher workforce, PBL has the potential to increase racial/ethnic and socio-economic diversity since 100% of candidates identify as Black or African American and since 95% percent identify as experienced with low-income communities. Even though PBL principals had a lower NPS and growth rates than candidates, 38 out of 41 principals indicated that they would hire PBL teachers in the future and 96% strongly agreed or agreed that PBL is a valuable pathway for educators to obtain licensure. Beyond averaging seven years of in-district experience, members of the first PBL cohort averaged 11 years as a teacher assistant or provisionally-licensed teacher and 4 years as a full-time interventionist or other instructional support role. 97 percent of the first cohort felt that teaching was their long-term profession or calling, and 85 percent saw themselves teaching in their current district for the rest of their career. As data became available, I shared the trends with Dr. Murphy, OTL Bureau Directors, and district stakeholders via fall and winter PBL reports.

The MDE will not have data on value-added measures and summative observations of teacher practice until state assessment scores are compiled this summer. Anticipating those summative observations of teacher practice, I facilitated Professional Growth System calibration sessions for all eight pilot districts and 43 principals so that the OTL could have reasonable confidence in the consistency of principal rubric training and scoring. The Professional Growth System is Mississippi's educator evaluation system, and it defines Level 3 as the expectation for all effective teachers (The Mississippi Department of Education, 2019a, p. 12). To achieve a Level 3, teacher rubric ratings must average to 3.0 or above across nine instructional standards spanning lesson design, student understanding,

classroom environment, and professional responsibilities. Formative observations indicate promising trends in PBL candidate performance as 34 percent of the cohort met the state's definition of effectiveness by achieving a Level 3 out of 4 on the Professional Growth System's teacher rubric by November. The OTL's goal was to have one third of candidates reach a Level 3 during summative observations by May since the Professional Growth System is a priority for Dr. Wright and MDE senior leadership. Additionally, 20 percent of PBL teachers have been selected as their school's teacher of the year.

Equity in Innovation

More broadly, qualitative evidence suggests that the PBL pilot can serve as an early example of the OTL's effort to employ more equitable practices in human capital innovation. One of the first scholars to differentiate between educational equity and educational equality, Walter Secada defines equity as meeting the needs of individuals (as cited in Tate, 1997, p. 235). And in fact, the OTL is striving to shift the talent paradigm from that of an educator pipeline to a human capital highway with multiple pathways for professional entry as determined by individual need. Dr. Murphy offered the rationale for programs like the PBL and Mississippi Teacher Residency pilots in the August 16, 2018 State Board of Education meeting when he observed:

The nonreflective approach has resulted in a leaky pipeline wherein we are losing potential educators between high school and college, throughout our educator preparation programs, in navigating licensure requirements, and in long-term retention. This is particularly the case for educators of color and in high-poverty, high-minority school communities. As our educator workforce becomes predominantly Millennials and Generation Zers, we must move away from forcing

individuals down a narrow pipeline and provide innovative on-ramps and off-ramps to provide sustainability within the profession. (The Mississippi Department of Education, 2018)

Subsequently, in the December 19, 2019 State Board of Education video spotlighting the impact of performance-based licensure and the Mississippi Teacher Residency, one district administrator remarked:

The programs show a commitment to equity in our state, particularly here in the Mississippi Delta where the teacher shortage is really high. Oftentimes we're looked at as an area that doesn't have what it needs to be successful, and so these programs show a strong commitment to giving kids teachers . . . That's what the teacher residency and the performance-based licensure programs are doing . . . they just show that if you give people what they need, they'll get the job done. (The Mississippi Department of Education, 2019b)

In response to the video, Dr. Wright reiterated her support for both programs: "We're very excited about this. This is cutting edge, and we're excited and very proud of the work that the Office of Teaching and Leading is doing" (The Mississippi Department of Education, 2019b).

As I collected both quantitative and qualitative data, I used Plan-Do-Study-Act cycles when I provided program updates to Dr. Murphy, OTL Bureau Directors, district stakeholders, professional development providers, and funders. In so doing, I hoped to involve stakeholders in refining the program even as we learned from it. I also created informal spaces for PBL candidates and principals to share feedback on the program by attending all of the required literacy development sessions with the Barksdale Reading

Institute (BRI). This evidence base supported Dr. Murphy's decision to expand the PBL pilot into a second cohort of 40 within its eight current districts. If trends in candidate diversity continue from the first to second PBL cohort, the program will be Mississippi's largest pathway for effective educators of color striving to become licensed teachers.

Analysis

The emerging success of the PBL pilot results from a combination of factors in the external environment, organizational culture, program design, and my leadership. In the external environment, countable gaps in teacher diversity combined with feasible performance-based alternatives. At the same time, Dr. Murphy and the OTL's influence authorized the PBL pilot from day one. The program's user-informed design offered a more equitable and sustainable model that I was able to implement, evaluate, and communicate as the result of my ongoing leadership development.

Coupling Problems with Feasible Solutions

Broad shifts in the external environment coupled problem indicators with feasible solutions to open the space for a program like PBL. The national teacher shortage and the need for racially/ethnically diverse educators is well established and growing. The shortage could reach 200,000 by 2025 according to research by the Economic Policy Institute (García & Weiss, 2019). And at the same time, educators of color comprise only 20% of the teacher workforce while students of color now account for 50% of public-school enrollment (Carver-Thomas, 2018). While an adequate supply of teachers, let alone a surplus may suggest that a school system is healthy, a staffing shortfall indicates a problem for policymakers. Kingdon observes that objective indicators of problems frequently guide the policy process: "The countable problem sometimes acquires a power of its own that is

unmatched by problems that are less countable" (2011, p. 93). Sadly, both the national teacher shortage and the shortage of teachers of color qualify as countable problems. Yet even countable problems require proposed solutions to gain a foothold on the policy agenda.

