

12/31/2021

Professional Review Panel Ad Hoc Committee Report

Pursuant to PA 101-0654

DRAFT

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Executive Summary

Context and Charge to the Professional Review Panel

Governor JB Pritzker signed Public Act 101-0654 (Ammons/Lightford) into law on March 8, 2021. The measure is major education reform legislation designed to address systemic issues that cause deep inequities and opportunity gaps in education. This law takes powerful steps forward to ensure all our students have access to rigorous learning opportunities that will prepare them to succeed every step of the way after high school.

A portion of the Act charges the Professional Review Panel (PRP) with conducting research and presenting findings to ensure that: “(i) the Adequacy Target calculation under subsection (b) accurately reflects the needs of students living in poverty or attending schools located in areas of high poverty, (ii) racial equity within the Evidence-Based Funding formula is explicitly explored and advanced, and (iii) the funding goals of the formula distribution system established under this Section are sufficient to provide adequate funding for every student and to fully fund every school in this State”. To accomplish this task, the legislation directs that “the Panel shall review the Essential Elements under paragraph (2) of subsection (b).”

This executive summary provides an overview of the process the PRP undertook, some additional context, a brief overview of the charges the PRP was tasked with in Public Act 101-0654, and a summary of associated findings.

Process Overview

The Professional Review Panel created an Ad Hoc Committee to complete this review that met biweekly beginning in April 2021. In doing so, the committee grounded its analysis, discussion, and findings in a robust review of evidence related to each specific charge (provided by the Illinois State Board of Education and included in this document as Appendices for reference). For each charge, the committee considered the relevant research, considered how existing mechanisms within the Evidence-Based Funding formula currently worked to address the charge, and then whether and how adjustments that might be made in the future to more closely align the formula to the available evidence. Where appropriate, the group also considered whether action might more appropriately be taken outside of the EBF formula.

Potential Considerations Related to Funding Adequacy

Several of the charges include findings related to the way the cost of “adequacy” is calculated in the Evidence-Based formula. The Evidence-Based Funding formula calculates an “Adequacy Target” for each of the state’s 851 school districts, 69 regional office of education programs and two lab schools and then calculates how well-funded each district is at present, accounting for local and state funding sources. New state funding is then distributed each year, with the formula’s distribution mechanism designed to send greater amounts of new funding to districts that are furthest from their Adequacy Targets and with fewer local resources at their disposal.

Implementing any of the adjustments to the adequacy calculation included among this report’s findings would require the passage of legislation that specifies the methodology for calculating and operationalizing such changes. If such legislation is contemplated and drafted, the PRP notes that it will be necessary to consider the potential interaction of each of the recommended changes with one another. It will also be critical to model and consider financial and distributional implications of any adjustments and ensure that the resulting formula provides a functional and effective method for calculating adequacy and, in turn, driving the distribution of new state funds to districts. At present, the findings in this report are intended to respond to the questions posed by

the General Assembly, and to offer research-based adjustments that might be considered.

It is important to note that increasing districts' Adequacy Targets *does not add to the true costs districts are already paying, nor does it impose spending mandates*. Furthermore, it is important to acknowledge that this does not mitigate the need for additional efforts to address such areas as the state's teacher shortage or capital needs. Adjustments that would increase Adequacy Targets are instead intended to more accurately reflect the real costs of providing a high-quality education and help increase racial equity per the charge in Public Act 101-0654, in essence ensuring that the targets used in EBF are as accurate and equitable as possible.

Fully Funding the Formula

It is critical to note that, while all of the recommendations included in this document might help increase equity in the Evidence-Based Funding formula, the formula is at present already helping decrease funding gaps and provide a more adequate, equitable education for students across Illinois. A theme that was evident throughout the committee's work is that addressing any of the charges included in Public Act 101-0654 relies, as does progress toward adequacy and equity on the whole, on the state investing in the formula each year and working to fully fund the formula as quickly as possible. Indeed, it is the considered view of the PRP that the EBF funding model deserves the national attention it has received, and the dedicated funding support the General Assembly has been providing.

List of Charges and Summary of Findings

A) The financial ability of school districts to provide instruction in a foreign language to every student and whether an additional Essential Element should be added to the formula to ensure that every student has access to instruction in a foreign language.

Finding: Because the cost of providing world language instruction is captured for middle and high school grade levels in the core teacher section of the Core Investments calculation within districts' Adequacy Targets, the Professional Review Panel's preliminary finding is that ensuring every student has access to this kind of instruction begins with working to fund the EBF to its full level as soon as possible. This will help districts hire additional foreign language and or bilingual teachers who will be needed to implement the teaching of foreign languages with fidelity in rural, suburban, and urban districts. In addition however, it may be worth exploring the need for clarification in statute of whether world language teachers best fit into the category of "regular classroom teacher" or "specialist teacher" in the elementary grades, in order to help clarify future analysis of the extent to which the current cost factors reflect the cost of providing foreign language instruction in the early grades.

Additionally, if the state wishes to address the issue of increasing access to foreign language and dual language instruction for K-12 students in the immediate term, the state might consider creating a grant program outside of the EBF formula, with priority given to Tier I and II districts, to begin to address resource needs related to expanding high-quality foreign language instruction, including staffing challenges for underfunded districts. We note, however, that grant programs that operate outside of the EBF may slow down progress toward adequacy and, unintentionally or otherwise, undermine the broad equity focus at the heart of the funding formula.

B) The adult-to-student ratio for each Essential Element in which a ratio is identified. The Panel shall consider whether the ratio accurately reflects the staffing needed to support students living in poverty or who have traumatic backgrounds.

Finding 1: *To capture the cost of providing additional supports to districts that serve the highest concentration of*

students (evidence/research-based threshold) in low-income households, the state could differentiate existing low-income cost factors/staffing ratios. This could entail adding a differentiation to the existing four low-income cost factors (or a sub-set of those four factors) such that the associated staffing ratios decrease as the concentration of students in low-income households in a district increases. Districts with higher percentages of students in low-income households would then have reflected in their Adequacy Targets the costs of providing additional staff support suggested by research to be valuable in meeting the additional needs of students living in areas of concentrated poverty.

Finding 2: *The Whole Child Task Force should research and make recommendations related to state data collection on student exposure to trauma. The PRP can, in turn, consider the appropriateness of tailoring cost factors to address those needs at a later point in time. At present, the State of Illinois does not have state-level data that is comparable across school districts that captures student exposure to trauma. To some extent, because of the interplay of trauma and poverty, addressing poverty and concentrated poverty within the formula and including staffing ratios for positions like psychologists, social workers, and guidance counselors will also begin to address the needs of students who are likely to have experienced trauma. Ideally, however, more detailed information specifically about student exposure to trauma at the school, district, or community level would help better tailor Adequacy Targets based on student need.*

The creation of such a measure or index could possibly entail the combination of data from multiple existing sources relating to things like levels of community violence, connectivity with IDHS, levels of student mobility, and youth in foster care, or might involve introduction of tools or protocols for collecting new information. It is the PRP Ad Hoc Committee's belief that the state's Whole Child Task Force, which is charged with making recommendations to the state concerning "the key data to be collected and reported to ensure that this state has a full and accurate understanding of the progress toward ensuring that all schools, including programs and providers of care to prekindergarten children, employ restorative, anti-racist, and trauma-responsive strategies and practices," is best positioned to undertake the work of considering and making recommendations on how the state could measure student needs related to experiences of trauma ([PA 101-0654](#)). The state's Resilience Education to Advance Community Healing (REACH) pilot will likely also yield information about promising practices for measuring student needs related to trauma in the coming years.

Finding 3: *To provide an additional data point that can be used in the calculation of districts' Adequacy Targets related to poverty concentration, the state can explore ways to measure depth of poverty (potentially using Census block-level data) in the future. Information on depth of poverty within school districts could potentially allow Adequacy Targets to be even more specifically tailored to districts' unique student populations. In order to avoid creating additional administrative burden by creating new avenues for data collection, it is worth exploring whether statewide, comparable data on depth of poverty that is applicable at the school district level could possibly be gathered from federal sources, like the American Community Survey, or created from the existing data on family income used to determine eligibility for means-tested programs and free-or reduced lunch.*

C) Changes to the Essential Elements that may be required to better promote racial equity and eliminate structural racism within schools.

Finding 1: *To better promote racial equity within schools, the state could add a specific professional development (PD) cost factor for PD related to implicit bias and antiracism at a fixed per pupil cost based on overall enrollment, with additional per pupil dollar amount for all students in districts that serve a majority of students of color. Research suggests that professional development and dedicated organizational time and capacity at the school*

and district levels focused on developing a healthy school culture, reducing implicit bias, and eliminating structural racism are important for all students and schools, but especially important for schools and school districts serving predominantly students of color. At present, the EBF formula includes cost factors associated with providing supports based on student needs for students from low-income households and English Learners but does not capture the cost of reversing or reducing the negative impacts of systemic disadvantage or inequity faced by students of color. This proposed additional PD cost factor would recognize that students of color do not inherently need additional supports by nature of their race/ethnicity, but that these students do face inequities because of historical and existing institutional structures. There is a cost associated with working to dismantle those inequities through training on antiracism and eliminating implicit bias within schools and districts.

Like the suggested cost factor for poverty concentration, application of this proposed cost factor could also be applied in a graduated fashion. Also, given that this proposed factor would be tied to counts of students by race/ethnicity within a district, it would be important to consider the legality of using a race-conscious or race-explicit metric in estimating costs for the purpose of calculating district Adequacy and distributing state funds.

It is critical to note that this cost factor would not constitute a mandate, nor would it affect curricula, but would instead attempt to ensure districts' Adequacy Targets reflect the costs of providing equity and inclusion-focused professional development. As with all cost factors in EBF, districts have local control and discretion over how to spend Tier funding once they receive it.

Finding 2: *To promote racial equity by increasing educator diversity, the state could add a cost factor for recruitment and retention of diverse educators and leaders which could reflect costs associated with such actions as making systemic changes in hiring practices, loan repayments and scholarships, mentorship, and induction, etc., with an allocation/ratio based on the proportion of students of color a district serves.*

This approach would be a step toward combatting the state's shortage of diverse educators while simultaneously reflecting the value of enabling districts, especially those serving large proportions of students of color, to recruit and retain educators and leaders who reflect the diversity of their student populations. While an important mechanism for attracting and retaining educators of color in the long term is likely to ensure that salaries for educators, especially those teaching in districts serving high proportions of students of color, are competitive, this focus on recruitment, retention, and working conditions could help begin to address the challenge of combatting the state's shortage of diverse teachers.

(D) The impact of investing \$350,000,000 in additional funds each year under this Section and an estimate of when the school system will become fully funded under this level of appropriation.

Finding 1: *Attaining better student outcomes in districts that use new funding in fidelity with EBF is the reasonably anticipated result of enhancing annual formula funding under EBF, because the legislation ties the dollar amount taxpayers invest in schools to paying for those educational practices that research shows actually enhance student achievement over time.*

Hence, after the model becomes fully funded, stakeholders can expect to see, for example, growth in student test scores; improved school climates with reduced disciplinary problems; reduced drop-out rates with corresponding increases in high school graduation and college enrollment rates; and a K-12 system that appropriately serves the social-emotional needs of students from diverse backgrounds. It is worth noting, however, that all of these outcomes are lagging indicators, and thus will take years of stable, sustained investment in districts through EBF before they are realized.

Finding 2: *The state would need to increase the annual funding allocation to \$983 million (excluding the property tax relief portion) in order to reach full funding by 2027, or change the legislation to reflect a more accurate projected timeline of 2042 to fully fund the model based on the current \$300 million/year allotment. Alternatively, the state might adopt the goal of reaching full funding by 2032 – a goal that would necessitate an annual increase of \$527 million.*

The Committee's findings related to other charges (Charges B, C, and H) also include a number of possible adjustments or additions to cost factors currently included in the Evidence-Based Formula's calculation of districts' Adequacy Targets. Adding cost factors to the formula would increase the overall cost of fully funding the system, and as such, should also be associated with a proportional increase in the state's Minimum Funding Level, in order to ensure the state continues to make progress toward full funding. Any actions resulting from these recommendations should also balance the real tensions of updating the model to more accurately reflect the true cost of an evidence-based education for all students with the increases to the state's expected contribution/Base Funding Minimum and the timeline to full funding.

(E) Provide an overview of alternative funding structures that would enable the State to become fully funded at an earlier date.

Finding: *It is outside the purview of the Professional Review Panel to identify alternative funding structures that would enable the state to fully fund EBF by FY 2027, as provided in statute. It is up to the General Assembly and Governor to identify such additional revenue sources and/or fiscal reforms as could be implemented by the state to fund the EBF model fully by its statutorily created deadline.*

Elements or mechanisms to create alternative funding structures that would enable the state to fully fund EBF at a faster pace than the current, \$300 million in new funding per year do not exist within the EBF formula itself. With that in mind, the Ad Hoc Committee -- with the support of ISBE -- will conduct financial analysis and project outcomes as requested based on the EBF model.

(F) The potential to increase efficiency and to find cost savings within the school system to expedite the journey to a fully funded system.

Finding: *It is recommended to review potential redundancies in resourcing at the state and local levels. There are opportunities to identify potential redundancies in resourcing at the state and local levels that should be explored further.*

(G) The appropriate levels for reenrolling and graduating high-risk high school students who have been previously out of school. These outcomes shall include enrollment, attendance, skill gains, credit gains, graduation or promotion to the next grade level, and the transition to college, training, or employment, with an emphasis on progressively increasing the overall attendance.

Finding: *The appropriate levels for reenrolling and graduating high-risk high school students who have been previously out of school cannot be determined without additional research. Our recommendation would be to convene a Professional Review Panel committee to further discuss how to best support this important work. The*

committee could be an extension of the existing Programs Committee with said committee being appointed by the chair of the Professional Review Panel per the Rules of Procedure and starting research in January of 2022. The existing Program Committee members may be appropriate for this new committee, but other stakeholders should also be considered for membership. Further research conducted by this committee would include, but not be limited to, the following:

- Thoughtful analysis of existing alternative education models (e.g., ROE, school district, etc.);
- A review of current funding mechanisms for alternative programs;
- Exploration of possible mechanisms for understanding costs associated with educating and reenrolling at-risk students and related distribution of state funding to meet those needs;
- Creation of a funding formula specific to at-risk students using a framework similar to that of EBF;
- Research on proactive measures to reengage at-risk students; and
- Consideration of how any newly proposed structures would align with existing programs in place through an ROE or in individual school districts.

It is also worth noting that the State Task Force on Re-Enrolling Students who dropped Out of School produced a report containing information relevant to this charge in 2008. However, as over a decade has passed since that report was created, the committee tasked with studying and making recommendations specific to this issue and its relationship to the Evidence-Based Funding formula may also benefit from updated information on many of the topics included in that initial report.

(H) The evidence-based or research-based practices that are shown to reduce the gaps and disparities experienced by African American students in academic achievement and educational performance, including practices that have been shown to reduce disparities in disciplinary rates, drop-out rates, graduation rates, college matriculation rates, and college completion rates.

Finding 1: *Early childhood education is pivotal in closing racial opportunity and outcome gaps – though outside the purview of this committee since the EBF and PRP deal with K-12 funding. One key way to close these gaps will be to equitably and adequately fund early childhood education and care. Consider recommendations made by the Illinois Commission on Equitable Early Childhood Education and Care Funding in a March 2021 report for next steps.*

Finding 2: *Recruiting and retaining leaders and educators of color and supporting PD and school climate/culture work that is aimed at reducing implicit bias and antiracism are both strategies for closing gaps supported by research. Formula related recommendations related to both are included in the recommendations related to Charge C.*

Finding 3: *Supporting students of color in college and career readiness and in enrolling in and passing advanced coursework is another evidence-based strategy for closing gaps in HS attainment and college enrollment. The EBF could be used to help capture/reflect the costs of doing so for students of color within districts' Adequacy Targets. The education omnibus package included a provision to help remove barriers to the placement of students of color into advanced coursework in high school. While access to early college coursework is important, research suggests that students are more likely to succeed in passing said courses and the associated assessments when they have access to additional academic supports. This could be achieved by adding a cost factor, similar to the existing "gifted" cost factor, specifically to capture the costs of providing supports for success in early college coursework.*

Professional Review Panel Membership

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Governor JB Pritzker signed Public Act 101-0654 (Ammons/Lightford) into law on March 8, 2021. The measure is major education reform legislation designed to address systemic issues that cause deep inequities and opportunity gaps in education. This law takes powerful steps forward to ensure all our students have access to rigorous learning opportunities that will prepare them to succeed every step of the way after high school. A portion of the Act charges the Professional Review Panel (PRP) with the following tasks:

To ensure that (i) the Adequacy Target calculation under subsection (b) accurately reflects the needs of students living in poverty or attending schools located in areas of high poverty, (ii) racial equity within the Evidence-Based Funding formula is explicitly explored and advanced, and (iii) the funding goals of the formula distribution system established under this Section are sufficient to provide adequate funding for every student and to fully fund every school in this State, the Panel shall review the Essential Elements under paragraph (2) of subsection (b). The Panel shall consider all of the following in its review:

(A) The financial ability of school districts to provide instruction in a foreign language to every student and whether an additional Essential Element should be added to the formula to ensure that every student has access to instruction in a foreign language.

(B) The adult-to-student ratio for each Essential Element in which a ratio is identified. The Panel shall consider whether the ratio accurately reflects the staffing needed to support students living in poverty or who have traumatic backgrounds.

(C) Changes to the Essential Elements that may be required to better promote racial equity and eliminate structural racism within schools.

(D) The impact of investing \$350,000,000 in additional funds each year under this Section and an estimate of when the school system will become fully funded under this level of appropriation.

(E) Provide an overview of alternative funding structures that would enable the State to become fully funded at an earlier date.

(F) The potential to increase efficiency and to find cost savings within the school system to expedite the journey to a fully funded system.

(G) The appropriate levels for reenrolling and graduating high-risk high school students who have been previously out of school. These outcomes shall include enrollment, attendance, skill gains, credit gains, graduation or promotion to the next grade level, and the transition to college, training, or employment, with an emphasis on progressively increasing the overall attendance.

(H) The evidence-based or research-based practices that are shown to reduce the gaps and disparities experienced by African American students in academic achievement and educational performance, including practices that have been shown to reduce disparities in disciplinary rates, drop-out rates, graduation rates, college matriculation rates, and college completion rates.

In order to understand the complexities of the tasks assigned, an overview of Evidence-Based Funding is required.

Evidence-Based Funding Model Overview

The [Illinois Evidence-Based Funding \(EBF\) Model](#)¹ was created by a product of the work of many education groups in Illinois. They came together to address the inequality in school funding in Illinois. EBF includes 34 cost factors that are incorporated in a formula that considers each school district's unique student population. Governor Bruce Rauner signed Public Act 100-0465 (Manar/Davis) into law on August 31, 2017. There are four major components of the funding model in the Act. First, the model calculates a unique Adequacy Target for each Organizational Unit in this state that considers the costs to implement research-based activities, the unit's student demographics, and regional wage differences. Second, the model calculates each Organizational Unit's Local Capacity Target, or the amount each Organizational Unit is assumed to contribute toward its Adequacy Target from local resources. Third, the model calculates how much funding the state currently contributes to the Organizational Unit and adds that to the unit's Local Capacity to determine the unit's overall current adequacy of funding. And finally, the model's distribution method allocates new state funding to those Organizational Units that are least well-funded, considering both Local Capacity and state funding, in relation to their Adequacy Target. Additionally, the funding formula considers district inequalities in their funding in the overall EBF calculation. The Essential Elements of the EBF formula consist of cost factors that are included in the calculations. The Illinois State Board of Education (ISBE) seeks through EBF to provide "adequate" funding to all 851 districts in the state of Illinois, paying close attention to our most vulnerable students.

The "essential elements" of the EBF formula consist of cost factors that are included in the calculation of districts' Adequacy Targets. The EBF cost factors reflect research on those educational inputs that have been demonstrated to have a positive impact on student outcomes. They provide staffing ratios for both core positions, including supports for students with special needs, which apply to all enrolled students, and select additional factors that are associated with providing a high quality education for specific student groups, including students designated as English Learners, and students from low-income households. The Adequacy Target calculation also includes a number of cost factors associated with per-pupil costs rather than staff positions.