For a proposal to survive in the policy stream, it must achieve technical feasibility, value acceptability, and tolerable cost (Kingdon, 2011). The technical feasibility test for any proposal is the question "Can it actually be administered?" (Kingdon, 2011, p. 132). Before implementation of the Every Student Succeeds Act (ESSA), the answer for PBL would have been "no." Under the "highly qualified teacher" stipulations of No Child Left Behind (NCLB), state education agencies (SEAs) often met the demonstrated content knowledge component by requiring subject matter and reading, writing, mathematics skill tests such as the Praxis for certification. However, ESSA removed NCLB's "highly qualified" provisions, instead requiring SEAs to ensure that all teachers meet applicable state licensure requirements. Nearly a decade before ESSA's passage in 2015, Mississippi statute was amended to include provisions for a nontraditional program called the Teach Mississippi Institute (TMI). TMI program requirements constitute an early effort to broaden local control over the educator pipeline. Yet in an apparent nod to the MDE, program stipulations contain the caveat that "Such implementation of the TMI program may not be deemed to prohibit the State Board of Education from developing and implementing additional alternative route teacher licensure programs, as deemed appropriate by the board" (Mississippi code title 37. Education § 37-3-2, n.d.). As a boardapproved, alternative-route, teacher-licensure pilot, PBL met state certification requirements as outlined in ESSA and emerged as a technically feasible program. But beyond mere feasibility, the program's user-informed design and its focus on impact are widely deemed acceptable in a state that historically values local control and accountability. PBL's focus on increasing teacher diversity also achieved value acceptability and led to a grant with the W. K. Kellogg Foundation as it aligned with the foundation's commitment to racial equity (W.K. Kellogg Foundation, n.d.-b). While the estimated cost per candidate of \$1,100 is currently funded by the Kellogg grant, it remains the lowest cost option of all licensure programs in the state. As a result, PBL should be well-positioned to address the problem of teacher shortages if student learning gains continue to indicate the level of effectiveness that candidates demonstrated before program selection.

The Importance of Influence

Key actors and units within the MDE's unique organizational culture are also responsible for the advancement of PBL. The MDE operates as a bureaucracy that values process, specialization, and hierarchy, so Dr. Murphy and Dr. Wright's support remains critical to this effort. As the Executive Director of the Office of Teaching and Leading, Dr. Murphy reports to the Chief Accountability Officer and leads the Commission on Teacher and Administrator Education, Certification and Licensure and Development (or "the Licensure Commission" as it is generally known). As the architect of current licensure guidelines spanning Mississippi and Alabama, Dr. Murphy has expertise that brings him to regularly report to State Superintendent Wright on educator pipeline issues. Dr. Murphy is also well-versed in the policy process and maintains strong relationships with Licensure Commission members to the point that his items invariably move forward to the SBE. Dr. Murphy maintains this commitment to process even as he consistently champions

innovative strategies to improve and diversify Mississippi's educator workforce. One tangible result has been the Licensure Commission's unanimous approval of the Special-Nonrenewable Performance-Based License (PBL) for Prospective Teachers on May 5, 2019. While her actions have been more symbolic in nature, Dr. Wright has also consistently signaled her support for the PBL pilot by featuring the program in a press release, an SBE spotlight video, and her annual report (Appendix D).

Given its talented leadership and direct access to Dr. Wright, and by virtual of its broad oversight of a core MDE's policy lever, the OTL is a very influential unit within the organization. As Jeffery Pfeffer notes in *Managing with Power: Politics and Influence in Organizations*:

Not all subunits are created equal—some are more influential than others. The power of a subunit comes from its ability to act in a unified, consistent fashion, from its proximity to critical issues, and its ability to cope with those issues, and from achieving a position of monopoly by means of its expertise and problem-solving ability. (Pfeffer, 1992)

During the Bureau Director hiring process, Dr. Murphy looks for subject expertise, leadership experience, interpersonal communication skills, and a commitment to equity. As a result, Dr. Murphy and OTL Bureau Directors are frequently tasked with representing the agency at national conferences, state task force meetings, superintendent convenings, and stakeholder engagement sessions. Our team frequently meets before cross-functional meetings and external engagements to align on messaging and practice presentations, particularly as they relate to teacher shortage issues. OTL leadership's proximity to critical teacher shortages and our understanding of complex licensure requirements ensures that

our team is frequently the authorizing body for new programs, policies, initiatives, focus groups, and innovations aimed at expanding and improving Mississippi's educator workforce. In effect, I was authorized to lead the PBL pilot as a Bureau Director on day one by virtue of support coming from the State Superintendent via Dr. Murphy.