Based on how well-funded districts are with current state and local funding relative to their Adequacy Targets (their percent of adequacy) districts are placed into four "tiers". Districts furthest from full funding are placed into Tier 1 (the threshold for placing districts into Tier 1 is dynamic, based on the amount of new funding allocated for EBF in a given year, and in FY22 included all districts below 68.48% of adequacy in Tier 1). Districts below 90% of full funding are in Tier 2, those between 90-100% are in Tier 3, and those funded at or above 100% of Adequacy are in Tier 4. Districts' Tier designation then dictates the amount of new funding districts receive. Half of all new state funding (50%) in a given year is distributed through Tier 1 mechanics, 49% is distributed through Tier 2 mechanics, with those funds distributed to both Tier 1 and Tier 2 entities, .09% is distributed to Tier 3 entities, and .01% is distributed to Tier 4 entities. The statute includes a provision creating the "Minimum Funding Level" which requires the state to appropriate at least \$350 million each year in new state funds for EBF, with \$50 million of that amount automatically set aside for Property Tax Relief Grants, and the remaining amount distributed through the EBF Tiers. If the state appropriates less than the Minimum Funding Level, a change in the formula for distributing new funds is triggered to prioritize the districts furthest from full funding.

EBF's provision of stability and equity for state K-12 funding and site-based expenditure reporting's² resource allocations inspire this priority area of ISBE's Strategic Plan³. As districts receive new dollars or stretch existing dollars, they face the challenge of spending those dollars strategically and aligning fiscal

solvency with student success priorities. School system leaders know their students best and are therefore best equipped to make these decisions within their district. At the same time, the state has a responsibility to support these decision-makers by providing user-friendly data and tools, encouraging collaboration between finance and program area leaders, educating practitioners on funding expectations and requirements, and maximizing the equity of resources available to districts. (ISBE 2020-2023 Strategic Plan)

The Professional Review Panel created an Ad Hoc Committee consisting of the following members to complete this review:

Dr. Marcus Belin, Principal, Huntley High School
Tianna Cervantez, Galesburg CUSD 205 Board Member
Susan Harkin, Superintendent, CUSD 300 (Chair)
Dr. Rebecca Hinze-Pifer, University of Illinois Champaign
Ralph Martire, Executive Director, Center for Tax and Budget Accountability
Unique Morris, Illinois Education Association
Dr. Gregg Murphy, Regional Superintendent, I-KAN
Dr. David Negron, Superintendent, Maywood-Melrose Park – Broadview SD 89
Jane Russell, Secretary-Treasurer, Illinois Federation of Teachers
Robin Steans, President, Advance Illinois
Gary Tipsord, Superintendent, LeRoy CUSD 2
Heather Wendell, Chief Budget and Grants Officer, Chicago Public Schools 299
Dr. Ann Williams, Chief Financial Officer, CSBO, East Aurora School District 131

Members of the PRP Ad Hoc Committee and ISBE staff reviewed the Essential Elements as part of our research and discussion process. This was an essential component in addressing the purpose of this PRP Ad Hoc Committee’s purpose and findings. The committee met biweekly beginning in April 2021 in order to research the topics and compile a comprehensive report. The committee established the following guiding questions to be answered for each task when applicable:

- What is the research base/evidence for the impact of this intervention on student outcomes?
 - Included in this answer should be a description/definition of the group’s shared understanding of the intervention, which also should detail the grade levels and student populations to which it applies, if relevant.
 - Include criteria for evaluating sufficient impact to be considered “evidence-based” and whether this intervention meets that standard of evidence.
- How do elements or mechanisms currently included in Illinois’ Evidence-Based Funding formula work to address this item?
- What potential input might the PRP make for adjustments to Illinois’ EBF formula to ensure this item is addressed? If this is not an item that the committee concludes is most effectively addressed by the EBF formula, how might it otherwise be addressed outside of the EBF formula?

¹ Additional background on EBF can be found at <https://www.isbe.net/ebfdist>.

² Information on site-based expenditure reporting can be found at www.isbe.net/site-based.

³ ISBE Strategic Plan can be found at <https://www.isbe.net/Pages/Strategic-Plan.aspx>.

Task (A) The financial ability of school districts to provide instruction in a foreign language to every student and whether an additional Essential Element should be added to the formula to ensure that every student has access to instruction in a foreign language.

1. Relevant Research

What is the research base/evidence for the impact of this intervention on student outcomes?

“The Illinois State Board of Education supports biliteracy, not only to prepare students to thrive in an increasingly global society and economy, but also to build stronger and more connected communities here at home. Exploring and interacting with different cultures and perspectives strengthens students’ critical thinking and problem-solving skills.”

-- State Superintendent of Education Dr. Carmen I. Ayala

The adoption of the new learning standards for world languages ushered in a new age of accepting second language acquisition as important for Illinois students to learn. World languages can be useful in many ways. The U.S. Bureau of Labor Statistics found that foreign-born workers made up 17.4 percent of the 2019 labor force (U.S. Bureau of Labor Statistics, 2020). The concept of college and career readiness, now more than ever, must shift to include and foster high-quality education that will allow American students to be competitive in the global market. More industries, both domestic and abroad, have begun to require that applicants have language proficiencies other than English (Commissions on Language Learning, 2017; Damari et al., 2017; O’Rourke et al., 2016); thus, the value of multilingualism and bilingual proficiency in K-12 schools is relevant to this pursuit. Languages can help us communicate with people from other countries. Learning about the language development in those countries is part of that process. Language development may help us understand idioms, sayings, and popular language vernacular spoken in a particular country. Research overwhelmingly provides evidence of the impact of learning a second language on our students’ cognitive development.

Students taught world languages early in elementary school have shown the following: an increased cognitive ability, better native-like pronunciation, enhanced skills in English, and higher scores on standardized exams (Davis-Wiley & Miller, 2013; Gilzow & Rhodes, 2000; Marcos, 1997; Stewart 2005). Research shows dual language programs improve students’ learning in English. Early indicators in North Carolina conducted between 2007-10 found that low-income black students learning a foreign language in dual- language programs surpassed similar students taught in one language. Additionally, as fifth graders, they were reading at a sixth-grade level, according to a study conducted by George Mason University. Dual language programs help English Learners (ELs) reach English language proficiency and eventually perform at or above grade level in core content areas (Collins, 2014; Lindholm-Leary, 2016; Lindholm-Leary & Block, 2010; Lindholm-Leary et al., 2018). Students enrolled in dual language programs, regardless of native language, also see gains in reading/language arts and math scores on state assessments (Lindholm-Leary et al, 2018, Collier & Thomas, 2004; Utah State Department of Education, n.d.).

This may mean that the cognitive benefits of being bilingual can help students have a learning advantage as their educational career continues. The benefits of speaking two languages are well documented.

Being bilingual has been linked to health benefits. Research recently found that there is [growing evidence](#) to suggest that bilingualism can delay the onset of dementia and Alzheimer's disease, for example. Other benefits of being bilingual include recovering faster from a stroke, lower stress levels, and delaying many effects of aging. Second language learning benefit includes ELs who are educated in their own language. Studies suggest that former ELs outperform monolingual students as they continue to develop second language skills. Therefore, we might make the case that second language skills as a cognitive development strategy may help us reduce the achievement gap like it does with ELs.

2. EBF at Present

How do elements or mechanisms currently included in Illinois' Evidence-Based Funding formula work to address this item?

The Illinois Evidence-Based Funding formula includes several definitions relevant to understanding how the Evidence-Based Funding formula presently captures the costs of providing instruction in foreign language to students in grades K-12.

- *World Language* - Within the EBF statute, "world language" is used to refer to foreign language instruction.
- *Core teacher* - "Core teacher" is defined in the EBF statute as "a **regular classroom teacher** in elementary schools and **teachers of a core subject** in middle and high schools".
- *Core Subject* - Courses that are considered "core subjects" according to EBF statute, include the following: Science; Reading, English, Writing, Language Arts, History and Social Studies; **World Languages**; and subjects taught as Advanced Placement. Additionally, the term "core teacher" is used in the fifth cost factor provided for English Language Learner supports.
- *Specialist teacher* – According to the EBF statute, "a teacher who provides instruction in subject areas **not included in core subjects**, including, but not limited to, art, music, physical education, health, driver education, career-technical education, and such other subject areas as may be mandated by State law or provided by an Organizational Unit."

The implication of these sections of existing EBF statute is that all districts currently have included in their Adequacy Targets the cost of providing "regular classroom teachers" in the elementary grades and "core teachers," including world language teachers, in the middle and high school grades, at the class size ratios included in the Core Investments section of the EBF formula (15:1 student-to-teacher ratio in Grades K-3 for students from low-income households and 20:1 for students not from low-income households, and 20:1 in Grades 4-12 for low-income students and 25:1 for Grades 4-12 for students not from low-income households). At present however, there is no definition in statute specifying what subjects or types of FTEs are considered to be included in the description of "regular classroom teacher" in the elementary grades. It may be worth clarifying in statute whether, as in the middle and high school grades, world language teachers are considered "regular classroom teachers" in the elementary grades, or whether those FTE's

are considered Specialist teachers. This would allow for analysis of whether, at full funding, the current staffing ratios would allow for a district to both be at the recommended class sizes and provide world language instruction to all students *in all grades*. This may be a topic worth further exploration/analysis by the Illinois State Board of Education, but at present, it is the understanding of the Ad-Hoc Committee that the Adequacy Target calculation meets the condition presented in Charge A of reflecting the cost of providing “instruction in a foreign language to every student” at some point over the course of their educational experience, specifically in relationship with grades 6-12.

Finding

What potential input might the PRP make for adjustments to Illinois’ EBF formula to ensure this item is addressed? If this is not an item that the committee concludes is most effectively addressed by the EBF formula, how might it otherwise be addressed outside of the EBF formula?

Finding: Because the cost of providing world language instruction is captured for middle and high school grade levels in the core teacher section of the Core Investments calculation within districts’ Adequacy Targets, the Professional Review Panel’s preliminary finding is that ensuring every student has access to this kind of instruction begins with working to fund the EBF to its full level as soon as possible. This will help districts hire additional foreign language and or bilingual teachers who will be needed to implement the teaching of foreign languages with fidelity in rural, suburban, and urban districts. In addition however, it may be worth exploring the need for clarification in statute of whether world language teachers best fit into the category of “regular classroom teacher” or “specialist teacher” in the elementary grades, in order to help clarify future analysis of the extent to which the current cost factors reflect the cost of providing foreign language instruction in the early grades.

Additionally, if the state wishes to address the issue of increasing access to foreign language and dual language instruction for K-12 students in the immediate term, the state might consider creating a grant program outside of the EBF formula, with priority given to Tier I and II districts, to begin to address resource needs related to expanding high-quality foreign language instruction, including staffing challenges for underfunded districts. We note, however, that grant programs that operate outside of the EBF may slow down progress toward adequacy and, unintentionally or otherwise, undermine the broad equity focus at the heart of the funding formula.

Task (B) The adult-to-student ratio for each Essential Element in which a ratio is identified. The Panel shall consider whether the ratio accurately reflects the staffing needed to support students living in poverty or who have traumatic backgrounds.

1. Relevant Research

What is the research base/evidence for the impact of this intervention on student outcomes?

Concentrated Poverty

Impact on student opportunity/outcomes

Poverty has been demonstrated by research to have a significant negative impact on children’s academic opportunities and outcomes. From an early age, low levels of household financial resources are associated with [inadequacies in both physical and cognitive development](#), as children living in low-income households and their families face barriers to accessing basic resources needed for both types of growth - - from nutrition and housing to high-quality early childhood education and care. These gaps in resources as well as access to high-quality early educational opportunities often manifest themselves once children reach school age in the form of [academic proficiency gaps](#).

Two aspects of poverty can be considered when working to understand whether some students from low-income households may benefit from additional or different supports for learning – the depth of poverty (or how far below the national poverty level a family’s household income is) and the concentration of poverty within a school district (or how many students within a given area or school community are living in low-income households). The U.S. Census Bureau defines “[deep poverty](#)” as living in a household with a total income of less than 50 percent of the poverty threshold. Illinois presently lacks the data to accurately characterize varying or average depth of poverty at the school or district level, although neighborhood levels of depth of poverty already collected as part of federal Census data could provide a possible avenue for understanding districts’ depth of poverty in the future.

Data on the second aspect – that of poverty concentration -- is currently available and, indeed, counts of students from low-income households are already used in the EBF calculation of adequacy. (More detail on this is included in the next section.) Some studies suggest that the greater the proportion of students in a school or district who are living in poverty, the more supports those students -- and, indeed, all students -- in the school or district will need to achieve and thrive academically, ad socially, and emotionally. A number of studies suggest there may be a [threshold or “tipping point”](#) of the percentage of a district’s students living in poverty, such as those with greater than 50-60 percent of students in low-income households, above which student learning needs increased dramatically.

Evidence-based interventions

A number of supports and interventions have been tied to demonstrable positive impacts for students from low-income households. Those with the largest effect sizes include tutoring on a [one-on-one basis](#), extending [instructional time](#) by lengthening the school day, and providing instruction and targeted supports over the [summer](#). Supports aimed at social-emotional development and mental health are also associated with positive outcomes and narrowed outcome gaps for students from low-income households living in concentrated poverty, in large part as a result of the fact that these students experience trauma at disproportionate rates compared to their non-low-income peers. More information about research on interventions associated with exposure to trauma is included in the next section.

The research does suggest that students in areas with high rates of concentrated poverty likely benefit from more complex, higher dosage, and comprehensive combinations of interventions than those living in low-poverty areas. More [extensive districtwide services](#) and resources are needed to provide an adequate education in districts that serve higher concentrations of students in poverty, including wraparound services for social services, health care, and nutrition. Designing and implementing a set of comprehensive supports aimed at meeting the needs of a student population with a high concentration of poverty carries a greater cost than providing targeted supports for a small proportion of a student population from low-income households. It is for this reason that in some states, additional grant dollars

are directed to districts with high levels of concentrated poverty.

Trauma

Impact on student opportunity/outcomes

A traumatic event is defined by the [American Psychological Association](#) as “a frightening, dangerous, or violent event that poses bodily or psychological harm or is a threat to a student’s life or a loved one.” Over 60 percent of surveyed children experienced a form of trauma in the prior year, with some experiencing multiple traumas, according to the National Survey of Children’s Exposure to Violence. Traumatic experiences cause a constant heightened state of stress known as “[toxic stress](#)” and have been found to disrupt children’s brain development, affect their behavior and emotional responses, and have pronounced negative effects on a child’s ability to [learn](#). Trauma can be experienced at the individual level, and research suggests there are also environmental sources of trauma, like community violence, crime, and police violence, as well as historical trauma, like that caused by the experience of racism.

Children exposed to such experiences often withdraw from social situations; have difficulty responding to social cues; and may be distrustful of adults and authority figures, including educators. When these reactions to traumatic experiences are punished by institutions like schools, a cycle of trauma is created as the child’s stress is compounded, worsening the problem through the introduction of consequences rather than supporting the child in the process of healing and adjustment. Studies have shown that traumatic experiences in childhood can negatively impact a student’s success at school. This can lead to poor academic performance, inappropriate behavior in the classroom, and difficulty forming relationships.

Evidence-based interventions

Schools, where children spend the bulk of their time and where they develop socially and emotionally as well as academically, have a significant role to play in working break rather than reinforce the cycle of trauma. Research shows that they can do so and can help bring about positive outcomes for students and families by providing children with a safe, stable, and supportive environment. There are a number of models for creating trauma-responsive or [trauma-sensitive schools](#), but all contain the same or similar elements. These include leadership that is actively working to address trauma in practices and protocols, professional development aimed at creating trauma-responsive school environments, creation of a supportive school climate and culture, and an emphasis on family engagement. In terms of staffing, having [professionals](#) who are trained to address students’ mental health needs, such as psychologists, social workers, and guidance counselors, are an important structural component of supporting students who have been exposed to trauma. More information about specific components of trauma-responsive frameworks and school level approaches can be found in Research Appendix B.

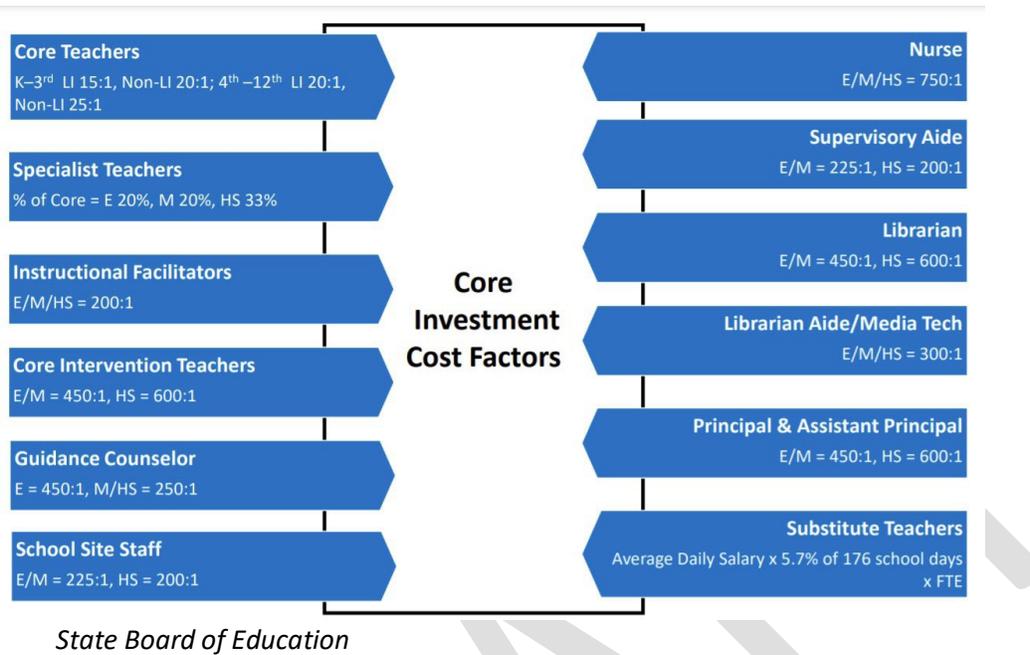
2. EBF at Present

How do elements or mechanisms currently included in Illinois’ Evidence-Based Funding formula work to address this item?

Cost Factors

A staffing ratio is identified for “core investments” and “additional investments” within the EBF formula as a component of calculating the cost of providing these elements within each school district’s Adequacy Target A list of staffing ratios for “core investments” is included in Figure 1.

Figure 1



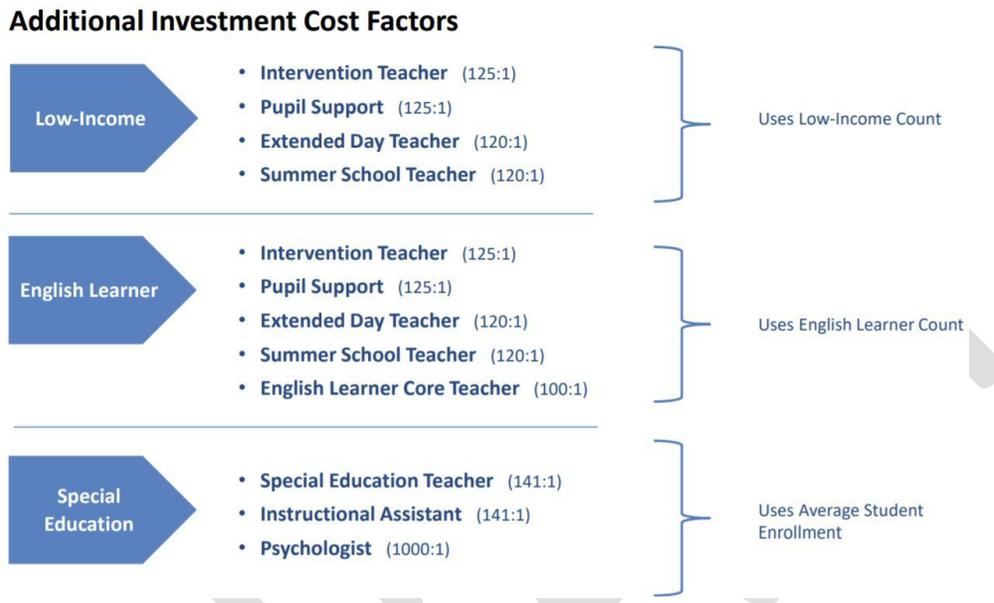
Staffing ratios for core investments are based on overall district enrollment, rather than differentiated based on student demographic characteristics, with the exception of the class size ratio that is used to determine the number of core teachers needed within each district. The class size ratio is differentiated to reflect evidence that students from low-income households benefit most from smaller class sizes (as evidenced by larger effect sizes for this student population in relevant research). As such, class size within the Adequacy Target calculation is set at a 15:1 student-to-teacher ratio in Grades K-3 for students from low-income households and 20:1 for students not from low-income households, and at 20:1 in Grades 4-12 for students from low-income households and at 25:1 in Grades 4-12 for students not from low-income households.