User-Informed Design and Iteration

Above all, it was the PBL pilot's user-informed design that maintained the program's commitment to equity while ensuring its funding and implementation. By establishing focus-group participation as a prerequisite for pilot eligibility during the summer of 2018, I ensured that any district participating in the pilot co-created the PBL model. By asking that districts involve parents, prospective PBL candidates, teachers, principals and superintendents, I intentionally convened diverse stakeholders across race, role, gender, and socioeconomic status while making certain that the educators most impacted by the systemic inequities perpetuated by current licensure exam requirements were co-designers in crafting an alternative pathway (Hill et al., 2016, pp. 6–7). This approach was found particularly compelling by the W.K. Kellogg Foundation (WKKF) program officer who first heard my pitch for the program for three reasons: 1) WKKF's Mission Driven Investment portfolio aims to "dismantle systemic barriers to ensure that everyone has equitable access to opportunity" (W.K. Kellogg Foundation, n.d.-a), 2) we could share examples of how district stakeholders were already shaping the model, and 3) empathy interviews with teacher assistants in one of WKKF's priority places, Sunflower County, informed the initial prototype for PBL. The program officer's subsequent guidance and support enabled us to submit a successful grant proposal to WKKF.

Beyond the grant funding, districts and candidates remained invested in PBL's successful implementation because of their involvement in designing and redesigning a continually evolving program. Hill, Molitor, and Ortiz are careful to describe equity as an ongoing practice for transformation which requires language that creates the space for change (2016). Honoring this definition of equity made me stay open to new iterations of the PBL model while investing others within the MDE to do the same. In other words, it was insufficient for us to say that we designed the model based on stakeholder feedback: we also had to commit to redesigning the model based on stakeholder feedback. Even small redesigns demonstrated to districts that we were committed to learning and co-creation within the pilot. On the other hand, overlooking their emerging ideas and concerns could have indicated disingenuousness on our part and reduced program buy-in.

My first test came soon after starting at the MDE when districts asked to add iReady as an approved assessment for measuring student gains in PBL candidate classrooms. I had the authority to simply reference pilot-licensure guidelines and say no. Instead, during a check-in with Dr. Murphy, I reemphasized the pilot's space for ambiguity and learning as an unprecedented approach to licensure, and we moved forward with iReady as an approved assessment. Subsequent programmatic redesigns served as an ongoing commitment to equity that the districts could see even as they shaped the OTL's messaging during meetings with the Licensure Commission, State Board of Education, and funders. As a result, decision makers protected space for the program to evolve, districts not only implemented but also reminded me of program requirements, and most importantly, candidates had an overwhelmingly positive experience with the program as indicated by their NPS. The only outlier group with regard to positive program experience appears to

be principals, who frequently cited their required professional development as the one PBL component they would change. While administrators' experience initially appears to be an outlier, their pushback on required principal development remains consistent with pilot trends: this was the only element of PBL not prototyped during district focus groups.

Power in Persistence

One reason the PBL pilot has been successful is that program launch and management requirements aligned well with my prior experiences. As a principal, I coauthored multi-million-dollar Magnet Schools Assistance Program and Race to the Top grant proposals. That experience proved invaluable in co-authoring the WKKF grant proposal because I knew I needed to incorporate the fund's priorities, establish a reasonable timeline, articulate feasible outcomes, and provide a plan for sustainability in the grant narrative. My time as the Managing Director of Teacher Leadership Development with Teach For America-Mississippi also provided experience in evidence collection and program management. Using Teacher For America's (TFA) fall, winter, and spring corps member surveys as a guide, I designed PBL candidate and administrator surveys to assess growth over time while testing for key indicators of program diversity, development, retention, and satisfaction. And after managing a program with 100+ first- and second-year teachers, leading a pilot with 70+ veteran educators certainly felt approachable. But perhaps most importantly, my years of engaging in and facilitating personal racial identity work through TFA's commitment to diversity, equity, and inclusion made the practice of noticing and discussing systemic inequities a habit I carried into the PBL design process.

Although I was well-versed in school and nonprofit programs, policy seemed both interesting and alien to me. Inadvertently, I approached PBL in a role I have come to

understand as that of a policy entrepreneur. Kingdon coined the term policy entrepreneur and defined it as follows:

These entrepreneurs are not necessarily found in any one location in the policy community. They could be in or out of government, in elected or appointed positions, in interest groups or research organizations. But their defining characteristic, much as in the case of a business entrepreneur, is their willingness to invest their resources—time, energy, reputation, and sometimes money—in the hope of a future return. (2011, p. 122)

He then lists the three qualities of policy entrepreneurs as:

- 1. The person has some claim to a hearing through expertise, an ability to speak for others, or an authoritative decision-making position.
- 2. The person is known for [their] political connections or negotiating skill.
- 3. Probably most important, successful policy entrepreneurs are persistent. Many of these people might have expertise and political skill, but sheer tenacity pays off . . . In terms of our concept of entrepreneurship, persistence implies a willingness to invest large and sometimes remarkable quantities of one's resources. (2011, pp. 180–181)

Ultimately, my persistence in pursuing an alternative licensure pathway based on an educator's demonstrated effectiveness and in convincing others that it met stakeholder needs helps to explain why PBL exists. I joined the Ed.L.D. program believing that the exams currently used to license teachers were both ineffective and disproportionately screened educators of color. I will complete the Ed.L.D. program strengthened in that belief

and having taken action based upon it. Yet I embraced the program as a consistent opportunity to develop a more nuanced rationale and policy proposal by studying, testing, refining, and investing others in exam alternatives along the way.

Together with Mariel Novas, I learned about the research supporting both educator diversity and alternatives to standardized exams used for licensure in the Harvard Graduate School of Education course "Evidence-Based Leadership in Education" with Marty West. We refined possible pathways aimed at reducing barriers for educators of color in both "Sector Change" (Irvin Scott) and "Thinking Strategically about Education Reform" (Liz City and Jal Mehta). Meanwhile, I practiced investing others in alternatives through communications in "Public Narrative" (Marshall Ganz), "School Systems" (David Cohen), "Influencing Policy Change through Strategic Communications" (Andy Burness), and "Race, Equity, and Leadership" (Deborah Jewell-Sherman). Because of that background in theory, I entered residency with some expertise on the topic as well as my years of practice addressing it before various audiences.

I also entered residency with blindspots. Interestingly, these largely emerged with principals. Despite serving as a teacher and nonprofit managing director, the principalship was the role I most identified with during my first two years in the Ed.L.D. program. Yet I think my personal experience with school leadership led me to overlook principal involvement in cohort selection, candidate support, and program communications. Remembering my conflicting priorities, stress, and email overload as principal all too well, I hesitated to "bother" principals with program update emails and site visit requests. I instead relied on district coordinators to follow up on program activities and requirements. During meta-empathy interviews (Appendix C) in August, principals agreed with this

approach to program communications, but I did not think to check back until fall survey feedback and conversations during BRI sessions indicated that they wanted to be more involved in candidate selection and professional development. This information then led me to include principals on subsequent program communications and advocate for their involvement in future candidate selection. Both actions correlated with an increased principal net promoter score between fall and winter survey administrations.

That said, the existence and early success of PBL remains driven by the 70+ Black educators who remained committed to their calling and craft regardless of how many barriers they encountered. They are the teachers who reference the commutative property with pre-kindergarteners. Who send pictures of the centers they overhauled after learning about structured literacy. Who parents text to check if the bus is running late. Who ask for feedback even if you only pass by their classroom. Who absolutely love teaching and reaching students. Who move entire schools. And finally, who inspire leaders to question a system that keeps them out of classrooms.

Implications for Site

As the MDE moves forward with PBL and other innovative pathways, it would do well to consider the power of countable problems and strategic communications in increasing teacher diversity and effectiveness. Countable problems receive and retain more public awareness, particularly when they are paired with feasible solutions. In addition, the same data systems required to generate valid counts concerning diversity, geographic, subject area, preparation program shortages will offer the OTL more precision in diagnosing and proactively addressing human-capital constraints. Any efforts to integrate vacancy fields into the Mississippi Student Information System, generate educator

preparation program report cards, and build a cross-functional data dashboard for continually assessing progress are highly recommended.

Still, as outlined above, it is not enough to cite a countable problem. The agency must also offer feasible solutions. Part of that feasibility is technical, and part of that feasibility is a matter of value acceptability and tolerable cost. Strategic communications play a large role in value acceptability. By framing PBL as a workforce development issue rather than a teacher shortage issue, new partnerships and concepts emerged such as career lattices with neighboring fields such as nursing. The OTL might consider revisiting the name performance-based licensure (PBL) as frequent conflations with performance-based assessments prove confusing to external stakeholders. That said, the OTL's refrain of "increasing teacher diversity and effectiveness" should continue to guard against long-held public perceptions that the profession's standards are not high enough.

Tolerable cost is an important test of a solution's feasibility. Part of that cost is the amount of money spent to run a new program: another part is the amount of energy spent to change existing systems. To reduce unnecessary costs resulting from fiscally or strategically unsustainable programs, the MDE would benefit from a closer consideration of the tolerable cost of an initiative relative to its return on investment. Programs like PBL are built for scale with a low cost per candidate that districts can absorb. By contrast, the Mississippi Teacher Residency (MTR) may be financially unsustainable without external grant funding. By consistently asking "How much will X program/pathway/initiative cost relative to how much will Y district/educator preparation program/individual gain?", the MDE can gain an additional lens through which to review and approve programs.

The importance of user-informed design cannot be overstated as the MDE pursues new programs, pathways, and initiatives to ensure that every school has effective teachers and leaders. By conducting focus groups similar to those that prototyped the PBL model and by refining pathways through its pilot infrastructure, the OTL is well positioned to study human capital innovations before scaling state-wide. Still, programmatic quality will likely be determined by the extent to which people closest to the problem actually inform its solution. Inform is an intentional term because as Hill, Molitor, and Ortiz observe, "We must acknowledge the power dynamics that allow some votes to count more than others. Equitable design demands that practices change and evolve—that we redefine roles, revalue ways of knowing, and reassess the ways we reach decision" (2016, p. 8). The OTL is not fully oriented to user-driven design as its "vote" still counts more than that of a given district in determining licensure requirements and the associated accreditation standards by which all districts are held accountable. But the OTL can acknowledge this power dynamic by explicitly defining previously implicit priorities while increasingly sharing power with stakeholders. By doing so, the OTL can serve as a model for the MDE.

Similarly, the MDE stands to learn from the OTL's efforts to balance innovation and effectiveness as it strives to prepare students to compete in the global economy (The Mississippi Department of Education, 2019a). The OTL aims to develop an educator workforce to meet shifting trends in student diversity and educator preparation through pilots like the MTR and PBL. At the same time, it strives to ensure fidelity with the statewide Professional Growth System as a means of generating effective observations of and feedback on teacher practice. More broadly, the MDE has more political buy-in and space to innovate than ever before as this year's fourth- and eighth-grade results on the National

Assessment of Educational Progress show that Mississippi made more progress than any other state. While it is difficult to determine exactly what caused such gains, the dramatic improvement is widely attributed to MDE's continued focus on effective literacy instruction (Hanford, 2019). Even as the MDE now looks to increase effectiveness with special education and math instruction, it would benefit from user-informed innovations to pilot increasingly necessary skills such as coding, digital literacy, and social influence. The OTL can serve as a thought partner to academic program offices in this regard given its experience with the shifts in design, policy, talent, communications, and evaluation needed to maintain a healthy tension between effectiveness and innovation.