The “additional investments” in the formula also include staffing ratios, which are based on the number of students in specific demographic categories within each district. These investments include staffing ratios related to the number of students from low-income households within a district. The formula uses data from the Illinois Department of Human Services (IDHS) on eligibility for and participation in several means-tested programs to secure district low-income student counts, including students who “are eligible for at least one of the following low-income programs: Medicaid, the Children's Health Insurance Program, Temporary Assistance for Needy Families, or the Supplemental Nutrition Assistance Program, excluding pupils who are eligible for services provided by the Department of Children and Family Services” ([Illinois School Code, Article 18](#)).

The EBF Adequacy Target calculation also includes staffing ratios related to the number of students designated as English Learners that a district serves. Finally, three staffing ratios are related to providing supports to students with Individualized Education Programs (IEPs). These cost factors are tied not to the count of students with IEPs in a district, but instead allocated based on overall district enrollment (like the core

Investments). For all three of these categories, EBF legislation requires that new tier funding dollars attributable to each of these student groups in a given year must be spent on services for these specific groups. Districts must articulate how they intend to spend new tier funding in keeping with this requirement in the annual spending plans they submit to ISBE at the beginning of each school year.

Figure 2



State Board of Education

The “additional investments” associated with district low-income student counts are all based in evidence of the positive impact of these supports for students from low-income households. Several of the existing cost factors, namely the psychologist factor and the “pupil support factor,” which refers to “a nurse, psychologist, social worker, family liaison personnel, or other staff member who provides support to at-risk or struggling students,” have been shown to benefit students exposed to trauma.

The current cost factors associated with students from low-income households result in higher Adequacy Targets for districts associated with the more students from low-income households they serve, the current cost factors do not reflect the even higher costs that research suggests may be appropriate for providing a high-quality education to students living in districts with especially high concentrations of poverty. None of the cost factors are tied specifically to the number of students who have experienced trauma.

Additional EBF Mechanisms Related to Poverty Concentration

The Evidence-Based Funding formula’s calculation of each district’s existing resources also includes an adjustment relevant to poverty concentration in school districts. Prior to the enactment of the formula, districts received a portion of state funding through a “poverty supplemental grant.” Districts with higher concentrations of poverty received more funds per pupil from this grant. Districts receive the same amount of funding from this grant that they received in fiscal year 2017 as part of their Base Funding Minimum. But in order to “avoid penalizing low-income districts when the system is not adequately funded, the poverty supplemental is discounted by the degree to which the district is fully funded” in the calculation of districts’ Percent of Adequacy for the sake of placement in the EBF tiers and distribution of

new tier funding through EBF in a given year. This reduces the amount of state funding recognized by the formula for districts serving the most low-income students in the state that are also furthest from full funding.

Findings

What potential input might the PRP make for adjustments to Illinois' EBF formula to ensure this item is addressed? If this is not an item that the committee concludes is most effectively addressed by the EBF formula, how might it otherwise be addressed outside of the EBF formula?

Finding 2: *The Whole Child Task Force should research and make recommendations related to state data collection on student exposure to trauma. The PRP can, in turn, consider the appropriateness of tailoring cost factors to address those needs at a later point in time. At present, the State of Illinois does not have state-level data that is comparable across school districts that captures student exposure to trauma. To some extent, because of the interplay of trauma and poverty, addressing poverty and concentrated poverty within the formula and including staffing ratios for positions like psychologists, social workers, and guidance counselors will also begin to address the needs of students who are likely to have experienced trauma. Ideally, however, more detailed information specifically about student exposure to trauma at the school, district, or community level would help better tailor Adequacy Targets based on student need.*

The creation of such a measure or index could possibly entail the combination of data from multiple existing sources relating to things like levels of community violence, connectivity with IDHS, levels of student mobility, and youth in foster care, or might involve introduction of tools or protocols for collecting new information. It is the PRP Ad Hoc Committee's belief that the state's Whole Child Task Force, which is charged with making recommendations to the state concerning "the key data to be collected and reported to ensure that this state has a full and accurate understanding of the progress toward ensuring that all schools, including programs and providers of care to prekindergarten children, employ restorative, anti-racist, and trauma-responsive strategies and practices," is best positioned to undertake the work of considering and making recommendations on how the state could measure student needs related to experiences of trauma ([PA 101-0654](#)). The state's Resilience Education to Advance Community Healing (REACH) pilot will likely also yield information about promising practices for measuring student needs related to trauma in the coming years.

Finding 3: *To provide an additional data point that can be used in the calculation of districts' Adequacy Targets related to poverty concentration, the state can explore ways to measure depth of poverty (potentially using Census block-level data) in the future. Information on depth of poverty within school districts could potentially allow Adequacy Targets to be even more specifically tailored to districts' unique student populations. In order to avoid creating additional administrative burden by creating new avenues for data collection, it is worth exploring whether statewide, comparable data on depth of poverty that is applicable at the school district level could possibly be gathered from federal sources, like the American Community Survey, or created from the existing data on family income used to determine eligibility for means-tested programs and free-or reduced lunch.*

Task (C) Changes to the Essential Elements that may be required to better promote racial equity and eliminate structural racism within schools.

It is important to note that there is significant overlap in the content of Task C and Task H, which focuses on exploring evidence-based practices that reduce opportunity and outcome gaps for African American students specifically. The Ad Hoc Committee acknowledged and discussed this overlap, noting that structural racism and the inequitable opportunities it creates and perpetuates are the cause, whether directly or indirectly, of many of the gaps in opportunities and outcomes experienced by students of color.

The group acknowledged this overlap as it worked to identify evidence-based interventions in keeping with the spirit and intent of the Evidence-Based Funding formula relevant to each charge. It drew some conceptual distinction between Tasks C and H for the sake of organizing research and making recommendations. Task C was construed as relating to creating school environments with healthy school climate and culture that prioritize diversity, equity, and inclusion, and working to make sure mindsets and practices within schools promote equity.

1. Relevant Research

What is the research base/evidence for the impact of this intervention on student outcomes?

Impact on student opportunity/outcomes

Students of color tend to live in racially and socio-economically segregated urban areas (Saporito & Sohoni, 2007), where they may attend underfunded schools and are less likely to receive a high-quality education (Hegedus, 2018; Noguera, 2011; Silva-Laya et al., 2020). Research also suggests that schools, where there are high concentrations of students of color, are also most likely to have higher rates of teacher turnover, less experienced teaching staff, low levels of teacher compensation, and in general lack the resources to provide basic supports needed to effectively teach students (Johnson et al., 2004; Maring & Koblinsky, 2013; Sass et al., 2012; Zimmerman & Astor, 2021). Despite multiple attempts to redress the achievement gap, often with “race-neutral” or “colorblind” strategies, educational inequities persist along racial and ethnic lines (Flores & Gunzenhauser, 2019).

At the national level, Black (80 percent), Latinx (82 percent), and American Indian/Alaska Native (74 percent) students continue to graduate at lower rates compared to their Asian/Pacific Islander (93 percent) and White (89 percent) counterparts (Irwin et al., 2021). Moreover, Black students (57 percent) are less likely to immediately enroll in college after high school, compared to Asian (82 percent), White (69 percent), and Latinx students (64 percent; Irwin et al., 2021). In fact, Black students in 2019 enrolled into college at lower rates than in 2010 (66 percent in 2010 compared to 57 percent in 2021; Irwin et al., 2021). Studies have also found that Black students are overrepresented in punitive disciplinary actions compared to their White counterparts (Barrett et al., 2017; Marchbanks et al., 2018; Ramey, 2015). These findings show that there is an overwhelming need to address racial inequities and structural racism in schools.

Evidence-based interventions

Notably, peer-reviewed evaluative studies describing the impact of equity-explicit interventions on student outcomes are newly emerging. Nonetheless, there are current approaches to promoting racial equity in education that target educator preparation and professional development, culturally responsive

pedagogy, and school climate. More specifically, contemporary methods of reducing teacher bias and improving student performance focus on student-teacher relationships (Gaias, Cook, et al., 2020; Gregory et al., 2017) and the power of student-teacher racial-ethnic and cultural match (Gershenson et al., 2021). A related body of literature has examined how race-conscious curriculum impacts student learning (Duncan-Andrade, 2005; Tintiango-Cubales et al., 2015). Other approaches to redressing racial inequities include reforming punitive disciplinary actions in schools (Jain et al., 2014) and integrating a whole systems approach (Priest et al., 2021).

Studies have examined the effectiveness of programs that target the teacher-student relationship as a viable pathway to reducing and eliminating structural racism in schools. These programs are aimed at improving student outcomes via teacher perceptions and practices, given that teachers' perceptions of students impact their academic expectations and interactions with their students (Gentrup et al., 2020). This evidence suggests a need for interventions to have a direct and explicit focus on equity and to offer concrete strategies for increased bias awareness on the part of educators and attendant behavioral changes in the classroom and increased awareness of bias (Gregory et al., 2019).

It is critical that all pre-service and in-service teachers be trained to engage diverse students, but it is also imperative that efforts be implemented to properly prepare, hire, and retain teachers of color. A host of studies have found that a quality racial-ethnic, teacher-student match results in better teacher-reported outcomes for children, including engagement, motivation, social skills, and school attendance (Rasheed et al., 2020; Redding, 2019). Furthermore, research also suggests that diversifying the teacher workforce benefits White students as much as students of color (Cherng & Halpin, 2016), suggesting that teachers of color are needed in all areas of the state. Non-White teachers are still grossly underrepresented in the teacher workforce in Illinois. In 2020, teachers in Illinois were predominantly White (82.3 percent), whereas the state's student population was more ethnically diverse (47.5 percent White, 26.6 percent Latinx, 16.6 percent Black, 5.2 percent Asian, 4.1 percent Other: Illinois Report Card, n.d.).

2. EBF at Present

How do elements or mechanisms currently included in Illinois' Evidence-Based Funding formula work to address this item?

Cost Factors

At present, EBF does not include any cost factors within its calculation of adequacy, nor components of the formula's distribution mechanism, that are explicitly tied to the race/ethnicity of students within a district, or that are specifically tailored to address systemic racism. Nonetheless, many of the evidence-based cost factors already included in EBF are elements of staffing and programming (like smaller class sizes and extended learning time) that are designed to improve student outcomes in general, and have been proven to have a disproportionately positive and significant impact for historically disadvantaged students, including students from low-income households and students of color.

Additionally, housing discrimination and segregation policies and practices have resulted in students of color being disproportionately concentrated in school districts that also serve a majority of students from low-income households. This overlap means that students of color are more likely to attend schools in the state's most underfunded school districts (those with the lowest Percent of Adequacy). As the formula

distributes the most new state funding in a given year to those districts that are furthest from Adequacy, this dynamic also means that districts serving both high proportions of students from low-income households and students of color should receive the most new funding from EBF tier funding. Analysis from the first several years of the formula suggest this to be the case. However, it is also worth noting that some of the inequity in educational opportunity experienced by students of color results from this relationship between race and residential segregation resulting in concentration of students of color in high-poverty and low-property wealth school districts. Poverty is not -- and should not be -- considered to be a proxy for race. Research has shown that students of color, regardless of their socioeconomic status, face systemic inequities.

Especially relevant for the purposes of this charge, for example, is the existing Professional Development cost factor. This cost factor, which is currently set at \$125 per pupil, reflects expenses related to providing “training programs for licensed staff in schools, including, but not limited to, programs that assist in implementing new curriculum programs, provide data focused on academic assessment data training to help staff identify a student's weaknesses and strengths; target interventions; improve instruction; **encompass instructional strategies for English Learner, gifted, or at-risk students; address inclusivity, cultural sensitivity, or implicit bias; or otherwise provide professional support for licensed staff.**” This cost factor is not, however, differentiated based on any measure of student need or district demographic characteristics.

Findings

What potential input might the PRP make for adjustments to Illinois' EBF formula to ensure this item is addressed? If this is not an item that the committee concludes is most effectively addressed by the EBF formula, how might it otherwise be addressed outside of the EBF formula?

Finding 1: *To better promote racial equity within schools, the state could add a specific professional development (PD) cost factor for PD related to implicit bias and antiracism at a fixed per pupil cost based on overall enrollment, with additional per pupil dollar amount for all students in districts that serve a majority of students of color. Research suggests that professional development and dedicated organizational time and capacity at the school and district levels focused on developing a healthy school culture, reducing implicit bias, and eliminating structural racism are important for all students and schools, but especially important for schools and school districts serving predominantly students of color. At present, the EBF formula includes cost factors associated with providing supports based on student needs for students from low-income households and English Learners but does not capture the cost of reversing or reducing the negative impacts of systemic disadvantage or inequity faced by students of color. This proposed additional PD cost factor would recognize that students of color do not inherently need additional supports by nature of their race/ethnicity, but that these students do face inequities because of historical and existing institutional structures. There is a cost associated with working to dismantle those inequities through training on antiracism and eliminating implicit bias within schools and districts.*

Like the suggested cost factor for poverty concentration, application of this proposed cost factor could also be applied in a graduated fashion. Also, given that this proposed factor would be tied to counts of students by race/ethnicity within a district, it would be important to consider the legality of using a race-conscious or race-explicit metric in estimating costs for the purpose of calculating district Adequacy and distributing state funds.

It is critical to note that this cost factor would not constitute a mandate, nor would it affect curricula, but would instead attempt to ensure districts' Adequacy Targets reflect the costs of providing equity and inclusion-focused professional development. As with all cost factors in EBF, districts have local control and discretion over how to spend Tier funding once they receive it.

Finding 2: *To promote racial equity by increasing educator diversity, the state could add a cost factor for recruitment and retention of diverse educators and leaders which could reflect costs associated with such actions as making systemic changes in hiring practices, loan repayments and scholarships, mentorship, and induction, etc., with an allocation/ratio based on the proportion of students of color a district serves.*

This approach would be a step toward combatting the state's shortage of diverse educators while simultaneously reflecting the value of enabling districts, especially those serving large proportions of students of color, to recruit and retain educators and leaders who reflect the diversity of their student populations. While an important mechanism for attracting and retaining educators of color in the long term is likely to ensure that salaries for educators, especially those teaching in districts serving high proportions of students of color, are competitive, this focus on recruitment, retention, and working conditions could help begin to address the challenge of combatting the state's shortage of diverse teachers.

Task (D) The impact of investing \$350,000,000 in additional funds each year under this Section and an estimate of when the school system will become fully funded under this level of appropriation.

I. Response to Part 1 of the task. The first determination is to identify the impact of increasing EBF funding on a year-to-year basis by \$350 million. Making that determination requires a little statutory language clarification before it can be answered accurately.

It is true that Section (g) of the Evidence-Based Funding for Student Success Act sets a target of increasing state funding for K-12 education by at least \$350 million on a year-to-year basis, but the actual minimum funding increase for formula funding is \$300 million (the Minimum Funding Level), not the \$350 million amount actually specified in statute. The reason for this is the Property Tax Relief Grant (PTRG) established in paragraph 9.5 of Section (g) of the legislation.

Under that section of the statute, the dollar amount of any year-to-year increase in funding the state appropriates for the EBF in a given fiscal year that is in excess of \$300 million, up to and including \$350 million, is dedicated to the PTRG – not to formula funding. When appropriated, this creates up to \$50 million for property tax relief under the EBF for the fiscal year in question. The statute further provides, however, that if any of the funding so dedicated to the PTRG is not actually used for property tax relief in a given year, then such unused PTRG revenue will be distributed to school districts as additional formula funding.ⁱ

This effectively reduces the state's Minimum Funding Level for increased, year-to-year formula funding from the \$350 million specified in the statute to \$300 million each fiscal year – and is precisely how the

EBF has been interpreted by ISBE since the EBF was first implemented in FY 2018.

The three main impacts of making that — or any greater increase in annual formula funding under the EBF — are easy to summarize:

First, per pupil education funding gaps by income, race, and ethnicity will continue to decline. This is because the procedure for distributing new formula funding under the EBF formula has proven to be highly equitable. Under EBF, a calculation is made of how close or far a school district is from its Adequacy Target. This is determined by adding the dollar values of a district’s Base Funding Minimum in a year to its Local Capacity Target and Personal Property Replacement Tax revenue for that year. Next, this sum is divided by that district’s Adequacy Target for the year in question, which produces its Percent of Adequacy. Once each school district’s Percent of Adequacy is computed, all districts statewide are broken into four tiers – with Tier I composed of the least adequately funded districts and Tier IV of the best-funded districts. The cutoff percentage for Tier I and the entry percentage for Tier II will vary each year based on a number of factors, like changes in enrollment and how new funding was distributed the prior year.

For example, in FY 2018, Tier I districts had resources sufficient to cover only 65 percent or less of their Adequacy. In FY 2022 calculations, the Tier 1 group includes districts with less than 68.48 percent of adequate resources. EBF specifies that Tier I districts initially receive 50 percent of all new funding the state allocates to K-12 education in a fiscal year.

Tier II includes those districts that have resources sufficient to cover between the cutoff for Tier I and 90 percent of their respective Adequacy Targets. EBF specifies that Tier II districts share 49 percent of the new state funding devoted to K-12 in a year with Tier I districts.

Tier III includes those districts that have resources that cover between 90 and 100 percent of their respective Adequacy Targets. Tier III districts receive just 0.9 percent of the new funding the state allocates to K-12 under the EBF in a year.

Tier IV includes the best-funded school districts in the state, all of which have resources from their Local Capacity Targets; Personal Property Replacement Taxes; and Base Funding Minimums, which already cover at least 100 of their respective Adequacy Targets. These districts receive just 0.1 percent of all new state-level education funding under the EBF in a fiscal year.

Figure 1 shows how all new K-12 funding from the state has been distributed since the EBF was first implemented in FY 2018.

Figure 1
Allocation by Tier of New State-Level Funding Under EBF Since FY 2018
(No new funding in FY 2021)

New Tier Funding	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total	% of New Money

Tier I	\$326,630,217	\$267,425,205	\$279,548,555	\$0	\$260,762,838	\$1,134,366,815	88.68%
Tier II	\$36,313,680	\$29,596,928	\$29,818,112	\$0	\$36,237,158	\$131,965,879	10.32%
Tier III	\$3,299,490	\$2,700,201	\$2,812,424	\$0	\$2,700,000	\$11,512,114	0.90%
Tier IV	\$366,609	\$300,022	\$312,491	\$0	\$299,999	\$1,279,121	0.10%
Total	\$366,609,996	\$300,022,356	\$312,491,581	\$0	\$299,999,996	\$1,279,123,929	100.00%

Source: CTBA analysis of ISBE EBF calculations

Note how powerful this distribution mechanism is from an equity standpoint, allocating over 89 percent of the new funding for education to those districts that are least adequately funded.

This is crucial for Illinois, given the state's former formula was one of the least equitable in America. It created much greater funding gaps per student for Black and Brown children than for white children.

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Fortunately, EBF is not only reducing the gap in funding for all students regardless of race or ethnicity but is also helping reduce the gap by race and ethnicity, as shown in **Figure 2**.

Figure 2
Average Per Pupil Adequacy Gap by Race, FY 2018 and FY 2022
(Excluding Tier IV Districts and ROEs)

Avg Adequacy Gap Per Pupil by Race/Ethnicity	Per Pupil Adequacy Gap, (weighted) 2018	Per Pupil Adequacy Gap, (weighted) 2022	\$ Change	% Change
White	\$ 3,620	\$3,572	(\$48)	-1%
Black	\$5,001	\$4,803	(\$198)	-4%
Latino	\$5,096	\$4,879	(\$217)	-4%
Total	\$ 4,370	\$4,256	(\$114)	-3%

Source: CTBA analysis of ISBE EBF Full Calculations FY 2018-22; excludes ROEs due to unavailable data

Second, every region of the state will receive enhanced funding for its schools and hence see a reduction in its per pupil funding shortfall, as has been the case since the EBF was implemented in FY 2018.

Figure 3 shows how EBF has been distributed across the state.

Figure 3
Geographic Allocation of New Funding Under EBF

Region	Total New Funding
Cook	\$268,494,750
Collar	\$219,832,546
CPS	\$346,770,006
Downstate	\$444,026,628
Statewide	\$1,279,123,929

Source: CTBA analysis of ISBE EBF Full Calculations FY 2018-22; includes ROEs

Third, if the districts receiving portions of said new, annual state-level increases in K-12 funding under the EBF formula utilize such funding to increase spending in fidelity with the educational elements identified in the statute as evidence-based practices that have been shown to enhance student achievement, those districts should ultimately realize better educational outcomes for students.