Implications for Sector

The standardized tests used for educator licensure amount to an established constraint on America's educator workforce, but this barrier's extent is not widely recognized because of the variability among state licensure and educator preparation program entry requirements. However, encouraging initial findings from the MDE's PBL pilot indicate the potential for performance-based licensure alternatives to increase teacher diversity and effectiveness. While the full range of performance-based applications in educator credentialing has yet to be determined, the MDE may offer an early signal of broader movements away from entry licensure exams and toward performance-based alternatives.

The American preK-12 educator workforce is limited in size and diversity because of national reliance on licensure testing requirements despite their disproportionate impact on people of color and their lack of predictive validity. According to the Educational Testing Service (ETS), "The *Praxis* tests are currently required for teacher licensure in

more than 40 states and U.S. territories. These tests are also used by several professional licensing agencies and by several hundred colleges and universities" (2020). ETS's second point suggests another testing-induced workforce constraint that may well dwarf that of licensure requirements: educator preparation program entry requirements. Unlike bar exams for lawyers or board exams for doctors, both of which are completed after graduate study, passing Praxis exam scores are required for formal entry into educator preparation programs (EPPs) at many colleges and universities as EPPs need to report the share of their graduates who ultimately obtain licensure. An untold number of prospective educators may be barred from the profession as early as their sophomore year . . . not to mention those who choose other majors from the start given the prospect of program entry testing requirements. While more research is needed into the origins and scale of this problem, educator preparation programs might experience increased enrollment and higher graduation rates if entry requirements included flexible pathways into the profession such as PBL.

In light of current system constraints and promising findings from the PBL pilot, states should continue to explore performance-based alternatives to state teacher licensure exams as one way to increase teacher diversity and effectiveness. Even though summative observations of teacher practice and value-added student learning data will not be available until late summer 2020, early evidence from the PBL pilot shows promise regarding teacher diversity, experience, learning, retention, and satisfaction within the program. Instate generalizability is limited at this time as predominantly Black teachers and students within the pilot are more reflective of population demographics in the Mississippi Delta than other regions in the state. Pilot expansion to districts with greater racial diversity may

offer important insights before state-wide expansion of the program. Additional research is needed on the potential for performance-based licensure alternatives in other states because any national generalizability of MDE's PBL pilot is limited given its state-specific design.

Still, the MDE is a leader on this front that other state education agencies would do well to consult before launching their own efforts. The MDE also stands to learn from other new approaches to the problem. It may very well have a new thought-partner in Massachusetts Department of Education whose Education Commission Jeff Riley recently proposed more flexibility in teacher licensing. According to the *Boston Globe*,

He is seeking to allow teachers who repeatedly fail their exams to receive a license based on their actual work experience — vetted by an expert — instead of their test scores. His proposal would also allow educators in some instances to take another licensing test offered in 26 other states. (Vasniz, 2020)

The proposed Massachusetts pilot carries important similarities and differences with Mississippi's PBL pilot. Like Mississippi's approach, the Massachusetts pilot requires a three-year trial period as approved by the State Board of Education and could use performance on the statewide teacher evaluation system as a replacement for subject-area licensure exams through the Performance Review Program for Initial Licensure route. But the proposed Massachusetts pilot could still require the Praxis Core as an alternative to the state's existing licensure exam for communications and literacy skills even as it does not require value-added measures of student learning (Massachusetts Board of Elementary and Secondary Education (BESE), 2020). While the MDE is in a position to share early

learnings based on its experience with the first PBL cohort, the Massachusetts Department of Education may offer helpful rationales for future revisions in the PBL model.

More broadly, the MDE's PBL pilot offers an alternative approach for any state that is moving away from requiring standardized exams for educator licensure. Recent legislation in Arkansas, Indiana, Iowa, Virginia, and Washington signals a general shift as states begin to take advantage of the flexibility afforded by ESSA and adjust licensure requirements. Last year, Arkansas and Indiana removed pre-service teacher basic skills test requirements for pedagogy and reading, writing, mathematics, respectively ("Amend Provisions To Obtain A Teaching License," 2019; Various Education Matters, 2019). Iowa, Virginia, and Washington enacted the following provisions, respectively, to allow individuals seeking initial licensure to demonstrate content and/or pedagogy proficiency: educator preparation program completion, alternative evaluation standards as prescribed by the Board, or other information such as work experience ("Diversifying Teacher Workforce Act," 2019; "Assessment Scores for Initial Teacher Licensure," 2019; "Basic Skills Assessments for Teacher Preparation Programs," 2019). Because their current legislation does not prescribe evaluation standards or other information that might be used to demonstrate proficiency, those states might look to performance-based licensure pathways as they consider alternatives to minimum scores on basic skills tests.

If states pursue performance-based alternatives to standardized licensure exams in the future, they will do well to consider clear branding for this approach from the start. Performance-based licensure seemed to be the right term initially, but subsequent stakeholder confusion about the difference between PBL and performance-based assessments implies that the question of "What should we call this?" remains open. After

several discussions and capstone revisions to clarify meaning, I recommend the term impact-based licensure for future endeavors. Impact-based licensure maintains the performance orientation of its predecessor while avoiding conflation with a common term in educator licensure. Importantly, this term also retains the word "license" which should be used instead of "credential" as licenses integrate with existing state and local educator salary scales in a manner that credentials do not. As the sector looks to increase educator diversity and effectiveness, it is critical that any future endeavors avoid terminology that signals a separate, and possibly lower, salary scale for individuals in performance-based pathways to licensure.

Implications for Self

My residency with the MDE taught several lessons that I hope to carry forward as an educational leader in Mississippi. First and foremost, I have developed a deeper appreciation for ongoing identity development while employing established frameworks to advance educational equity. I also learned that focused impact and broad influence are not mutually exclusive, and that strategic communications can be employed to bridge the two. This learning has implications for my future work as a systems leader in Mississippi, particularly with regard to disconnecting the interlocking systems that generate educational inequity.

My current and future work as an educational leader in Mississippi is inextricably tied to my ongoing identity development. As a White, Anglo-Saxon, and Protestant cisgender woman backed by eleven generations of United States citizenship, college professor parents, and enough horse riding lessons to fit right in at Mount Holyoke College, I check just about every box needed to lead a privileged life in America. And I generally

do . . . even as my commitment to an equitable PreK-12 American education system continues to grow.

I began a lifelong journey of racial and other social identity development when I joined Teach For America (TFA) twelve years ago. While the criticism that TFA's approach to diversity, equity, and inclusion is largely centered in White identity development is valid, I carried the organization's charge to understand the personal, interpersonal, and systemic power of race in education into the Ed.L.D. program and my residency. Slowly but surely, I worked within my cohort to notice, discuss, and push back against practices that adversely impact students of color. One systemically oppressive practice is the Praxis exams' disproportionate screening of Black educators who are otherwise effective—no, rockstars!—in classrooms across Mississippi. Accordingly, I developed a PBL pilot that applies equityxdesign practices such as positioning the marginalized as designers, engages in ongoing identity development, shares power, and creates reflective space through meta-empathy mapping.

The Ed.L.D. program taught me that my story matters as a leader. During our first week on campus, Cohort 8 received a version of this advice from Marshall Ganz:

If you don't interpret to others your calling and your reason for doing what you're doing, do you think it will just stay uninterpreted? No. Other people will interpret it for you. You don't have any choice if you want to be a leader. You have to claim authorship of your story and learn to tell it to others so they can understand the values that move you to act, because it might move them to act as well. (Ganz, 2009)

Moving Mississippians to act on the structural inequities within our education system requires that I share my own story, particularly as a native Mississippian. I entered the Ed.L.D. program believing that I was an impactful, if not particularly compelling, leader. Throughout residency, I learned how to leverage my focused leadership style in program management even as I shared stories that invested others in reimagining educator licensure policies. Given the centrality of strategic communications in influencing public opinion, I had to practice turning my abstract edu-speak into accessible messages that could be carried forward by MDE leadership, board members, funders, district administrators, PBL principals, and candidates alike. This required that I develop several versions of talking points to deliver the same core messages.

Yet oppression takes many forms, from the structural to daily conversations and personal beliefs. Thus, the tenacity that marks a skilled policy entrepreneur also carries a potential for myopia that I will do well to avoid as a systems-level leader. This is particularly the case when grappling with the interconnected structures that generate educational inequity. Using Marilyn Frye's "birdcage" metaphor to describe systemic oppression, Iris Marion Young writes:

If one thinks about racism by examining only one wire of the cage, or one form of disadvantage, it is difficult to understand how and why the bird is trapped. Only a large number of wires arranged in a specific way, and connected to one another, serve to enclose the bird and to ensure that it cannot escape. (as cited in (Alexander, 2012)

If teacher licensure exams represent one wire, zero-tolerance discipline policies, drill-andkill classroom environments, part-time counselors and nurses, outdated instructional materials, and dilapidated facilities represent five others that are more likely to negatively impact Black, and increasingly Latino, students in Mississippi than their White peers. Framed differently, collective wire cutting is necessary for all children to be free in fully realizing their potential. This carries particular implications for my leadership since I hope to become a Mississippi district superintendent in the future.

One day, I hope the district I lead can hire the diverse, experienced and effective teachers its children need regardless of whether those educators have passed a test. But for the time being, our workforce will likely remain predominantly White, female, and lacking the consistent focus on personal identity development supported by programs like TFA and Ed.L.D. As a White female superintendent, it will be important that I continue talking about being White, breaking (often White) silence on misinformation about people of color, educating myself about America's history with race relations, building authentic cross-racial relationships, and supporting action for equity in education (DiAngelo, 2012, p. 332).

Encouraging White female administrators and teachers to do the same requires that I stay in Mississippi and see the work through. Most Mississippians I know are both remarkably kind to and careful with anyone who is not deeply rooted in their state. They are the first people to welcome visitors and feed them in their homes, even as they brace for unthinking jokes at Mississippi's expense or a status report on the state's progress with the racial healing that our nation has yet to begin. They also brace for the brightest Mississippians to leave. Throughout residency, my hardest question was not about the PBL pilot, or even about post-Ed.L.D. plans. It was the simple, quiet "Why did you come back?" that floored me every time. My answer is still a work in progress, but I hope it will

eventually carry some of the power of National Book Award winner Jesmyn Ward's response to a similar question:

I like to think that after I die, my children will look at that place and see a place of refuge, of rest. I hope they do not flee. I hope that at least one of them will want to remain here in this place that I love more than I loathe, and I hope the work that I have done to make Mississippi a place worth living is enough. I hope they feel more themselves in this place than any other in the world. (2018)

Making Mississippi a place worth living for *all* children seems like a great reason to come back. And stay.