Attaining better student outcomes in districts that use new funding in fidelity with EBF is the reasonably anticipated result of enhancing annual formula funding under EBF, because the legislation ties the dollar amount taxpayers invest in schools to paying for those educational practices that research shows actually enhance student achievement over time.

Hence, after the model becomes fully funded, stakeholders can expect to see, for example, growth in student test scores; improved school climates with reduced disciplinary problems; reduced drop-out rates

with corresponding increases in high school graduation and college enrollment rates; and a K-12 system that appropriately serves the social-emotional needs of students from diverse backgrounds. It is worth noting, however, that all of these outcomes are lagging indicators, and thus will take years of stable, sustained investment in districts through EBF before they are realized.

Ultimately, EBF — again, when fully funded — is designed to create a K-12 system with the capacity to provide an education of sufficient quality for all students to graduate high school college and career ready, irrespective of income, race, ethnicity, or geography. With that in mind, as of FY22 the state is still \$4.6 billion short of fully funding EBF.

II. Response to Part 2 of the task. The second part of the task involves identifying how long it will take to fully fund EBF if the state continues to increase year-to-year formula funding by the statutory Minimum Funding Level of \$300 million.

The Ad Hoc Committee and ISBE collaborated with the Center for Tax and Budget Accountability (CTBA) to determine the appropriate methodology to use when projecting how long it will take to achieve full funding at the current pace. For purposes of making that projection, the Ad Hoc Committee, ISBE, and CTBA made the following determinations:

(i) The appropriate target for aggregate, state-level funding under EBF should be predicated on that amount which equates to 90 percent of the sum of all Adequacy Targets for all school districts, given that federal support generally covers anywhere from 8 percent to 10 percent of all K-12 funding in the state. The designs of the EBF distribution in statute defines adequacy as 90 percent.

(ii) The funding target should be adjusted for changes in inflation, based on historical data from the past two decades, to ensure the final targeted amount of funding is actually adequate in real terms. Under that methodology, there is an assumed rate of inflation of 2.96 percent for every school year after 2021-22. Additionally, for ease of calculation, the Ad Hoc Committee, ISBE, and CTBA assumed no changes to student enrollment or Local Capacity Targets from current levels.

Utilizing the aforesaid methodology, if the state were to continue satisfying the Minimum Funding Level of increasing K-12 formula funding under EBF by \$300 million per year, EBF will not be fully funded on an inflation-adjusted basis until 2042, as shown in **Figure 4**.

FIGURE 4
EBF FUNDING IF \$300 MILLION MINIMUM FUNDING LEVEL IS NOT ADJUSTED FOR INFLATION (\$ MILLIONS)

	FY2021	FY 2022	FY2028	FY2034	FY2037	FY2042
Aggregate Funding Gap Before Annual Distribution (infl. adj.)	\$4,528	\$4,624	\$3,514	\$2,191	\$1,437	\$24
New Annual Tier Funding Amount	\$0	\$300	\$300	\$300	\$300	\$24
Remaining Aggregate Funding Gap after	(\$4,528)	(\$4,324)	(\$3,214)	(\$1,891)	(\$1,137)	(\$0)

Distribution of New Tier Funding						
Total Nominal Dollars Put into EBF since FY 2018	\$979	\$1,279	\$3,079	\$4,879	\$5,779	\$7,003

Source: CTBA analysis of ISBE FY 2018, 2019, 2020, and 2021 EBF Calculation using U.S. Bureau of Labor Statistics Employment Cost Index (ECI) historical data.

That is problematic, because in addition to creating the aforesaid Minimum Funding Level for increasing K-12 funding on a year-to-year basis, EBF also committed the state to funding the formula fully within 10 years of its initial implementation, which would be June 30, 2027.ⁱⁱ As of FY 2021, EBF was underfunded statewide by some \$4.6 billion, an amount that is projected grow to over \$4.6 billion by the end of FY 2022,^{iv} according to ISBE. The one inescapable conclusion is that at its current rate of increasing EBF, the state is not close to being on track for satisfying the obligation to fully fund EBF by FY 2027.

To meet the statutory deadline, the Minimum Funding Level of year-to-year increases in EBF formula funding would have to increase from its current amount of \$300 million to \$983 million, in nominal, non-inflation-adjusted dollars, starting in the 2022-23 school year, as shown in **Figure 5**.

FIGURE 5
FULLY FUNDING EBF ON AN INFLATION-ADJUSTED BASIS IN 10 YEARS FROM EBF ENACTMENT (\$ MILLIONS)

	FY2022	FY2025	FY2027
Aggregate Funding Gap Before Annual Distribution (infl. adj.)	\$4,805	\$2,864	\$983
New Annual Tier Funding Amount	\$300	\$983	\$983
Remaining Aggregate Funding Gap after Distribution of New Tier Funding	(\$4,505)	(\$1,881)	\$0
Total Nominal Dollars Put into EBF since FY 2018	\$1,279	\$4,227	\$6,192

Source: CTBA analysis of ISBE FY 2018-22 EBF Calculation using U.S. Bureau of Labor Statistics ECI historical data.

If instead of meeting the existing statutory deadline, the General Assembly desired to fund the EBF on a fully inflation adjusted basis 10 years or 15 years from now, the annual Minimum Funding Level of year-to-year increases in EBF formula would have to increase from its current amount of \$300 million, to either \$527 million (10 years from now, 15 years from enactment of the EBF), or \$376 million (15 years from now, 20 years from enactment of the EBF), as shown in **Figures 6 and 7**, respectively.

FIGURE 6
FULLY FUNDING THE EBF ON AN INFLATION-ADJUSTED BASIS IN 15 YEARS FROM EBF ENACTMENT (\$ MILLIONS) – 10 YEARS FROM 2022

	FY2022	FY2027	FY2032
Aggregate Funding Gap Before Annual Distribution (infl. adj.)	\$4,805	\$2,864	\$527
New Annual Tier Funding Amount	\$300	\$527	\$527
Remaining Aggregate Funding Gap after Distribution of New Tier Funding	(\$4,505)	(\$2,416)	\$0
Total Nominal Dollars Put into EBF since FY 2018	\$1,279	\$3,914	\$6,550

Source: CTBA analysis of ISBE FY2018-FY 2022 EBF Calculations using Bureau of Labor Statistics ECI historical data.

FIGURE 7
FULLY FUNDING THE EBF ON AN INFLATION-ADJUSTED BASIS IN 20 YEARS FROM EBF ENACTMENT
(\$ MILLIONS) – 15 YEARS FROM 2022

	FY2022	FY2027	FY2032	FY2037
Aggregate Funding Gap Before Annual Distribution (infl. adj.)	\$4,805	\$3,593	\$2,108	\$376
New Annual Tier Funding Amount	\$300	\$376	\$376	\$376
Remaining Aggregate Funding Gap after Distribution of New Tier Funding	(\$4,505)	(\$3,216)	(\$1,725)	\$0
Total Nominal Dollars Put into EBF since FY 2018	\$1,279	\$3,161	\$5,043	\$6,924

Source: CTBA analysis of ISBE FY2018-FY 2022 EBF Calculations using Bureau of Labor Statistics ECI historical data.

The Professional Review Panel believes the key objectives are as follows:

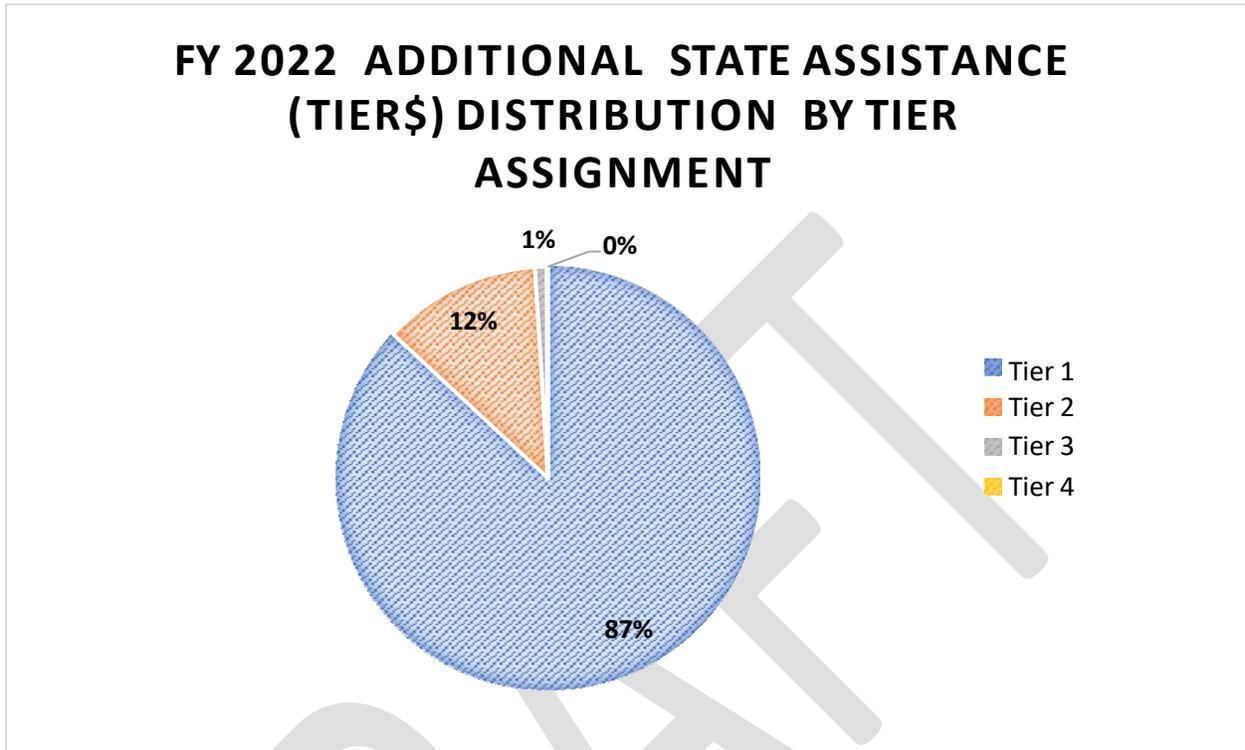
- The large majority of new funding is allocated to Tier I district that are furthest from adequacy.
- The model results in a reduced reliance on local property taxes as evidenced by the Property Tax Relief Grant in the EBF statute.
- The model will move districts to adequacy by 2027.
- Ensuring that annual appropriations guarantee that all schools districts receive allocations no less than what was received the prior year.

At the current rate of investment, it will not be possible to satisfy every key objective of the legislation. One key objective that is being satisfied is the goal of ensuring the majority of new, year-to-year tier formula funding from the state be allocated to Tier I districts. This was a key objective because those districts are furthest from their respective Adequacy Targets and, hence, have the greatest needs. Given that, as cited previously, to date 89 percent of all new year-to-year formula funding has gone to Tier I districts, this objective has been met.

However, another key goal of the legislation is to shift responsibility for funding K-12 education to rely on more state-based resources and away from being overreliance on local property taxes. Indeed, this was such an important goal that EBF even includes the PTRG -- a specific provision for property tax relief. If the state continues to increase year-to-year formula funding by a flat, \$300 million in nominal, non-inflation adjusted dollars, however, it is highly unlikely that such a shift will occur, given that annually the amount of property taxes used to fund K-12 education tends to grow by inflation.

The impact of the continued overreliance on property taxes to fund education will be felt most acutely in Tier II districts. This is because they have less than 90 percent of their respective Adequacy Targets in resources and, by design, receive a significantly lesser distribution of new state-level formula funding, as indicated in Figure 6. Hence after accounting for the impact of inflation, the state's 362 Tier II districts will have to continue to over rely on increasing their annual property tax levies, if they hope to develop the capacity to fund the evidence-based educational practices identified in EBF. Depending on Local Capacity and tax tolerance, this may ultimately result in a number of Tier II districts transitioning to Tier I over time.

Figure 6



Tier	Tier Distribution (in millions)	Number of Org. Units	Average Tier \$ per Pupil
1	\$260.8	320	\$354.41
2	\$36.2	362	\$61.95
3	\$2.7	65	\$25.39
4	\$0.3	175	\$1.02

Source: Illinois State Board of Education

Findings

Finding 1: *Attaining better student outcomes in districts that use new funding in fidelity with EBF is the reasonably anticipated result of enhancing annual formula funding under EBF, because the legislation ties the dollar amount taxpayers invest in schools to paying for those educational practices that research shows actually enhance student achievement over time.*

Hence, after the model becomes fully funded, stakeholders can expect to see, for example, growth in student test scores; improved school climates with reduced disciplinary problems; reduced drop-out rates with corresponding increases in high school graduation and college enrollment rates; and a K-12 system that appropriately serves the social-emotional needs of students from diverse backgrounds. It is worth noting, however, that all of these outcomes are lagging indicators, and thus will take years of stable, sustained investment in districts through EBF before they are realized.

Finding 2: *The state would need to increase the annual funding allocation to \$983 million (excluding the property tax relief portion) in order to reach full funding by 2027, or change the legislation to reflect a more accurate projected timeline of 2042 to fully fund the model based on the current \$300 million/year allotment. Alternatively, the state might adopt the goal of reaching full funding by 2032 – a goal that would necessitate an annual increase of \$527 million.*

The Committee’s findings related to other charges (Charges B, C, and H) also include a number of possible adjustments or additions to cost factors currently included in the Evidence-Based Formula’s calculation of districts’ Adequacy Targets. Adding cost factors to the formula would increase the overall cost of fully funding the system, and as such, should also be associated with a proportional increase in the state’s Minimum Funding Level, in order to ensure the state continues to make progress toward full funding. Any actions resulting from these recommendations should also balance the real tensions of updating the model to more accurately reflect the true cost of an evidence-based education for all students with the increases to the state’s expected contribution/Base Funding Minimum and the timeline to full funding.

Task (E) Provide an overview of alternative funding structures that would enable the State to become fully funded at an earlier date.

Finding

Finding: *It is outside the purview of the Professional Review Panel to identify alternative funding structures that would enable the state to fully fund EBF by FY 2027, as provided in statute. It is up to the General Assembly and Governor to identify such additional revenue sources and/or fiscal reforms as could be implemented by the state to fund the EBF model fully by its statutorily created deadline.*

Elements or mechanisms to create alternative funding structures that would enable the state to fully fund EBF at a faster pace than the current, \$300 million in new funding per year do not exist within the EBF formula itself. With that in mind, the Ad Hoc Committee -- with the support of ISBE -- will conduct financial analysis and project outcomes as requested based on the EBF model.

Task (F) The potential to increase efficiency and to find cost savings within the school system to expedite the journey to a fully funded system.

Evidence-Based Funding Spending Plans that are required to be submitted by all organizational units receiving EBF funds are designed to support districts in strategic decision-making in investments for student needs, with a particular emphasis on students from low-income backgrounds, students with IEPs,

and English Learners. Without these data points, districts and communities are limited in their opportunities to understand and influence resource allocation in the service of students. The EBF Spending Plan represents an opportunity to connect these dots for district and community decision-making. This plan is best completed when the finance and program departments within a district collaborate. The FY 2022 EBF Spending Plan represents an opportunity for district leaders to develop and refine the story behind their allocation decision-making processes to yield more meaningful -- and, eventually, public -- data. Future iterations of the EBF Spending Plan will be integrated into another existing collection ISBE will continue to engage with the field as the EBF Spending Plan evolves iteratively.

We have made an effort to determine efficiencies within the model. Our conclusion is that the model should exist to identify evidence-based best practice that leads to the increased potential of positive student outcomes. We believe that the model is to be modified and changed according to current research and the analysis of how it is performing specifically for the students of Illinois. The artificial manipulation of the elements to create efficiencies would only happen at the expense of the elements of best practice. The redundancy of resourcing is an area where we found that a fair analysis and application of the model was useful to find efficiencies. Consider where we fund for particular expectations both within the model and outside or independent of the model.

Additionally, federal dollars could be used in conjunction with EBF funding to increase efficiencies. As an example, Title II funds are typically used for professional development. If, evidence based best practices are identified through the use of the EBF model, those same practices can be incorporated into the professional development plans for a district and paid for by the Title II grant. As this funding source already exists, a district could increase efficiencies by assuring that professional development plans align to the needs of special populations as defined in the EBF model.

Finally, the ability of a district to utilize EBF to implement evidence-based practices identified in the model may be compromised due to the ongoing COVID-19 pandemic. The significant, on-time federal assistance tied to the pandemic makes it challenging to determine how much deficit spending is actually occurring in districts today. Depending on how much a district receives, how quickly it spends the assistance, and what it spends the assistance on skews the picture of district fiscal capacity across the state.

Finding

It is recommended to review potential redundancies in resourcing at the state and local levels. There are opportunities to identify potential redundancies in resourcing at the state and local levels that should be explored further.

Task (G) The appropriate levels for reenrolling and graduating high-risk high school students who have been previously out of school. These outcomes shall include enrollment; attendance; skillgains; credit gains; graduation or promotion to the next grade level; and the transition to college, training, or employment, withan emphasis on progressively increasing the overall attendance.

Finding

Finding: *The appropriate levels for reenrolling and graduating high-risk high school students who have been previously out of school cannot be determined without additional research. Our recommendation would be to convene a Professional Review Panel committee to further discuss how to best support this important work. The committee could be an extension of the existing Programs Committee with said committee being appointed by the chair of the Professional Review Panel per the Rules of Procedure and starting research in January of 2022. The existing Program Committee members may be appropriate for this new committee, but other stakeholders should also be considered for membership. Further research conducted by this committee would include, but not be limited to, the following:*

- Thoughtful analysis of existing alternative education models (e.g., ROE, school district, etc.);
- A review of current funding mechanisms for alternative programs;
- Exploration of possible mechanisms for understanding costs associated with educating and reenrolling at-risk students and related distribution of state funding to meet those needs;
- Creation of a funding formula specific to at-risk students using a framework similar to that of EBF;
- Research on proactive measures to reengage at-risk students; and
- Consideration of how any newly proposed structures would align with existing programs in place through an ROE or in individual school districts.

It is also worth noting that the State Task Force on Re-Enrolling Students who dropped Out of School produced a report containing information relevant to this charge in 2008. However, as over a decade has passed since that report was created, the committee tasked with studying and making recommendations specific to this issue and its relationship to the Evidence-Based Funding formula may also benefit from updated information on many of the topics included in that initial report.

105 ILCS 5/, Evidence-Based Funding for Student Success Act, (2017).

105 ILCS 5/, Evidence-Based Funding for Student Success Act, (2017).

CTBA analysis of ISBE Evidence-Based Funding Formula Distribution Full Calculations Fiscal Year 2020

CTBA analysis of ISBE Evidence-Based Funding Formula Distribution Full Calculations Fiscal Year 2020; ISBE FY 2021 EBF Base Funding Minimum Calculations

Task (H) The evidence-based or research-based practices that are shown to reduce the gaps and disparities experienced by African American students in academic achievement and educational performance, including practices that have been shown to reduce disparities in disciplinary rates, drop-out rates, graduation rates, college matriculation rates, and college completion rates.

As noted in the prior section related to Charge C, it is important to note that there is significant overlap in the content of Charge C, which is aimed at interrogating how EBF might better “promote racial equity and eliminate structural racism” within schools, and Charge H, which focuses on exploring evidence-based practices that reduce opportunity and outcome gaps for African American students specifically. The Ad-Hoc Committee acknowledged and discussed this overlap, noting that structural racism and the inequitable opportunities it creates and perpetuates are the cause, whether directly or indirectly, of many of the gaps in opportunities and outcomes experienced by students of color.

While acknowledging this overlap, in working to identify evidence-based interventions in keeping with the spirit and intent of the Evidence-Based Funding formula relevant to each charge, the group drew some conceptual distinction between charges C and H for the sake of organizing research and making recommendations. Charge C was construed as relating to creating school environments with healthy school climate and culture that prioritize diversity, equity and inclusion, and working to make sure mindsets and practices within schools promote equity.

1. Relevant Research

What is the research base/evidence for the impact of this intervention on student outcomes?

Impact on student opportunity/outcomes

Existing inequities in opportunity and educational quality that lead to gaps in outcomes for African American students are the result of a series of systems, policies, and practices that affect students from birth through college and career. These disparities can be seen in education related data, from lower levels of funding adequacy for school districts serving the largest proportions of African American students to gaps in proficiency, discipline, and academic attainment mentioned in the section related to Charge C. In Illinois, limited racial data on access and uptake of high-quality early childhood makes understanding racial equity in this space challenging, but gaps in kindergarten readiness levels suggest that gaps start early and persist.