Conclusion

The performance-based licensure (PBL) pilot at the Mississippi Department of Education (MDE) is an early example of educator credentialing based on actual impact as an alternative to entry exams. Research consistently indicates that current entry exams are both weak signals of educator effectiveness and strong screens for educator diversity; therefore, the PBL pilot offers an important example for states seeking to improve on both fronts. The MDE's openness to improvements in educator effectiveness, retention, diversity, learning, and administrative support as a result of the PBL pilott also provides a strong foundation for future insights into teacher workforce development.

With the elimination of NCLB's standardized entry exam requirements, ESSA creates a policy window for states to reimagine certification and licensure policies based on local need. This window combined with existing research on the importance of increased educator diversity to generate an impetus for the PBL pilot. As states like Arkansas, Indiana, Iowa, Massachusetts, Virginia, and Washington move away from

requiring standardized exam passage for educator licensure, the MDE is positioned to serve as a thought partner in generating an educator workforce more reflective of current students than obsolete policy. Hopefully, the flexibility offered by ESSA allows MDE and fellow state education agencies to engage in human capital innovation as a means of advancing educational equity.

As articulated by Hill, Molitor, and Ortiz, designing for equity requires the involvement of those most impacted by inequity. The Office of Teaching and Leading (OTL) embodied a different approach than the "top-down" stance often ascribed to government agencies by designing PBL in focus groups with the parents, teachers, and administrators who could be later impacted by the pilot. As a result, the model was created to fit Mississippi classrooms and the program experienced strong stakeholder buy-in from the start. The OTL then ensured the pilot's feasibility and acceptability through continued program iteration, technical assistance, evidence collection, and strategic communications. The PBL pilot remains quite innovative in nature yet tethering it to existing state and district priorities made it more approachable and acceptable to various stakeholder groups.

Early evidence from the PBL pilot suggests the potential for similar performance-based licensure alternatives to increase teacher diversity and effectiveness. 100% of candidates in the program's first cohort identify as Black or African American and 95% percent identify as experienced with low-income communities. In terms of experience and retention, members of PBL Cohort 1 averaged 11 years as a teacher assistant or provisionally-licensed teacher and 4 years as a full-time interventionist or other instructional support role. 97 percent of the first cohort felt that teaching was their long-term profession or calling, and 85 percent saw themselves teaching in their current district

for the rest of their career. Tellingly, one third of the cohort met the state's definition of an effective teacher by achieving a Level 3 on the Mississippi Teacher Growth Rubric within the first three months of the pilot.

The PBL pilot suggests several important questions that the education sector might consider in its efforts to improve educator workforce development. Namely, what is the impact of educator licensure exams on educator preparation program entry and graduation? To what extent might both increase if program entry requirements were inclusive of more flexible pathways into the profession such as PBL? Are there performance-based licensure applications for other roles in education such as the principalship and superintendency? And finally, how might performance-based licensure pathways be designed in other states that are moving away from standardized licensure exams?

Epilogue

The Governor of Mississippi, Tate Reeves, issued an executive order to close schools on March 19, 2020 in an effort to slow the spread of COVID-19 (coronavirus). As a result of extended school closures, the Mississippi State Board of Education (SBE) voted that same day to suspend all federal and state assessments for the 2019-2020 school year (The Mississippi Department of Education, 2020a). The SBE subsequently granted approval to suspend the requirement for districts to submit annual employee performance data, which includes Professional Growth System ratings based on observations of PBL candidate classrooms (The Mississippi Department of Education, 2020b). As a result, the MDE will not have data on value-added measures and summative observations of teacher practice for PBL candidates until state assessment scores are compiled in summer 2021. Still, the program's first cohort will remain eligible to meet performance targets next year

since PBL candidates are issued a special three-year pilot license for the duration of the study. In the meantime, the MDE is committed to continuing the PBL pilot for the 2020-2021 school year and has reason to hope that the program will increase teacher diversity and effectiveness based on initial evidence from the 2019-2020 school year.

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Appendices

Appendix A: Prototype Examples

EXTREMES and MAINSTREAMS MODEL

The following models offer more extreme examples on either side of the design spectrum. Fully acknowledging that a performance credentialing model will likely operate more toward the mainstream, these models are meant to spark innovation through additional iteration.

As a result of feedback from the executive directors and division directors within the Office of Teaching and Leading, the following primary adjustments were made to the second performance-based licensure model proposal (Prototype 2.0):

• A/B, C, and D/F delineations were added to scaffold eligibility, support structures, evaluation, and performance verification.

BOUNDED AUTONOMY MODEL

The following prototypes is designed to offer performance credentialing based on feedback from district focus groups. Positive and negative focus group feedback from the Clarksdale, Greenwood, Quitman, and Tate school districts is included below.