Evidence-based interventions

Just as the causes of inequitable outcomes for African American students are multifaceted and varied, so too must strategies or reducing or eliminating equity gaps in educational opportunities and outcomes for African American students be approached in a comprehensive way, considering the entirety of the educational continuum. This begins to increasing access to high quality Early Childhood Education and Care (ECEC). Research demonstrates that access to full day pre-kindergarten and high quality early childhood can have a measurable positive impact on student academic and life outcomes, and can help narrow racial equity gaps. The Illinois Commission on Equitable Early Childhood and Care Funding issued a report in Spring of 2021 that provides recommendations on governance and funding of our state's system of Early Childhood Education and Care which have the potential not only to improve access and quality of ECEC for all of Illinois' youngest learners, but also to address racial equity gaps in ECEC.

A number of academic supports over the course of K-12 education have also been shown to narrow disparities impacting African American students, including things like tutoring and access to academic support before and after the school day (extended learning time). Supportive relationships with and access to instruction from high quality educators, especially diverse educators, has also been shown to improve outcomes for African American students, as has work to reduce implicit bias and stereotype threat and ensure that school culture and climate is inclusive (as detailed more fully in section C).

2. EBF at Present

How do elements or mechanisms currently included in Illinois' Evidence-Based Funding formula work to address this item?

As stated for Charge C, EBF does not include any cost factors within its calculation of adequacy, nor components of the formula's distribution mechanism, that are explicitly tied to the race/ethnicity of students within a district or that are specifically tailored to address systemic racism. Nonetheless, many of the evidence-based cost factors already included in EBF are elements of staffing and programming (like smaller class sizes and extended learning time) that are designed to improve student outcomes in general and have been proven to have a disproportionately positive and significant impact for historically disadvantaged students, including students from low-income households and students of color.

Findings

What potential input might the PRP make for adjustments to Illinois' EBF formula to ensure this item is addressed? If this is not an item that the committee concludes is most effectively addressed by the EBF formula, how might it otherwise be addressed outside of the EBF formula?

Finding 1: *Early childhood education is pivotal in closing racial opportunity and outcome gaps – though outside the purview of this committee since the EBF and PRP deal with K-12 funding. One key way to close these gaps will be to equitably and adequately fund early childhood education and care. Consider recommendations made by*

the Illinois Commission on Equitable Early Childhood Education and Care Funding in a March 2021 report for next steps.

Finding 2: *Recruiting and retaining leaders and educators of color and supporting PD and school climate/culture work that is aimed at reducing implicit bias and antiracism are both strategies for closing gaps supported by research. Formula related recommendations related to both are included in the recommendations related to Charge C.*

Finding 3: *Supporting students of color in college and career readiness and in enrolling in and passing advanced coursework is another evidence-based strategy for closing gaps in HS attainment and college enrollment. The EBF could be used to help capture/reflect the costs of doing so for students of color within districts' Adequacy Targets. The education omnibus package included a provision to help remove barriers to the placement of students of color into advanced coursework in high school. While access to early college coursework is important, research suggests that students are more likely to succeed in passing said courses and the associated assessments when they have access to additional academic supports. This could be achieved by adding a cost factor, similar to the existing "gifted" cost factor, specifically to capture the costs of providing supports for success in early college coursework.*

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Research Appendix: A

Research Memo: Dual Language Education in Public Schools: Equity Issues and Outcomes

DATE: 07/09/2021; rev. 07/19/21

MEMORANDUM

TO: Professional Review Panel Ad Hoc Committee Working Group 2 Members:
Tiana Cervantez, Rebecca Hinze-Pifer, Unique Morris, David Negron, Jane Russell, Robin Steans, and Tron Young

FROM: Dr. Brenda M. Dixon, Research and Evaluation Officer
Dr. Ernesto Matias, Education Officer

STAFF: Barbara Thomas, Ph.D., Director of Research
Jaime Smith, Research Specialist
Christabel Yamoah, Statistician

SUBJECT: Dual Language Education in Public Schools: Equity Issues and Outcomes

Executive Summary

This report serves as a brief guide to support the Professional Review Panel's Ad Hoc Committee as it considers dual language programs and instruction in Illinois K-12 schools, with a primary focus on issues of equity. For the purposes of this report, the most common models of dual language instruction were identified, as well as their associations with student outcomes. This report also examined equity considerations related to the implementation of dual language programs.

Key Findings

- The primary goal of dual language programs is to promote biliteracy, bilingualism, and global awareness (Office of English Language Acquisition, 2015).
- The two types of dual language programs, one-way and two-way, are often implemented in a 50:50 model, where half of the time is spent taking classes in the native language and the other half of the time is spent taking classes in the target language (Utah Dual Language Immersion, n.d.a, n.d.b), or a 90:10 model, where students initially take classes 90% of the time in their first language and 10% of the time in the second language in the first year, with each subsequent year gradually shifting the

instructional ratio (80:20, 70:30, 60:40) until eventually 50:50 is reached (Collier & Thomas, 2004).

- Well-implemented dual language programs encourage students from different backgrounds to work collaboratively on various classroom projects and tasks, which can foster an environment where students can challenge their own beliefs (Gómez et al., 2005; Sugarman, 2012) and every student is positioned as equal, regardless of background.
- Dual language programs help English Learners (ELs) reach English language proficiency and eventually perform at or above grade level in core content areas (Collins, 2014; Lindholm-Leary, 2016; Lindholm-Leary & Block, 2010; Lindholm-Leary et al., 2018). Students enrolled in dual language programs, regardless of native language, also see gains in reading/language arts and math scores on state assessments (Lindholm-Leary et al, 2018; Collier & Thomas, 2004; Utah State Department of Education, n.d.).
- Research has shown that ELs typically take six to eight years to develop grade-level linguistic proficiency and academic performance in English (Collier & Thomas, 2004; Cummins, 1979, 2008; Hakuta et al., 2000). However, dual language programs are often not made available to students for this length of time, which may lead to long-term English Learners and a slower acquisition of cognitive academic language proficiency skills (CALPS; Cummins, 2008; see also Lavadenz et al., 2012; Muro, 2012; Nagy & Townsend, 2012).
- Many public school students, including English Learners, come from cultural and linguistic backgrounds that do not match their teachers. This difference may be associated with negative educator perceptions of EL students (Rizzutto, 2017).
- In Illinois, the number of unfilled bilingual teaching positions has steadily increased; from 2018 to 2020, unfilled full-time equivalents (FTEs) increased from 119.1 to 164.1, a roughly a 38% increase (ISBE, 2020a). This suggests that there is an increasing need for bilingual educators that is not being met.

Dual Language Education in Public Schools: Equity Issues and Outcomes

As more industries, both domestic and abroad, have begun to require applicants with language proficiencies other than English (Commissions on Language Learning, 2017; Damari et al., 2017; O'Rourke et al., 2016), the value of multilingualism and bilingual proficiency in K-12 schools is relevant to this pursuit. Dual language immersion is a popular and effective model for world language instruction, used by government entities and K-12 schools alike (Commissions on Language Learning, 2017; Curtain et al., 2016; Padilla et al., 2013; Rubio, 2017; Utah Dual Language Immersion, n.d.a). The aim of this memo is to briefly identify the most common models of dual language instruction; examine associations between dual language programs and student outcomes; explore how equity could be considered during implementation; and, lastly, discuss implications for Illinois as it considers the future of world language instruction for its students.

Literature Review

Dual Language Models

Dual language programs are rooted in an immersion language instructional model. Dual language programs teach some or all subjects in a target, or partner, language (Stewart, 2005). There are two types of dual language programs: one-way dual language and two-way dual language. One-way dual language programs are typically designed for students from one predominant language group to receive instruction in both English and a partner language. There are three subtypes of one-way dual language programs: developmental, or maintenance, bilingual program; one-way/world language immersion program; and heritage or native language programs (Office of English Language Acquisition, 2015). The developmental or maintenance program is mainly designed for ELs. The one-way/world language immersion program is designed primarily for English-speaking students. The heritage or native language program is designed for students with a background or cultural connection to the partner language.

Two-way dual language/two-way immersion programs typically consist of English Learners and native English speakers who are receiving both English instruction and the partner language (Office of English Language Acquisition, 2015). Two-way immersion is also known as *bilingual or dual language education*. Ideally, this model teaches the world language to a mix of native, or heritage speakers, and non-native speakers for at least 50% of the time. As a result, both English learners and native English-speaking students learn in their native language half of the time and their second language the other half of the time (Gilzow & Rhodes, 2000).

Instructional time in the target language is a variable in one- or two-way instruction that schools can experiment with based on the needs of their students and resources available. For example, Utah's dual language program uses a 50:50 model where half of the time is spent taking classes in the native language and the other half of the time is spent taking classes in the target language (Utah Dual Language Immersion, n.d.a,

n.d.b). A 90:10 model may also be utilized; in this model, students initially take classes 90% of the time in their first language and 10% of the time in the second language in the first year. Each year, the instructional ratio gradually shifts (80:20, 70:30, 60:40) until, eventually, 50:50 is reached (Collier & Thomas, 2004). The longitudinal research by Collier and Thomas (2004) found that one-way 90:10 models resulted in a 70-100% closure in achievement gap, and two-way 90:10 models led to a 95-100% closure in achievement gap. Their findings also noted that one-way programs closed the achievement gap by about 70%, whereas two-way programs closed the achievement gap by 70-100% by Grade 5 if the 50:50 model was used; yet, both one-way and two-way bilingual programs closed achievement gaps between student groups (Collier & Thomas, 2004). It is worth noting that in order to test students in an equitable manner on content knowledge, assessments should be administered to students in their primary or native language, especially early on (Collier & Thomas, 2004).

Currently, 36 school districts in Illinois (roughly 4% of the school districts in the state) self-identify as providing a dual language program (ISBE, n.d.). Many of the dual language programs offered in the state are designed mainly for English Learners (Ill. Admin. Code tit. 23 § 228, 2017). From 2015-20, the percentage of ELs increased from 10.3% to 12.5% of the public school student population in Illinois. Although the overall student enrollment of the state had decreased from 2,054,556 to 1,957,018 in those same years, the EL enrollment increased from 211,619 students in 2015 to 245,502 students in 2020 (ISBE, 2015, 2020). The increase in the number of English Learners means there is an even higher demand for dual language programs.

Dual Language Instruction and Student Outcomes

Cross-Culturalism

Students with access to dual language programs have the potential to benefit from learning about languages, cultures, and people from groups different from their own (Lindholm-Leary, 2016; Lindholm-Leary et al., 2018); this is especially true for the two-way dual language program, which consists of a mix of native English and non-native speakers. Encouraging students from different backgrounds to work collaboratively on various classroom projects and tasks can help facilitate an environment where students can challenge their own beliefs (Gómez et al., 2005; Sugarman, 2012) and every student is positioned as equal, regardless of background. For example, some schools use the “pair-sharing” strategy, where students work cooperatively on assigned classwork (Gómez et al., 2005; Sugarman, 2012), further fostering collaboration and perspective taking in daily tasks. In a study by Sugarman (2012), one participating administrator reported that during the second year of implementing the dual language program, students of different ethnic backgrounds were segregating less and more willing to socialize with each other because this was encouraged in the classroom and playground setting. Dual language programs have the added benefit of encouraging students to learn cultural competence because various perspectives and cultures, with cultural humility and sensitivity, are shared as students from

different backgrounds are encouraged to work with each other.

Improvement in Language Proficiency and Performance in Core Content Areas

In the pursuit of biliteracy and bilingualism, dual language programs promote equity by helping English Learners reach proficiency in their second language and eventually perform at or above grade level in core content areas (Collins, 2014; Lindholm-Leary, 2016; Lindholm-Leary & Block, 2010; Lindholm-Leary et al., 2018). Findings from a study of Oregon’s dual language program showed a statistically significant increase in language assessment scores and proficiency in both languages (students’ first language and their second language) after just two years of implementation (Lindholm-Leary et al., 2018). Furthermore, the benefit of dual language programming for Latinx students is two-fold, advancing the English proficiency of both English Learners and students who are already bilingual or who have lost their native language (Thomas & Collier, 2019).¹

In addition to improved linguistic proficiency, studies have shown that students enrolled in dual language programs also see gains in reading/language arts and math scores on state assessments (Collier & Thomas, 2004; Lindholm-Leary et al., 2018); eventually, students in these programs performed at or above grade level. A report on Utah’s dual language immersion program indicated that students in the immersion programs have performed as well as or better than non-immersion students on math and English standardized tests administered in English (Utah State Department of Education, n.d.). Graduation rates are yet another factor reported to be influenced by dual language program participation. Studies on the dual language high school program in Omaha, Nebraska, showed a 100% graduation rate for participating students, many from low-income areas, and the Woodburn, Oregon K-12 dual language school district increased its EL graduation rate from 41% in 2011 to 91% in 2016 (Collier and Thomas, 2019).

Extant research on student outcomes for Latinx students in dual language programming dominates the literature; however, research has also explored the benefits of dual language programming for other student groups. For example, implications for African American students participating in dual language program have been reported as increased metalinguistic awareness of both the target language, standard English, and other English dialects used in the home or community (Thomas & Collier, 2017, 2019), such as Black Vernacular English² (BVE; Myhill, 2018; see also EPPI Review Group for English, 2004; Fogel & Ehri, 2000). Studies also found that African American students of low-income backgrounds attending dual language classes in North Carolina over a three-year period “were as much as two grades ahead of their peers not in dual language” by middle

¹ The authors noted that this proficiency is capable of being seen with time (an average of six years), with the highest levels of achievement seen in Latinx students who attended dual language programs for 6-12 years.

² Also seen commonly as African American English (AAE), African American Vernacular English (AAVE), Black English Vernacular (BEV), and Ebonics (Rickford, n.d.).

school and developed higher self-esteem with student-reported self-perceptions such as “gifted curriculum . . . privileged, respected, and valued” (Thomas & Collier, 2019, p. 6). The analysis of North Carolinian data also found that students with special and diverse needs scored significantly higher than their comparable peers with special needs who were not enrolled in dual language programming, on the contrary to common concerns of language classes being detrimental to this population of students (Thomas & Collier, 2017, 2019).

Although most recent studies have shown favorable student outcomes associated with dual language programming, a study by McCormick et al. (2021) on dual language programs in New Mexico elementary charter schools reported mixed results. Their findings showed a dramatic increase in oral and written Spanish proficiency, from 15% to 75% and 5% to 64%, respectively, from kindergarten entry to fifth grade exit, as reported by the principals. However, the report also stated that the English language arts achievement of ELs at these schools and the proportion of this subgroup who were re-designated as English proficient by fifth grade did not differ significantly from similar students enrolled in English language schools in the same time period. It is worth noting that the researchers acknowledged a very small sample size (71 students) of ELs in this study, as only 38% of ELs maintained enrollment status in the years of the study at the same school, compared to 75% of non-English Learners (McCormick et al., 2021). Moreover, the proposed findings on dual language matching study across all fifth-graders proved “too uncertain to support interpretation” due to a very small sample size of continuously enrolled students, an inability to match baseline assessment data, and too much variation across students (McCormick et al., 2021, p. 14). Favorable byproducts of the dual language programs, as observationally cited by participating school staff of the study, included a more diverse teacher population and a consistency between school decisions and the ethos of the dual language programs:

Focus groups indicated that this school-wide model means there are never any instances where decisions are made for the school that can contradict or conflict with the foundational beliefs of mission of the [dual language] program . . . all stakeholders are grounded in the same model, methodology, and instructional path to student success. (McCormick et al., 2021, p. 18)

Equity Considerations in Implementation

The goal of dual language programming, whether one-way or two-way, is to facilitate students in becoming bilingual, biliterate, and globally aware of other cultures (Office of English Language Acquisition, 2015; Utah State Board of Education, n.d.). This goal can be achieved when thoughtful and deliberate space is given to explore issues of equity. Equity should be considered when implementing dual language programs, including eligibility, length of enrollment in dual language programs, and educator availability. The following sections will examine these considerations in more depth.

Eligibility

The implementation of a dual language program varies at the state, district, and school levels. For example, although many states require that students for whom English is their second language take the World-Class Instructional Design and Assessment (WIDA) ACCESS test, the cut scores for determining whether a student is considered proficient in English varies. These cut scores often determine whether a student is eligible for dual language programs such as the one-way developmental or maintenance program for English Learners. Depending on the cut scores, more or fewer students can have access to these programs. Some states use a more holistic approach and rely on content assessment scores, teacher referrals, interviews with family members, and prior academic records in addition to the English language proficiency assessment (Office of English Language Acquisition, 2015). This holistic approach could lead to more students who are interested in dual language programming qualifying and benefitting from the learning opportunities they provide.

Length of Enrollment in Dual Language Programs

Another factor to consider for English Learners compared to their native English-speaking peers is the length of time they are enrolled in these dual language programs. The seminal work of Jim Cummins and other research on second language acquisition suggests that the average English Learner takes roughly six to eight years to develop grade level linguistic proficiency and academic performance in their second language (Collier & Thomas, 2004; Cummins, 1979, 2008; Hakuta et al., 2000). However, students are prematurely moved to English-only classrooms in a few years. While being immersed in the English language helps English Learners to a certain degree, this is only half the recommended time it takes for students to see promising results in terms of closing the achievement gap, potentially leading to long-term English Learners and a slower acquisition of cognitive academic language proficiency skills (CALPS; Cummins, 2008; see also Lavadenz et al., 2012; Muro, 2012; Nagy & Townsend, 2012).

In Illinois, ISBE's goal for bilingual education is to transition students to English-only classrooms within three years (ISBE, 2018). Additionally, districts are authorized to discontinue Transitional Bilingual Education (TBE) or Transitional Program of Instruction (TPI) services to students who have been enrolled and participated in these programs for three consecutive years (Ill. Admin. Code tit. 23 § 228.27, 2017; ISBE 2020c). However, districts that discontinue services as such must "file a plan for EL services to continue to support ELs beyond the third year of instruction and until the student has met the state ELP criteria" (ISBE, 2020c, p. 3).

Educator Availability

Educator availability is yet another key equity issue that affects all students' abilities to access dual language programming. Forty-four states and Washington, D.C., report difficulty in finding enough qualified teachers to meet the current needs (Commission on Language Learning, 2017). According to ISBE's 2020 *Educator Supply and Demand Report*, the number of unfilled bilingual teaching positions has steadily increased;

from 2018 to 2020, unfilled FTEs increased from 119.1 to 164.1, about a 38% increase (ISBE, 2020a). The number of unfilled bilingual FTEs was disproportionately high in Chicago, and the Northeast region had a disproportionately low number of unfilled FTEs (ISBE, 2020a). The City of Chicago also had one of the lowest year-over-year teacher retention rates (82% in 2020) compared to the other regions in the state, which ranged from about 84 to 92% retention (ISBE, 2020a).

English Learners, in regions where there is a marked shortage of bilingual educators, are further disadvantaged, because they are less likely to be taught by educators from a similar cultural and linguistic background. A study by Rizzutto (2017) on early childhood teachers' perceptions of their early childhood English Learners found that 70% of the participating teachers reported having negative perceptions of ELs. The study further argued that when students are taught by educators with a different demographic background, the educators do not feel compelled to adjust their instruction to meet the needs of English Learners. Moreover, some educators may be ill-equipped to meet the diverse needs of these students considering that earning and maintaining a bilingual endorsement involves strong proficiency in an additional language, extra coursework, training, experience, and materials; as a result, a "diluted" curriculum may be offered to the students (Rizzutto, 2017, p. 193).

Discussion

Transitional Bilingual Education in Illinois

Currently, Illinois uses a holistic approach to determine student eligibility for full- and part-time TBE programs, which includes both one-way and two-way dual language programs (Ill. Admin. Code tit. 23 § 228, 2017). As per Ill. Admin. Code tit. 23 § 228 (2017). The state relies on English proficiency tests, such as ACCESS, native language proficiency tests, state and local assessments from previous years, grades, and teacher recommendations. The use of multiple criteria to determine eligibility helps to evaluate students in a more equitable and complete manner and, consequently, ensure access by students that need the services the most.

In Illinois, a TBE program is required to be in place when 20 or more English Learners from the same language classification are enrolled in the same attendance center or preschool program (ISBE, 2020c). ISBE's Multilingual Department states the following in regard to TBE service requirements:

TBE programs must provide instruction in both the home language of students and in English in the core subject areas (language arts, mathematics, science, and social studies), as well as instruction in English as a Second Language (ESL). TBE services must also include instruction on the history of the student's or the parent's native land and the United States. TBE teachers are required to be certified by the State of Illinois and possess the appropriate Bilingual and/or ESL endorsement/approval. Bilingual teachers must demonstrate proficiency in the language(s) spoken by students and in English. (ISBE, 2020c, p. 3)

For schools with 19 or fewer enrolled English Learners from the same language background, districts may provide a TBE program; however, if a district determines that a TBE program will not be provided, then a TPI must be made available to those students (Ill. Admin. Code tit. 23 § 228, 2017; ISBE 2020c). A TPI must include instruction or native language support in the student’s home language based on the student’s level of English proficiency; TPI services can also include ESL instruction, language arts in the student’s home language, and history of the student’s home geographic area and the United States (Ill. Admin. Code tit. 23 § 228.30, 2017; ISBE, 2020c). Depending on level of need, some students receive full time services, and others receive part-time services.

Native Language Assessment Development

As noted in the ISBE 2020-2023 Strategic Plan, the agency aims to develop a native language assessment for Spanish language arts within three years (ISBE, 2020b). According to plan (2020b), Spanish language arts standards will be developed and adopted by the Board by the end of SY 2021. Test items based on the standards will be developed by SY 2022 and piloted in SY 2023. The Spanish standards-based assessment will be fully implemented during SY 2024. The implementation of native language assessments is one step in the pursuit of equity by allowing English Learners to be assessed in their primary language like their English-speaking peers.³ The availability of these assessments assists in implementing dual language curriculum more effectively because a large portion of the course content is taught in the primary language of the English Learner, particularly if the 90:10 dual language model is utilized.

Districts in Practice

Illinois school districts such as U-46 and Urbana SD 116 provide dual language support models consistent with the recommendations of Collier and Thomas (2004) for closing achievement gaps. School District U-46 (which includes Elgin) uses the 80:20 model, and Urbana SD 116 offers the 90/10 model (School District U-46, n.d.; Wiemelt, n.d.). Both models allow English Learners more time spent taking coursework in their native languages. By minimizing language barrier issues, students can focus on mastering content taught in core courses during the first few years in the program. In alignment with research on second language and academic language development and acquisition, ideally, students would be enrolled in dual language programs for roughly six to eight years (Collier & Thomas, 2004).

Additional Implications

³ It is worth noting that although the development of native language assessments in Spanish will potentially benefit Spanish-speaking English Learners significantly, comprising 72% of the K-12 EL public school population of Illinois, an equitable assessment for the remaining 28% of the Illinois EL population, which is comprised of a number of other native languages, including, but not limited to, Arabic, Polish, Urdu, Russian, Gujarati, and Tagalog, etc. is not scheduled to become available (ISBE, 2020c).

Teacher Shortages

A bilingual teacher shortage is one of the key challenges in offering these programs to students for an optimal length of time. Illinois has focused on strategies, such as creating additional programs that train more educators to teach bilingual education and thoughtful recruitment of a qualified teachers from other areas (e.g., the Visiting International Teacher Program). Illinois is also expanding its pool of qualified educators by offering a bilingual residency program. The pilot started in 2018 and currently includes tracks for bilingual early childhood education and early childhood special education (Garcia & Garza, 2019). The majority of educators in this pilot are current employees of Chicago Public Schools, and many are paraeducators experienced in classroom support. This program could help meet the needs of Chicago students, the area with the greatest educator shortage (approximately 40% of bilingual unfilled FTEs) in the state (Garcia & Garza, 2019; ISBE, 2020a). Additional consideration should be given to promote and recruit qualified bilingual teachers in other areas of the state to ensure that all Illinois students have access to the services and resources necessary for their success.

The state offers a Seal of Biliteracy to students who have studied or attained proficiency in two or more languages by high school graduation (Seal of Biliteracy, 2020). This award makes students competitive when applying for college and employment. Former English Learners are amongst those recommended for recruitment when there are instructor shortages in dual language education (Wixom, 2015). In April of 2021, Illinois updated the Bilingual Teaching Endorsement requirements to accept a Seal of Biliteracy in lieu of the required targeted language proficiency assessment (Ill. Admin. Code tit. 23 § 1.781, 2021). This change further incentivizes the Seal of Biliteracy and reduces the number of tasks required in pursuit of bilingual teaching endorsement. Further exploration of the benefits of this program is suggested to bridge linguistically qualified students with communities experiencing a high demand for bilingual educators but lacking in supply.

Multilingualism Beyond K-12

Bilingualism is beneficial academically, economically, and societally and a burgeoning component of career readiness after K-12 education is complete (Vander Ark, 2016; Commission on Language Learning, 2017). The demand for bilingual workers in the job market doubled from 2012-17 (New American Economy, 2017) and remains high across most sectors, especially in fields such as business, international relations, finance, health care, social services, and legal services (Commission on Language Learning, 2017; New American Economy, 2017). The 2014 *U.S. Business Needs for Employees with International Expertise* survey of 836 companies found that 39% of companies felt that they had failed to actualize their full international business potential in the last five years due to a shortage of internationally competent employees, and between 51% and 67% of firms stated that an appreciation of cross-cultural differences and foreign language skills were the most important skills at

even the entry level (Daniel et al., 2014). As of 2017, the most common languages employers had sought were Chinese, Arabic, and Spanish (New American Economy, 2017). Thus, dual language education increases American competitiveness in the globalized job market (Vander Ark, 2016; Commission on Language Learning, 2017).

From a domestic perspective, foreign language skills continue to be an immediate need in the interest of national security, public health, and social justice. In response to the events of 9/11, the Federal Bureau of Investigation increased its number of linguists by 85% (A National Security Crisis, 2012). In the last decade, the U.S. Department of State has increased language-based positions by 15%, while the Department of Defense -- the largest federal employer of language-based jobs -- encouraged K-12 partners and school systems to continue early language learning programs in order to improve and sustain a pipeline of linguistically proficient workers (A National Security Crisis, 2012).

In 2004, language barriers to early Chinese reports were argued to be the culprit of America's delayed awareness of the 2004 avian flu epidemic (Cyranoski, 2004). Nationwide media reports during the current COVID-19 pandemic have magnified the issue of inequitable access to public health and vaccine information among communities for whom English is not their first language (Moreno & Bernal, 2020; see also Associated Press, 2020; Bohra, 2021; Galvin, 2020; Goodman, 2021; Masson, 2021; Reed, 2021; Wong, 2021). These communities are further disadvantaged by barriers to linguistic professionals in the American judicial system, where language interpreters for civil and criminal cases -- despite an individual's inability to speak or understand English adequately -- can be denied by the courts for a myriad of reasons (Abel, 2013). It is in this pursuit of more equitable systems for all members of our American society that bilingualism and biculturalism should be prioritized at the earliest possible educational level and accessible and transparent bridges to career and advocacy pathways within our communities be created and encouraged.

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Research Appendix: B

DATE: October 8, 2021

MEMORANDUM

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STAFF: Barbara Thomas, Ph.D., Director of Research
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SUBJECT: **Trauma, Poverty, and Student Learning**

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Executive Summary

- A host of studies suggest that adverse childhood experiences (ACEs) are linked to negative outcomes throughout their lifespan (Nikulina et al., 2011; Giano et al., 2020). Less studied forms of trauma include historical and cultural trauma as well as poly-victimization among children and adults. Racial-ethnic, gender, and socioeconomic status disparities exist in children’s reports of ACEs.
- Children growing up in poverty-stricken communities face unique ACEs and complex traumas. Childhood neglect, childhood family poverty, and childhood neighborhood poverty each contribute to poor outcomes later in life (Nikulina et al., 2011).
- ACEs are incredibly common. Between 50-60% of adults have experienced one or more categories of ACEs, and 25% reported experiencing more than two categories (Felliti et al., 1998; Gilber et al., 2015; Merrick et al., 2018). The most common ACEs include economic hardship and divorce/separation of a guardian (Sacks & Murphey, 2018). Although ACEs occur at high rates in the general population, post-traumatic stress disorder (PTSD) develops in much smaller numbers (4-14%) of those children affected (Copeland et al., 2007; Giaconia et al., 1995; Mclaughlin et al., 2013).
- ACEs can have direct impacts on a child’s brain development and future health (CDC, 2019; Felliti et al., 1998). Increased occurrences of ACEs were shown to be significantly predictive of emotional dysregulation, attention deficits, and reactive aggression (Shields & Ciccheetti, 2010) as well as development of latent anxiety (National Scientific Council on the Developing Child, 2010; Warren et al., 2000).
- Children who have experienced ACEs are more likely to exhibit a lack of trust in the ability of others to protect them, view the world as threatening, and struggle to maintain positive relationships with both their peers and other adults in their lives (Macy et al., 2003; Shields & Cichhetti, 1998; Warren et al., 2000). Also, students who have experienced ACEs were more likely to possess deficits in executive functioning skills (Beers & DeBellis, 2002; Center on the Developing Child at Harvard, 2011; Sektnan et al., 2010).
- Abuse and neglect can have impacts on children’s IQ scores, reading ability, and general academic achievement (Perez & Widom, 1994), which can permeate into their expectations for future academic success as well. Adults with greater frequencies of ACEs were more likely to report high school non-

completion, unemployment, and living in a household below the federal poverty level (Metzler et al., 2017).

- Programs developed from trauma-informed approaches, such as the Attachment, Regulation, and Competency (ARC) framework and multi-tiered trauma-informed practice, show promising results among clinical or controlled samples (Hodgdon et al., 2013; Hansel et al., 2010).
- Trauma-informed approaches at the school level include trauma-sensitive schools and trauma-informed pedagogy. Implementation studies from trauma-sensitive schools in California and Washington state showed significant reductions in office referrals (20-44%) and suspensions (30-90%; Stevens, 2012, 2013). Culturally responsive, trauma-informed curriculum improved overall internal resilience scores, problem-solving, and empathy among students who received the Resilience Classroom Curriculum (Ijadi-Magsoodi et al., 2017).
- There are a multitude of clinical assessments that can be used to identify potential ACEs, including, but not limited to, the 10-item ACEs questionnaire (McLennan et al., 2020); Childhood Trauma Questionnaire (Liebschutz et al., 2018); CAPS-5 (a version of the Clinician-Administered PTSD Scale specifically targeted for children; Pynoos et al., 2015); Trauma Symptom Checklist for Children (NCSN, n.d.); and the Race-Based Traumatic Stress Symptom Scale (Carter et al., 2013).
- Many of the evidence-based practices described in this memo require significant policy changes at all levels of the educational landscape and will require sizeable, continued investments to ensure they are implemented with fidelity. The Every Student Succeeds Act includes a host of trauma-informed approaches and practices, such as Student and Academic Enrichment Grants, which provide funding to support “comprehensive school-based mental health services and supports” (Prewitt, 2016). The Trauma Recovery Demonstration Grant Program provides technical assistance and capacity building to State Education Agencies and Local Education Agencies to deliver trauma-specific mental health services (National Center on Safe Supportive Learning Environments, 2021).

Trauma, Poverty, and Student Learning

Background

The Professional Review Panel (PRP) Ad Hoc Committee was tasked with reviewing the extent to which “racial equity within the Evidence-Based Funding formula is explicitly explored and advanced” (ISBE, 2021, p. 1). More specifically, the committee will generate recommendations to address the following:

Topic B – The adult-to-student ratio for each Essential Element in which a ratio is identified. The Panel shall consider whether the ratio accurately reflects the staffing needed to support students living in poverty or who have traumatic background

Topic C – Changes to the Essential Elements that may be required to better promote racial equity and eliminate structural racism within schools.

Thus, the purpose of this memo is to (1) succinctly review trauma in all its forms and its impacts on student well-being, (2) explain how poverty exacerbates trauma and inequality among racially marginalized children, and (3) summarize current trauma-informed practices in education. By no means is this review meant to an exhaustive and sweeping assessment of said research. Rather, this memo briefly summarizes extensive scientific literature in order to facilitate further discussions among PRP Ad Hoc Committee members.

Definitions

We begin this memo by defining key terms:

Adverse Childhood Experiences (ACEs) – Negative experiences to individuals before the age of 18 years. The Centers for Disease Control and Prevention assesses ACEs via eight domains: emotional abuse, physical abuse, sexual abuse, intimate partner violence, household substance use, household mental illness, parental separation/divorce, and household members who are incarcerated (Giano et al., 2020). However, how ACEs is defined will vary largely depending on the measured experiences.

Concentrated Poverty – Geographic areas where a high proportion of residents are poor or experience extreme poverty (Iceland & Hernandez, 2017). Researchers often consider poverty “concentrated” if it is in a Census tract where the poverty rate is 40% or more (Shapiro et al., 2015).

Generational/Historical Trauma – A process of transmission of negative effects from one generation to subsequent generations stemming from mass trauma (Sotero, 2006).⁴

Generational Poverty – Being in poverty for two generations or longer (Payne, 1996).

Trauma – Daily negative and injurious experiences that have adverse effects on an individual (DePrince et al., 2009).

Trauma-Informed Approach – A program, organization, or system’s ability to comprehend the

⁴ For the purposes of this memo, the terms *generational trauma* and *historical trauma* will be used interchangeably.

widespread impact of trauma and promote potential paths to recovery; to recognize the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and to respond by fully integrating knowledge about trauma into policies, procedures, and practices, and seek to actively resist re-traumatization (SAMSHA, 2013).

Post-Traumatic Stress Disorder (PTSD) – A mental health condition that is triggered by a traumatic event. Symptoms may include flashbacks, nightmares, and severe anxiety as well as uncontrollable thoughts about the event (Kilpatrick et al., 2013).

Literature Review

Trauma is defined as daily negative experiences that have adverse effects on an individual (DePrince et al., 2009), such as a serious accident, abuse, or abandonment. These injurious experiences are linked to mental and physical stress and subsequent poor behavioral, mental, and physical health (Anestis et al., 2012; Rosen et al., 2017).

Types of Trauma

Generational and Historical Trauma

Whereas everyday trauma is usually experienced by an individual or among a small group of people, like families, generational trauma involves a negative event substantial enough to be experienced by a large group of people (Kirmayer et al., 2014). Generational trauma, also referred to as *historical trauma*, describes a process of transmission of negative effects from one generation to subsequent generations stemming from mass trauma (Conching & Thayer, 2019; Brave Heart, 2003). According to Sotero (2006), a population may experience trauma if it is subjected to subjugation via at least four methods: (1) overwhelming physical and psychological violence, (2) segregation and/or displacement, (3) economic deprivation, and (3) cultural dispossession. Like people who experience everyday trauma, the population subjected to atrocious events, such as mass violence, ethnic cleansing practices, and genocide, will suffer from adverse effects. According to the conceptual model of historical trauma (Sotero, 2006), how the victimized groups reacts to the negative event subsequently may shape their psychological responses (e.g., PTSD, depression); social responses (e.g., unemployment, substance abuse, poverty); and physical responses (e.g., compromised immune system, gene impairment), which result in the breakdown of social structures and loss of resources. These learned responses are linked to heritable changes in genome function that are associated with DNA sequence alterations (Conching & Thayer, 2019), which can explain contemporary health disparities among historically marginalized communities (Chen et al., 2006; Dressler et al., 2005). Indeed, a host of studies have consistently found poor outcomes (e.g., health disparities, academic achievement) among Holocaust survivors and their children (Sharon et al., 2009); Japanese families who were forcibly imprisoned in the United States (Nagata et al., 2019, Saavedra, 2015); American

Indians/Alaska Natives navigating colonialism (e.g., loss of land, loss of identity, mass violence; Elias et al., 2012; Jones, 2005); and the impact of structural racism on Black Americans (Black et al., 2015) and Latino well-being (Fernandez-Esquer et al., 2021).

Cultural Trauma

Cultural trauma can be seen as a more specific manifestation of historical trauma. While historical trauma concerns intergenerational impacts broadly, cultural trauma focuses on the way in which a shared traumatic event impacts group consciousness and identity (Alexander, 2004). The process of seeking asylum in other countries can be seen as cultural trauma. Studies have found a heightened risk of mental illness among Vietnamese refugees in Australia (Steel et al., 2002) and Rohingyas refugees in Bangladesh (Khan & Haque, 2020). Latino patients in primary care settings who had reported exposure to political violence had greater chronic pain, impaired physical functioning, and diminished health-related quality of life (Fortuna et al., 2009). The impact of the events of 9/11 included heightened anxiety, depression, and PTSD among Muslim Americans, a population doubly traumatized — first by the attacks themselves, and then by the rise in Islamophobia that followed (Clay, 2011). Finally, cultural trauma can also include the police killings of Black Americans. Using U.S. Census data, Eichstaedt et al. (2021) found that compared to White Americans, Black Americans reported significantly larger increases in depression and anxiety symptoms after George Floyd's death (Smiles, 2021).

Traumas are further complicated by the identity and lived experiences of individuals. Collective and cultural trauma may be experienced differently among individuals and the magnitude of the impact may vary (Sotero, 2006). Furthermore, intersectionality (Crenshaw, 1990) suggests that an individual's multiple identities and social status impact perceptions of daily experiences, including traumatic events. Thus, it is important to always consider the poly-victimization of marginalized individuals to truly understand their multiple traumas. For instance, gendered racialized trauma -- trauma that is the result of intersecting identities of gender and race -- may manifest as heightened adverse health outcomes among Black American women (Dale & Safren, 2019). However, scholars posit that historical trauma operates through a layering of narratives that connect past and present suffering to resilience and perseverance (Crawford, 2013; Mohatt et al., 2014).

Poverty and Trauma

Children and adults who have experienced poverty are negatively affected in a variety of ways, including thwarting education and restricting access to extracurricular activities, high-quality foods, quality health care, adequate housing, and transportation (Payne, 1996). Moreover, the negative impact of poverty includes, but is not limited to, exposure to violent crimes and other traumatic experiences of institutionalized racism and classism in the United States (Chappelle and Tadros, 2020). Indeed, childhood neglect, childhood family poverty, and childhood neighborhood poverty each contribute to poor outcomes later in life (Nikulina et al., 2011).

A more nuanced analysis of socioeconomic status in the United States exposes the risks of generational and concentrated poverty. *Generational poverty* is defined as being in poverty for two generations or longer (Payne, 1996). Black Americans are noted as being adversely and disproportionately affected by generational poverty (Tourse et al., 2018), which scholars attribute to the legacies of the enslavement of Africans in the Americas and adoption of Jim Crow laws (i.e., institutionalized forms of discrimination against Black Americans; Crutchfield, 2015). *Concentrated poverty* is the phenomenon of geographic areas where a high proportion of residents are poor or experience extreme poverty (Iceland & Hernandez, 2017). Individuals from historically marginalized communities are more likely to be poor, and poor minorities are more likely to live in concentrated poverty tracts (Lichter et al., 2012).

One recent example of how poverty exacerbates collective trauma is the COVID-19 pandemic. COVID-19 has had disproportionate contagion and fatality in Black, Latino, and Native American communities and among the poor in the United States (Fortuna et al., 2020). The sociopolitical, racial, and environmental stresses that marginalized communities of color already experience have been magnified and intensified during the COVID-19 pandemic. For instance, many low-income Black and Latino parents have been unable to work from home, have not had work-leave benefits, or have simply lost their jobs or work hours. At the same time, children have also faced the increased burden of community exposure to COVID-19 coupled with grief from lost loved ones (Fortuna et al., 2020). Given that exposure to multiple traumatic experiences and social inequities are well established mental health and medical liabilities for low-income communities and people of color (Black et al., 2015; Fernandez-Esquer et al., 2021), it is important for academic institutions and policymakers to consider the present and long-term impact of those experiences to students' well-being, especially those from underserved and marginalized communities.

Trauma Among Children

Adverse Childhood Experiences

The seminal *Adverse Childhood Experiences (ACEs) Study* by Felitti et al. (1998) continues to ground the conversation regarding the prevalence in and impacts of trauma on childhood and beyond. Felitti et al. described the seven categories of ACEs as psychological or sexual abuse; violence against mothers; or living with household members who were substance abusers, mentally ill, suicidal, or even imprisoned. The study found that there is a strong relationship between the breadth of exposures to ACEs and multiple risk factors for several of the leading causes of death in adults. Replication and expansion studies have expanded the list of ACEs to include violence outside the home, living in unsafe neighborhoods, discrimination based on race or ethnicity, bullying, and experience of income insecurity (Child Trends, 2018; Gilbert et al., 2015, Merrick et al., 2018). Moreover, the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System, a

national survey among adults 18 and older, assesses ACES via eight domains: emotional abuse, physical abuse, sexual abuse, intimate partner violence, household substance use, household mental illness, parental separation/divorce, and household members who are incarcerated (Giano et al., 2020). Given the myriad of negative experiences children and adolescents may experience and the variability in measured experienced, currently there is no set industry standard definition of ACES.