As a result of this feedback, the following primary adjustments were made to the fourth performance-based licensure model proposal (Prototype 4.0):

- A condition that the required 3-year district commitment would not supercede any district non-renewal policy/process was added.
- Ongoing principal development, coaching, and alignment sessions on the Teacher Growth Rubric became a required support structure.
- Instructional rounds were added as an optional support structure

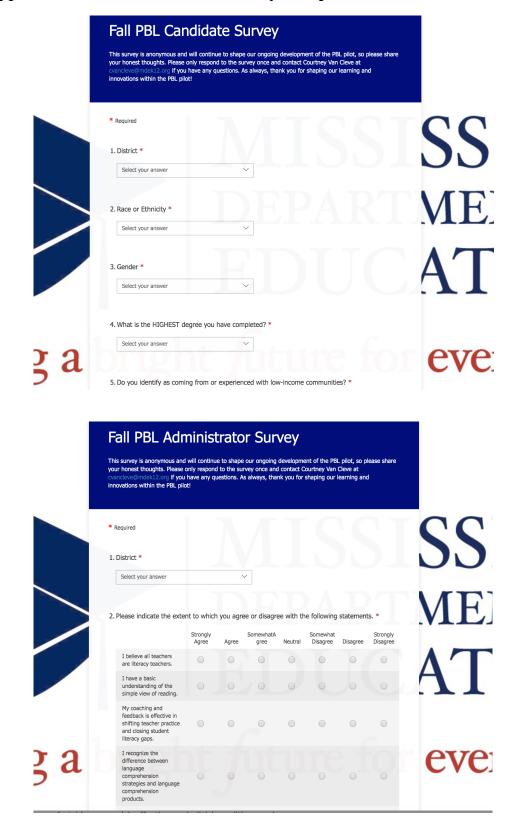
ACCOUNTABILITY-BASED MODEL

The following prototypes are designed to offer performance credentialing within the bounds of a district's existing performance rating. Positive and negative focus group feedback from the McComb, Kociusko, Wilkinson, and Vicksburg school districts is included below.

As a result of this feedback, the following primary adjustments were made to the third performance-based licensure model proposal (Prototype 3.0):

- A/B, C, and D/F delineations were eliminated in favor of one model to improve pilot sustainability, increase the potential for state-wide scalability, and preempt inequitable pipeline constraints in D/F districts.
- A required 3-year district commitment beyond initial licensure was added.
- A 3-year eligibility period for performance-based licensure was added.
- Language around "MDE prescribes" was removed to increase district buy-in.

Appendix B: Fall and Winter Survey Samples



This survey is anonymous and will continue to shape our ongoing development of the PBL pilot, so please share your honest thoughts. Several questions mirror the fall survey to help us review change over time. Please only respond to the survey once and contact Courtney Van Cleve at <u>concleve@mddetl.2.org</u> if you have any questions. As always, thank you for shaping our learning and innovations within the PBL pilot! SS * Required 1. District * Select your answer ME 2. Do you know your fall formative professional growth system scores based on a classroom observation with your principal or an administrator? * O No 3. Have you created professional growth goals and an actionable plan with an administrator based on you fall formative observation(s) to improve performance before spring summative PGS Yes eve Winter PBL Principal Survey This survey is anonymous and will continue to shape our ongoing development of the PBL pilot, so please share your honest thoughts. Several questions mirror the fall survey to help us review change over time. Please only respond to the survey once and contact Courtney Van Geve at condeveedment of the place of the pl SS * Required 1. District * ME 2. I would like the opportunity to hire PBL candidates in future years (even if I am not anticipating vacancies next year). * ○ Yes O No 3. I met with all PBL candidates in my school to establish professional growth goals based on their fall formative observations to support their development and improve performance before spring summative PGS observations. * Yes O No eve 4. I completed a fall formative Professional Growth System (PGS) classroom observation and feedback cycle for all PBL candidates at my school. * Yes ○ No

Winter PBL Candidate Survey

Appendix C: Modified Meta-Empathy Map

Stakeholder Interview Agenda: Meta-Empathy Maps

How can we get How did you first Why did you what were your first Would you How might the PBL teachers and leaders the learn about the PBL decide to join or knowledge and skills pilot? Rowledge and skills pilot impact your be via orientation, an If so or if not, why? Rowledge and you might the PBL pilot impact your pilot impact your percessary for success in program?	Click or tap to open the Navigation Pane.		Si	14	
How can v teachers of knowledg necessary	PBL Coordina	Principal	PBL Candidates	Superintendent	Stakeholders

Appendix D: State Superintendent Support

MDE to Prepare Educators through Teacher-Residency and Performance-Based Licensure Pilot Programs

NEWS RELEASE For Immediate Release: October 31, 2018 Communications and **Government Relations** JACKSON, Miss - The Mississippi Department of Education (MDE) is launching an initiative to increase the number of qualified teachers entering and remaining in the profession through teacher-residency and performance-based licensure programs. 601-359-3515 2 Staff The project is funded by a \$4.1 million grant from the W.K. Kellogg Foundation to address the achievement gaps in high poverty, high minority schools and schools that lack a diverse teaching staff. Services "Every school must have effective teachers to help students learn and achieve at the highest levels," said Dr. Carey Wright, Blogs and Publications state superintendent of education. "This project is part of a statewide strategy to diversify the teacher pipeline to ensure all students have access to teachers who are well-prepared, appropriately licensed and serve as role models for success." Government Relations



TEACHER RESIDENCY PROGRAM AND PERFORMANCE-BASED LICENSURE PILOT

The Mississippi Department of Education secured a \$4.1 million grant from W.K. Kellogg Foundation to help increase the number of qualified teachers entering and remaining in the profession. The funds support the MISSISSIPPI TEACHER RESIDENCY, which is a two-year program that combines coursework and on-the job trainings to prepare prospective educators for the teaching profession. The Mississippi Department of Education recruited and placed 35 teacher residency candidates in four Mississippi school districts in the 2018-19 school year. The grant also supports the PERFORMANCE-BASED TEACHER LICENSURE PILOT PROGRAM, which is helping 73 candidates in seven school districts become fully licensed.