ACES are incredibly common. Studies have shown that between 50-60% of adults have experienced one or more categories of ACES and 25% reported experiencing more than two categories (Felliti et al., 1998; Gilbert et al., 2015; Merrick et al., 2018). Sacks and Murphey (2018) posited that the most common ACES include economic hardship and divorce/separation of a guardian (Sacks & Murphey, 2018). Moreover, studies find consistent racial and economic disparities in children's reports of ACES. For instance, females tend to report greater frequencies of ACES compared to males (Giano et al., 2020). Additionally, non-White children and children from families with an annual income of less than \$15,000 report higher rates of ACES (Gilbert et al., 2015; Sacks & Murphey, 2018). Importantly, there is substantial evidence of an association between different aspects of childhood adversity and increased risk of negative outcomes (Gilbert et al., 2015). Research on ACES and PTSD among children further clarifies this relationship.

ACES and PTSD

Although ACES are common among the public, fewer children who experience trauma develop PTSD.⁵ Children can be diagnosed with PTSD when they develop long-term symptoms (i.e., longer than one month) stemming from a traumatic event that upsets or interferes with their relationships and activities (CDC, 2021; Kilpatrick et al., 2013). Symptoms may include flashbacks, nightmares, and severe anxiety, as well as uncontrollable thoughts about the event.

Studies showed that although ACES occur at high rates in the general population (40%-65%), PTSD develops in much smaller numbers (4-14%) of those children affected (Copeland et al., 2007; Giaconia et al., 1995; McLaughlin et al., 2013). Among adults exposed to trauma, PTSD risk was higher among Black Americans than White, and lifetime prevalence of PTSD was highest among Black Americans and intermediate among Latinos and Whites (Roberts et al., 2011). Rates of PTSD were higher in females than males (McLaughlin et al., 2013). Lastly, higher rates of PTSD are seen in children exposed to urban community violence (Cohen, 1998; Schwarts & Proctor, 2000). Studies showed that children diagnosed with PTSD experienced higher rates of behavioral problems, interpersonal problems, academic failure, suicidal behavior, and health problems

⁵ Given the scope of this project, we will be focusing on the experiences of children with PTSD. For more information on rates and experiences of adults with PTSD, see <https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd>.

(Giacocnia et al., 1995; Schwarts & Proctor, 2000). This point validates the need for increased research and a deeper understanding of how complex trauma may impact children both immediately following a traumatic event and throughout the remainder of their life.

Impacts of Trauma on Students

Given the widespread and persistent nature of ACEs across the country, it is critical to understand the different responses to these experiences and the effects of ACEs on a developing child. Trauma can have a myriad of impacts on a developing child from epigenetic changes to shifting their long-term academic trajectory.

Physiological

Research has shown that ACEs can have direct impacts on a child's brain development and future health (CDC, 2019; Felitti et al., 1998). These changes have been shown to cause increased and prolonged stress responses, which are correlated with changes in brain architecture and chemistry (National Scientific Council on the Developing Child, 2010). ACEs are also shown to negatively impact a child's memory systems, including problematic sleeping and eating patterns (Macy et al., 2003), which are two critical components to a child's ability to obtain and retain new information. Increased occurrences of ACEs were shown to be significantly predictive of emotional dysregulation, attention deficits, and reactive aggression (Shields & Cicchetti, 2010) as well as development of latent anxiety (National Scientific Council on the Developing Child, 2010; Warren et al., 2000).

Social-Emotional

Students who have experienced trauma can have difficulty developing certain social-emotional skills. This section will focus on factors of social-emotional learning, including relationships, self-perception, executive functioning skills, disengagement in academic content, and discipline.

Relationships -- Establishing and maintaining relationships can be difficult for students who have experienced ACEs. For instance, children who have experienced ACEs are more likely to exhibit a lack of trust in the ability of others to protect them, view the world as threatening, and struggle to maintain positive relationships with both their peers and other adults in their lives (Macy et al., 2003; Shields & Cicchetti, 1998; Warren et al., 2000).

Executive Functioning Skills -- As students' progress through their educational career, it is vital that they develop necessary executive functioning skills. Although there are differing definitions of executive function, some of the frequently highlighted skills include self-monitoring, working memory, inhibitory control, and cognitive flexibility (Center on the Developing Child at Harvard, 2011). Students who have experienced ACEs were more likely to possess deficits in executive functioning skills (Beers & DeBellis, 2002; Center on the Developing Child at Harvard, 2011; DePrince et al., 2009; Sektan et al., 2010). Sektan et al. (2010) found that

students who lived with a parent struggling with depression had increased difficulty with kindergarten behavioral regulation, which in turn led to negative effects in first-grade achievement.

Disengagement in Academic Content -- Students who are more engaged in academic content throughout the day show more academic achievement (Center on the Developing Child at Harvard, 2011; Shonk & Cicchetti, 2001; Streeck-Fischer & Kolk, 2000). Students who have experienced ACEs tend to be easily distracted or lack focus in the classroom due to the fact that anxiety and fear for their own and other's safety chronically occupy their thoughts (Shonk & Cicchetti, 2001; Streeck-Fischer & Kolk, 2000). Children with no ACEs were half as likely to be disengaged in school compared to those with two or more ACEs (Bethell et al., 2017). However, Bethell et al. (2017) did note that students who were taught coping mechanisms and how to stay calm and controlled when faced with challenges saw a dramatic increase in their rates of engagement (Bethell et al., 2017).

Discipline -- Students who have experienced ACEs were overrepresented in rates of suspension and expulsion (Balfanz et al., 2014; Bethell et al., 2017) and exhibited reduced abilities to self-regulate (Masten & Coatsworth, 1998). Bethell et al. (2017) also showed that compared to students without ACEs, children ages 3 to 5 are four times more likely to have three or more of the social and emotional challenges that can impact learning. The behaviors referenced in the study include the following: inability to self-regulate, loss of temper control, inability to play well with others, easily distracted, doesn't keep working at something until finished, and difficulty making friends.

Academic Achievement

As noted in the previous section, students who have experienced trauma struggle with many of the social-emotional and executive functioning skills necessary to excel in school. Without the proper supports, these deficiencies can often translate to negative associations with academic performance.

Basic Skills Attainment -- Students who have experienced trauma may miss out on learning basic skills. A study of children in a welfare program showed that 46% of students exhibited developmental delays (Stahmer et al., 2005). Children who have experienced multiple traumatic experiences have also been shown to experience difficulties processing academically significant information (Streeck-Fischer & Kolk, 2000). A study on the impacts of family risk from birth to kindergarten (e.g., ethnic minority status, low average family income, high maternal depressive symptoms) showed that these risk factors had negative effects on reading, math, and vocabulary achievement in first grade students (Sektan et al., 2010).

Long-Term Academic Outcomes -- ACEs not only have effects on a child's success in school but their long-term academic trajectory. Abuse and neglect can have impacts on children's IQ scores, reading ability, and general academic achievement (Perez & Widom, 1994). These negative associations can permeate into their

expectations for future academic success as well (Perez & Widom, 1994). Adults with greater frequencies of ACEs were more likely to report high school non-completion, unemployment, and living in a household below the federal poverty level (Metzler et al., 2017), and childhood neglect is associated with low academic attainment in adulthood (Nikulina et al., 2011). Furthermore, individuals with four or more ACEs were significantly less likely to obtain a bachelor's degree or higher than their peers with fewer ACEs (Chen & Harris, 2014).

Trauma-Informed Education

Defining Trauma-Informed Approaches

The increased attention paid to students who have experienced trauma in the last few decades, and more recently as the country deals with the ongoing pandemic, has created a greater need for a better understanding regarding trauma-informed care and approaches. The terms *trauma-informed care* and *trauma-informed approaches* are often used interchangeably and grounded in the same assumptions and principals.⁶ According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2013):

A program, organization, or system that is trauma-informed realizes the widespread impact of trauma and understands potential paths to recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization. (p. 13)

The six key principles of a trauma-informed approach are (SAMSHA, 2014):

- Safety
- Trustworthiness and Transparency
- Peer Support
- Collaboration and Mutuality
- Empowerment, Voice, and Choice
- Cultural, Historical, and Gender Issues

These principles will be used for the remainder of this paper to describe trauma-informed approaches and practices.

Trauma-Informed Frameworks and Approaches

There are numerous approaches to trauma-informed care.⁷ However, two trauma-informed approaches will be discussed for the purposes of this memo as well as accompanying programmatic examples.

⁶ For the purpose of this memo, the use of trauma-informed approaches will be used to refer to the framework as described by SAMSHA (2014) and trauma-informed practices refer to specific interventions designed to address the needs of students who have experience trauma.

⁷ The discussion of all approaches to trauma-informed care is out of the scope of this memo.

Attachment, Regulation, and Competency -- The Attachment, Regulation, and Competency (ARC) framework identifies three primary domains (Attachment, Self-Regulation, and Competency) and a fourth domain (Trauma Experience Integration). The framework was created to explicitly address complex trauma. It was the second most frequently utilized treatment among a national clinical sample (Arvidson et al., 2011). Studies on the implementation of the ARC framework showed that parents and caregivers found the training useful and practical (Barlett et al., 2017). Bartlett et al. (2017) also found that after training was complete family protective factors increased (e.g., resilience, social connections, concrete support in times of need, knowledge of parental and child development, and social emotional competence of children). In another study, the ARC framework was used to support children in foster care and their caregivers. The study found that 92% of those children who received the training were in a permanent placement compared to the less than 40% of typical foster placements (Arvidson et al., 2011). The ARC framework was also associated with a significant decrease in child symptoms and caregiver stress (Hodgdon et al., 2016). Furthermore, Hodgdon et al. (2013) found a significant relationship between the use of ARC and reductions in the PTSD symptoms (externalizing and internalizing behaviors) and the frequency of restraints used in a youth residential treatment center. More controlled studies are needed to fully understand the relationship between the ARC framework and improvements for students who have experienced trauma.

Multi-Tiered System of Supports to Address Childhood Trauma -- The multi-tiered trauma-informed practice approach can be defined as “one that occurs at the systems level and involves key educational stakeholders – from school leaders and educators to school staff – in addressing and responding to children’s trauma and possible traumatic stress” (National Child Traumatic Stress Network, 2008).⁸ Despite the growing popularity of the multi-tiered trauma-informed practice approach and its use in programs and schools across the country, few causal studies have been conducted on the impacts it has in schools. As of 2017, no studies met the criteria from a systematic review (e.g., randomized or quasi-experimental study design, conducted in preK-12 school, etc.) conducted by Maynard et al. (2019). Findings indicated a lack of causal evidence of the impacts of trauma-informed approaches in schools (Maynard et al., 2019). A narrative analysis showed that the most frequently cited treatment was Cognitive Behavior Interventions, and only 5% of studies cited a multi-tiered systems approach (Zakszeski et al., 2017). This is not to say that there are no other types of analyses done on the effects of this approach.

⁸ Multi-Tiered System of Supports (MTSS), Positive Behavioral Interventions and Supports (PBIS), and Multi-Tiered Trauma-Informed System of Supports are all examples of frameworks that emphasize the use of three tiers of support to provide academic and behavioral support for all students. This memo will focus on Multi-Tiered Trauma-Informed System of Supports, but more information on MTSS and PBIS can be found at <https://www.pbis.org/pbis/tiered-framework>.

One such study on a multi-tiered trauma-informed system of supports created to support refugee youths found that students across all tiers of the program demonstrated improvements in accessing mental health resources (Ellis et al., 2013). The study also showed that decreases in resource hardships (the loss of resources including personal, social, or material) were significantly associated with a decrease in PTSD symptoms (Ellis et al., 2013). A different study on a multi-tiered trauma-informed approach, based in rural Louisiana, showed that students' follow-up scores were statistically significantly lower on PTSD symptoms, intrusion, avoidance/numbing, and arousal (Hansel et al., 2010). The study also showed statistically significantly lower levels of anxiety, depression, and posttraumatic stress (Hansel et al., 2010).

Several studies have been done on the Head Start Trauma Smart (HSTS) program. HSTS is a holistic program that combines classroom supports, intensive therapy for targeted students, and parent supports. HSTS uses a combination of ARC, Trauma-Focused Cognitive Behavioral Therapy, and Early Childhood Mental Health Consultation (Holmes et al., 2014). Holmes et al. (2014) found that students who participated in the program showed a statistically significant change in ability to pay attention, attention deficit/hyperactivity problems, externalizing behavior, and opposition defiance problems. Parental forms indicated significant improvement in externalizing problems and attention/hyperactivity. Lastly, Classroom Assessment Scoring System scores, which rate the quality of relationships in the classroom, showed increases in positive classroom culture (e.g., respect for student perspective, teacher sensitivity). An additional study by Orapallo et al. (2021) on HSTS showed that the majority of educators were *satisfied* or *very satisfied* with the training and that the knowledge of core content increased. Additionally, staff attitudes became more favorable to trauma-informed approaches (Orapallo et al., 2021).

Approaches at the School Level

Trauma-Sensitive Schools -- A trauma-sensitive school is one in which all aspects of the educational environment, from workforce training to engagement with students, are grounded in an understanding of trauma and its impacts (Guarino & Chagnon, 2018). These schools are designed to promote resilience for all students (Guarino & Chagnon, 2018) and are rooted in the same philosophy described above in the Multi-Tiered System of Supports section. At the school level, a trauma-sensitive approach includes three tiers:

- Tier 1 – Universal Interventions (for all students exposed, preventative and proactive)
- Tier 2 – Secondary Interventions (for some students exposed or at risk and include group interventions)
- Tier 3 – Tertiary Interventions (for individualized and trauma-specific mental health interventions)⁹

Similar to the studies on multi-tiered trauma-informed approaches, there are few causal studies on

⁹ Implementation guides created by the National Center on Safe Supportive Learning Environments can be found at <https://safesupportivelearning.ed.gov/trauma-sensitive-schools-training-package>.

trauma-sensitive schools. Data from implementation in districts in California and Washington state showed that there were significant reductions in office referrals (20-44%) and suspensions (30-90%) according to the ACEs Too High Network (Stevens, 2012, 2013). Dorado et al. (2016) found that there was a 32% decrease in office disciplinary referrals and a 42.5% decrease in referrals involving physical aggression after just one year. After five years of trauma-sensitive implementation, there was an 87% decrease in total incidents and an 86% decrease for referrals involving physical aggression (Dorado et al., 2016). Lastly, in a study based out of Appalachia focused on rural preschool students, there was a significant increase in measures of resilience (Shamblin et al., 2016). Notwithstanding the positive associations noted, one critique of the trauma-informed school approach is that it is rooted in issues regarding disproportionality based on race but does not explicitly do enough to support the social justice aspect of the work; Gherardi et al. (2020) argue that to get to the root causes of these issues social justice needs to be a key principal of the work

Trauma-Informed Pedagogy -- The National Child Traumatic Stress Network (NCTSN) School Committee (2008) discusses several teaching strategies intended to mitigate the effects of trauma on student learning, including, but not limited to, maintaining routines, giving children choices, and being sensitive to the cues in the environment.¹⁰ Although there are a number of recommended strategies, much of the research focuses on providing educators with high quality training that incorporates building knowledge, shifting perspectives, and identifying self-care strategies for educators (Thomas et al., 2019). Additionally, the Cultural Adjustments and Trauma Services program, which is rooted in the Multi-Tiered System of Supports model but includes a program component, focuses on building knowledge of educators and has resulted in improved functioning and fewer PTSD symptoms for immigrant youth (Beehler et al., 2012).

Other studies have found positive results from specific curriculum. A recent study showed that culturally responsive, trauma-informed curriculum improved overall internal resilience scores, problem-solving, and empathy among students who received the Resilience Classroom Curriculum (Ijadi-Magsoodi et al., 2017). A pilot test of a modified version of the Heart of Teaching and Learning curriculum, which is an intervention designed to increase trauma-informed practices in classrooms, showed that use of the curriculum was associated with decreases in trauma symptoms for students (Day et al., 2015).

Use of Trauma Assessments, Surveys, and Inventories for Trauma Screening

As the conversation pertaining to trauma-informed care continues to permeate from the state level to individual classrooms, it becomes increasingly important to accurately identify those students who have experienced trauma. Trauma screening seeks to evaluate the exposure to potentially traumatic events and

¹⁰ More strategies for educators can be found at the National Child Traumatic Stress Network at <https://www.nctsn.org/resources/child-trauma-toolkit-educators>.

experiences as well as the aftermath of these experiences, including traumatic stress symptoms and reactions. According to the NCTSN (n.d.), there are three major types of screening tools: child-completed (self-reported), caregiver-completed, and provider-completed.

The most widely used tool to assess for ACEs is the 10-item ACEs questionnaire (abbreviated here as ACEs-10 questionnaire; McLennan et al., 2020). However, as argued by McLennan et al., the ACEs--10 questionnaire is coming under increased criticism. Some of the critiques include a limited scope of questions being asked, a simplistic approach to scoring, and the lack of psychometric assessment on the tool itself (McLennan et al., 2020). McLennan et al. argue the need for further psychometric assessment prior to clinical and research use. In addition to the ACEs-10 questionnaire, there are a multitude of clinical assessments that can be used to identify potential ACEs.

Childhood Trauma Questionnaire -- The Childhood Trauma Questionnaire (CTQ) is a 28-question self-report tool used to identify likely cases of abuse and neglect. The tool identifies these cases based on three levels of severity: low, moderate, and severe. The CTQ focuses on physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect. Critics of the ACEs-10 questionnaire cite the CTQ as a tool that has the required psychometric assessment completed that could be used for research and clinical practices (McLennan et al., 2020). Studies on the questionnaire showed that it serves as a reasonable retrospective assessment for the use of identifying ACEs (Liebschutz et al., 2018).

Clinician Administered PTSD Scale – CAPS- 5 -- The CAPS-5 is a version of the Clinician-Administered PTSD Scale specifically targeted for children (Pynoos et al., 2015). The assessment is appropriate for ages 7 and above and includes age-appropriate items and picture response options. The 30-item structured interview can be used to make current and lifetime diagnoses of PTSD. The CAPS-5 is designed to be administered by clinicians and clinical researchers who have a working knowledge of PTSD but can also be administered by trained professionals. The full interview can take between 45 and 60 minutes.

Trauma Symptom Checklist of Children -- According to the NCTSN (n.d.), the Trauma Symptom Checklist for Children can be used to evaluate acute and chronic posttraumatic symptomatology (anxiety, depression, anger, dissociation) after a child has been identified as potentially having experienced trauma. The checklist was created for children ranging from ages 8 to 16 years and only takes between 15 and 20 minutes to administer. It is appropriate for individuals or group administration. Lastly, the checklist is appropriate for both children who have previously disclosed their experiences with abuse and those who have yet to disclose.

Race-Based Traumatic Stress Symptom Scale -- The Race-Based Traumatic Stress Symptom Scale (RBTSS) is a measure designed to assess the psychological and emotional stress reactions to racism and racial discrimination (Carter et al., 2013). The assessment is a valuable tool for mental health professionals because it

provides them with a way to evaluate the emotional reactions of racism and racial discrimination (Carter et al., 2013). Criticisms of the scale include its length, a complicated scoring process, and inability to provide a diagnosis solely from the assessment (Williams et al., 2021).

Current Legislative and Funding Initiatives for Trauma-Informed Practices

Many of the evidence-based practices previously described in this memo require significant policy changes at all levels of the educational landscape and will require sizeable, continued investments to ensure they are implemented with fidelity. The following sections will describe some of the current policies and grants that target trauma-informed education.

Every Student Succeeds Act

The Every Student Succeeds Act (ESSA) includes a host of trauma-informed approaches and practices. Some provisions are more directly linked to trauma-informed practices, such as the Student and Academic Enrichment Grants, which provide funding to support “comprehensive school-based mental health services and supports” (Prewitt, 2016). Additionally, some ESSA provisions are more tangentially related, including reducing over-testing and overuse of exclusionary discipline practices, which disproportionately impact students who have experienced trauma. ESSA also includes grants focused on educator professional development to increase knowledge of the referral process for students who have experienced trauma. (Prewitt, 2016).

Promoting Student Resilience Grants

The Promoting Student Resilience Grant (PSR) was established by the U.S. Department of Education (ED) in 2016. The National Center on Safe Supportive Learning Environments (2020), in collaboration with Child Trends and the American Institute for Research, reported on the findings from the program thus far. Three Local Education Agencies were granted \$4.75 million, which would allow them to engage in activities to build capacity, assess efforts, and support sustainability to address student mental health and exposure to trauma. The PSR grantees (Baltimore, Chicago, St. Louis) provided more than 5,000 students from 53 schools with school-based and community health services in partnership with 92 community-based organizations. Grantees’ reports found that adequate time to build buy-in and ongoing support were integral to successful implementation. Additionally, community stakeholder support was critical and constant communication, both internally and externally, played a major role in the effectiveness of a program. Lastly, robust technical assistance and strategic data usage were two other strategies shown to be helpful.

The Trauma Recovery Demonstration Grant Program

ED started taking applications for the Trauma Recovery Demonstration Grant Program starting in fiscal year 2019. At the time of this memo, Alaska, Hawaii, Nevada, Delaware, and Louisiana have been awarded grants (National Center on Safe Supportive Learning Environments, 2021). The grant funding provides technical assistance and capacity building to State Education Agencies (SEAs) and Local Education Agencies to deliver

trauma-specific mental health services.¹¹ SEAs can use grant funds to pay external providers for the trauma-specific mental health services student receive. Additionally, the grant provides parents with more agency in determining the provider to best meet their needs.

ISBE Strategic Plan

The Illinois State Board of Education has developed a roadmap for all schools called the *2020-2023 Strategic Plan*, built around four principles that guide work at ISBE - equity, quality, collaboration, and community (ISBE, 2020). The plan is grounded in three equity-explicit goals:

1. Every child will make significant academic gains each year, increasing their knowledge, skills, and opportunities so they graduate equipped to pursue a successful future, with the state paying special attention to addressing historic inequities.
2. All districts and schools will receive the resources necessary to create safe, healthy, and welcoming learning environments, and will be equipped to meet the unique academic and social and emotional needs of each and every child.
3. Illinois' diverse student population will have educators who are prepared through multiple pathways and are supported in and celebrated for their efforts to provide each and every child an education that meets their needs.

The Strategic Plan addresses trauma within Goal 2 and Priority 1 (student well-being) and Priority 2 (resource allocation). Specific goals within each priority aim to address trauma holistically. For example, Priority 1 includes an emphasis on supporting community-based partnerships and providing statewide training on social and emotional learning, behavioral interventions, and trauma-informed care by leveraging federal programs. Additionally, ISBE has included a goal targeted at supporting the social and emotional needs of students, educators, and staff impacted by the COVID-19 pandemic by providing high-quality professional development by way of the Regional Offices of Education establishing a social-emotional learning/trauma training hub (ISBE, 2021).

Discussion

This memo aimed to review scientific literature on the impact of trauma and poverty on students and review current trauma-informed approaches in schools and clinical settings. Given the limited timeframe and exponential bodies of scientific research on trauma among children, the review was limited. In essence, this

¹¹ A more detailed description of the Trauma Recovery Demonstration Grant Program can be found here: <https://www.federalregister.gov/documents/2019/07/05/2019-14408/applications-for-new-awards-trauma-recovery-demonstration-grant-program>.

review suggests that ACEs are common and can have lasting, negative effects on children’s physiological, social-emotional, and academic well-being. Importantly, educational institutions and policymakers should consider how ACEs are further complicated and magnified by historical, cultural, and complex traumas as well as chronic and generational poverty. To address the increasing need to treat trauma, a number of trauma-informed care approaches, such as ARC and MTSS, have been developed specifically for children. These approaches show promising results among children who have faced trauma. In closing, many of the evidence-based practices described in this review require significant policy changes at all levels of the educational landscape and will require sizeable, continued investments to ensure trauma-informed approaches and care are implemented with fidelity.

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DRAFT

Research Appendix: C

DATE: 08/19/2021

MEMORANDUM

TO: HB 2170 Professional Review Panel Ad-Hoc Committee Group 2
Members: Marcus Belin, Tianna Cervantez, Rebecca Hinze-Pifer,
Unique Morris, David Negron, Jane Russell, and Robin Steans

FROM: Dr. Brenda M. Dixon, Research and Evaluation Officer
Dr. Ernesto Matias, Education Officer

STAFF: Barbara Thomas, Ph.D., Director of Research
Marbella Uriostegui, MA, Lead Researcher

SUBJECT: Approaches to Eliminating Structural Racism in Schools

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Executive Summary

- Despite multiple attempts to redress the achievement gap, educational inequities persist along racial-ethnic lines (Flores & Gunzenhauser, 2019). Black (80%), Latinx (82%), and American Indian/Alaska Native (74%) students continue to graduate at lower rates compared to their Asian/Pacific Islander (93%) and White (89%) counterparts (Irwin et al., 2021). Studies have found that Black students are overrepresented in punitive disciplinary actions compared to their White counterparts (Gregory et al., 2010).
- Teachers' personal biases are a contributing factor to persistent racial-ethnic student inequities and impact their expectations, management, and instructional quality for students of color (Martinez, 2020);

Martinez, McMahon, et al., 2016; Starck et al., 2020). Interventions that reduce teacher implicit biases and reform teacher practices to improve teacher-student relationships result in improvements in school belongingness, total problems (e.g., emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship problems), amotivation, and external regulation among students of color (Gaias, Cook, et al., 2020).

- In addition to preparing in-service and pre-service teachers to teach diverse students, schools will need to diversify their teacher workforce (Grooms et al., 2021). Racial-ethnic teacher-student match results in better teacher-reported outcomes for children, including engagement, motivation, social skills, and school attendance (Rasheed et al., 2020; Redding, 2019). To retain teachers of color -- who often report experiencing marginalization -- teacher and administration training will need to be part of a structured equity-explicit program.
- School leaders' race-ethnicity and willingness to examine racial disparities (e.g., students' and parents' experiences with racial discrimination) was found to determine equity-explicit intervention engagement and uptake in schools (Allen et al., 2021). District administrators can prove to be highly influential in school-wide equity-oriented reform (Turner & Spain, 2020).
- Mounting evidence suggests that culturally relevant pedagogy has a positive impact on students' educational outcomes, such as students' grades, test scores, behavior, and school completion (Cabrera et al., 2014; Dee & Penner, 2017).
- Black students are more likely to be referred to a school administrator's office for misconduct compared to other racial groups; this disparity is not explained by differences in their behavior or academic performance in class (Rocque & Paternoster, 2011). Studies show that alternative disciplinary methods, founded on community building, are associated with positive student outcomes, such as lower office referrals and suspension rates among Black and Latinx students (Gonzales et al., 2019; Anyon et al., 2016).
- Research-based interventions considered most effective are those that target structural, systemic, and institutional change as well as individual-level attitudes and beliefs (Howard, 2019; Priest et al., 2021).

Approaches to Eliminating Structural Racism in Schools

Background

The Professional Review Panel (PRP) Ad Hoc Committee was tasked with reviewing the extent to which “racial equity within the Evidence-Based Funding formula is explicitly explored and advanced” (ISBE, 2021a, p. 1). More specifically, the committee will generate recommendations to address the following:

Topic C: Changes to the Essential Elements that may be required to better promote racial equity and eliminate structural racism within schools.

Topic H: The evidence-based or research-based practices that are shown to reduce gaps and disparities experienced by African American students in academic achievement and educational performance, including practices that have been shown to reduce disparities in disciplinary rates, drop-out rates, graduation rates, college matriculation rates, and college completion rates.

Thus, the purpose of this memo is to succinctly review current approaches to eliminating structural racism in schools. By no means is this review meant to be an exhaustive and sweeping assessment of said research. Rather, this memo briefly summarizes extensive scientific literature in order to facilitate further discussions among PRP Ad Hoc Committee members.

Eliminating inequities in the educational system requires an ongoing awareness of how those disparities are produced and a steadfast commitment to rectifying them completely (Carter et al., 2017; Orelus, 2020). This pursuit involves:

- (1) Identifying or making visible systemic oppression,
- (2) Challenging denial of complicity in such oppression, and
- (3) Ultimately transforming structural inequalities (Lynch et al., 2017).

Definitions

In an effort to make apparent the systems of inequality in education, we begin this memo by defining key terms:

Anti-Racism - An active, intentional, and consistent process of change to eliminate all forms of racism (Paradies, 2016).

Anti-Oppression - Strategies, theories, and actions that challenge social and historical inequalities/injustices that have been engrained in American systems and institutions and allow certain groups to dominate over others (Dei, 2014).

Equity - The provision of personalized resources needed for all individuals to reach common goals. Stated differently, the outcome and expectations are the same for all individuals, but the supports

needed to achieve those goals depend on the individual's needs (Espinoza, 2007).

Racism - A system of interpersonal, cultural, institutional, and structural patterns and social hierarchies in which White Americans as a group benefit at the expense of racialized groups — Black, Latinx, Asian Americans, Native Americans, Pacific Islanders, and Arab Americans. This phenomenon operates historically, often with contemporary, institutionalized -- yet implicit -- practices and policies that help to sustain racial hierarchies and inform current racial disparities (Bonilla-Silva, 2016).

Structural Racism - The racialized exploitation and subordination of people of color that benefits White Americans. It encompasses White racial stereotyping, prejudices, and emotions, as well as the discriminatory practices and racialized institutions engineered to produce the long-term domination of people of color. At the heart of structural racism are discriminatory practices, implicit or explicit, that generally deny Americans of color the dignity, opportunities, and privileges available to White Americans individually and collectively (Feagin & Barnett, 2005).

Literature Review

Structural Racism in Schools

Students of color tend to live in racially and socio-economically segregated urban areas (Saporito & Sohoni, 2007) where they may attend underfunded schools and receive inferior types of education (Hegedus, 2018; Noguera, 2011; Silva-Laya et al., 2020).¹² It has been amply documented that teachers in urban schools, where there is a vast concentration of students of color, are often inexperienced, ill-prepared, poorly paid, and often lack the supports needed to effectively teach students (Johnson et al., 2004; Maring & Koblinsky, 2013; Sass et al., 2012; Zimmerman & Astor, 2021). Despite multiple attempts to redress the achievement gap, often with race-neutral or colorblind strategies,¹³ educational inequities persist along racial-ethnic lines (Flores & Gunzenhauser, 2019). At the national level, Black (80%), Latinx (82%), and American Indian/Alaska Native (74%) students continue to graduate at lower rates compared to their Asian/Pacific Islander (93%)¹⁴ and White (89%) counterparts (Irwin et al., 2021). Moreover, Black students (57%) are less likely to immediately enroll in college after high school, compared to Asian (82%), White (69%) and Latinx students (64%; Irwin et al., 2021). In fact,

¹² Studies have traced back the current demographic makeup of socio-economically segregated urban areas to slavery and colonization (Bell et al., 2016; Bonilla-Silva, 2016).

¹³ Refers to neo-liberal, assimilationist ideology that stresses ignoring or minimizing group differences (Bonilla-Silva, 2006). Neoliberalism refers to promotions of free market and individual responsibility intended to sustain longstanding economic and racial hierarchies. In the context of racism, neoliberalism disguises the problem of racial inequities by promoting a larger message of peace without addressing root issues, thus maintaining an oppressive status quo (Perez & Salter, 2019).

¹⁴ Unpacking research on the "model minority myth" is beyond the scope of this memo. To read more about Asian Americans' and Pacific Islanders' academic experiences, see Kana'iaupuni et al., 2021; Lee & Zhou, 2014; Iftikar & Museums, 2019; Yoo et al., 2015.

Black students in 2019 enrolled into college at lower rates than in 2010 (66% in 2010 compared to 57% in 2021; Irwin et al., 2021). Studies have also found that Black students are overrepresented in punitive disciplinary actions compared to their White counterparts (Barrett et al., 2017; Marchbanks et al., 2018; Ramey, 2015). These findings show that there is an overwhelming need to address racial inequities and structural racism in schools.

This memo describes current approaches that target educators, curriculum, and school climate in addressing systemic racism. More specifically, contemporary methods of reducing teacher bias and improving student performance focus on student-teacher relationships (Gaias, Cook, et al., 2020; Gregory et al., 2017) and the power of student-teacher racial-ethnic and cultural match (Gershenson et al., 2021). A related body of literature has examined how race-conscious curriculum impacts student learning (Duncan-Andrade, 2005; Tintiangco-Cubales et al., 2015). Other approaches to redressing racial inequities include reforming punitive disciplinary actions in schools (Jain et al., 2014) and integrating a whole systems approach (Priest et al., 2021).

Notably, peer-reviewed evaluative studies describing the impact of equity-explicit interventions on student outcomes are newly emerging. A number of qualitative studies have provided rich descriptions of teachers' experiences in equity-explicit intervention but do not provide evidence of its effectiveness (Green et al., 2011; Rojas & Liou, 2017). Furthermore, a recent meta-analysis of educational interventions found that out of 96 randomly selected studies and 210 meta-analyses that met the What Works Clearinghouse standards for rigorous research in multiple educational areas, 27% of empirical studies and 94% of meta-analyses did not report race-ethnicity (Gaias, Duong, et al., 2020). More importantly, only 19% of empirical studies and 6% of meta-analyses conducted analyses to examine the potential impact for reducing racial-ethnic disparities (Gaias, Duong, et al., 2020). Thus, there is a need to apply more rigorous evaluation techniques to interventions that incorporate an explicit focus on enhancing racial equity in all schools.

Approaches to Eliminating Structural Racism in Schools

Anti-Racism among Educators

Race Related Training for Teachers and Other Professional Development. Studies have found that cultural or racial-ethnic mismatch between students and their teachers or school environment can contribute to lower feelings of engagement and belonging among students of color (Booker, 2006; Rasheed et al., 2020). Scholars use the cultural synchrony hypothesis to understand these phenomena, which asserts that cultural misunderstanding and unfamiliarity forces teachers to rely on simplistic tropes of their students, potentially leading to strained teacher-student interactions and teachers' misinformed, preconceived notions about their students' academic engagement and abilities (Blake, Smith et al., 2016; Rasheed et al., 2020). In fact, studies have shown that teachers' personal biases are a contributing factor to persistent racial-ethnic student inequities and have been shown to impact teachers' expectations, management, and instructional quality for students of color (Martinez, 2020; Martinez, McMahon, et al., 2016; Starck et al., 2020). At the same time, educational scholars have argued that it is becoming increasingly apparent that a teacher's success will be determined by their ability to work effectively across racial, ethnic, and cultural differences, underscoring the imperative to

develop and implement race-explicit training for all teachers (Sleeter, 2001).

Studies have examined the effectiveness of programs that target the teacher-student relationship as a viable pathway to reducing and eliminating structural racism in schools. These programs are aimed at improving student outcomes via teacher perceptions and practices, given that teachers' perceptions of students impact their academic expectations and interactions with their students (Gentrup et al., 2020). One such program is the My Teacher Partner Secondary (MTP-S) training, an intensive, year-long coaching program aimed at improving teachers' daily interactions with students (Allen et al., 2011; Gregory et al., 2017). Multiple studies have found that the MTP-S program is effective in improving engagement in students aged 11-18 in secondary schools (Gregory, Hafen, et al., 2016; Gregory et al., 2017). Although the program itself is not race-explicit, evaluative studies have found that the program helped reduce discipline referrals for Black students (Gregory, Hafen, et al., 2016). Researchers attributed this positive outcome to teachers' improvements in facilitating higher level thinking skills, problem solving, and metacognition (Gregory, Hafen, et al., 2016), which may have translated to greater teacher expectations from students. However, a more recent evaluation of this program showed that compared with teachers randomly assigned to control conditions and to teachers who did not participate in the randomized trial, those receiving MTP-S showed no differences in their racial gaps in disciplinary referrals or the number of referred Black students during the two years of intervention and the postintervention year (Gregory et al., 2019). According to the authors, the lack of lasting effects may suggest a need for interventions to have a more explicit focus on racial dynamics, including equity direct approaches that offer concrete strategies for teachers' behavioral changes in the classroom and increased bias awareness (Gregory et al., 2019).

In the Equity-Explicit Establish-Maintain-Restore (E-EMR) intervention, a related teacher training, teachers engage in a collaborative process that promotes positive relationships with students in three phases: Establish, Maintain, and Restore (Cook et al., 2018). During the Establish phase, the objective is to facilitate student belonging and connection with the teachers. The primary practice during the Maintain phase is a 5-to-1 ratio of positive to negative interactions. Finally, the Restore phase is triggered when harm to the relationship has occurred because of a misunderstanding, conflict, or some other negative interaction (Duong et al., 2019). E-EMR also incorporates an explicit focus on enhancing racial equity by integrating relational strategies for reducing bias and enhancing cultural responsiveness (e.g., teachers focus on objectively describing the student's behavior, putting aside their interpretations and judgements during the Establish phase). Following the training, teachers participate in professional learning communities at their schools for honest reflection and collaboration where teachers reflect on whether students of particular racial-ethnic groups are disproportionality represented across the three EMR phases (Gaias, Cook, et al., 2020). When paired with a 90-minute online implicit bias training, students of color who were taught by teachers trained in E-EMR showed

greater improvement in school belongingness, total problems (e.g., emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship problems), amotivation, external regulation, and GPA when compared to their White counterparts (Gaias, Cook, et al., 2020). Importantly, in order to eliminate structural racism, schools will need to simultaneously train pre-service and in-service teachers, as well as diversify the teacher workforce (Grooms et al., 2021).

Diversifying the Teacher Workforce -- While it is critical that all pre-service and in-service teachers be trained to engage diverse students, it is also imperative that efforts be implemented to properly prepare, hire, and retain teachers of color. A host of studies have found that racial-ethnic teacher-student match results in better teacher-reported outcomes for children, including engagement, motivation, social skills, and school attendance (Rasheed et al., 2020; Redding, 2019). Black students taught by Black teachers are less likely to experience exclusionary discipline, like suspension and expulsion (Lindsay & Hart, 2017). Longitudinal state-level studies have also found that Black students who are taught by Black teachers in early grades are less likely to drop out of high school and more likely to aspire to attend college and take college entrance exams (Gershenson et al., 2021). Following the cultural synchrony hypothesis, scholars propose that teachers of color share similar lived experiences and are cultural translators and advocates for students of color, which may translate to students' higher regard toward their teachers and greater perceived expectations, potentially leading to higher academic engagement (Blake, Smith, et al., 2016). These findings are imperative considering that recruiting and retaining non-White teachers have been national initiatives for the last decade and teachers of color continue to be overrepresented in hard-to-staff schools (Achinstein et al., 2010; Ingersoll et al., 2019). Non-White teachers are still grossly underrepresented in the teacher workforce in Illinois. In 2020, teachers in Illinois were predominantly White (82.3%), whereas the state's student population was more ethnically diverse (47.5% White, 26.6% Latinx, 16.6% Black, 5.2% Asian, 4.1% Other; Illinois Report Card, n.d.).

Caution is advised for stakeholders who may interpret these finding on teacher-student matching as evidence for the argument that diversity and equity are urban area specific and, thus, irrelevant for the entire state of Illinois. Although it is critical that efforts be created to match students and teachers by cultural background, policies should also endorse that all educators practice anti-racism, regardless of how they racially identify or whether they teach in homogenously White or diverse classrooms. That is, all educators regardless of background must define the role they play in sustaining or ameliorating racial hierarchies and current racial disparities. This argument is buttressed with the fact that the United States has rapidly become more ethnically diverse (Tamir, 2021). Thus, educators of all backgrounds should practice anti-racism in classrooms to help students exhibit more empathy, gain a better understanding of historically marginalized individuals and communities, and be more open-minded.¹⁵

Importantly, one study suggests that diversifying the teacher workforce benefits White students as much as students of color (Cherng & Halpin, 2016), suggesting that teachers of color are needed in all areas of the state. However, placing teachers of color where they are the numerical minority may do more harm than

¹⁵ A growing body of literature investigates White educators' experiences with equity-explicit practices in education preparation programs and in schools (see Rojas & Liou, 2016; Shannon-Baker, 2020).

good if not supplemented by anti-racism training for all educators. Efforts to increase the number of educators of color may be undermined by the negative experiences of teachers of color who leave the profession at higher rates than their White counterparts (Ahmad & Boser, 2014). Studies suggest that the attrition of teachers of color may be attributed to racial battle fatigue (e.g., the daily psychological, emotional, and physiological toll of confronting racism; Pizarro & Kohli, 2020) and the “invisible tax” they endure while in education preparation programs and schools (Cerna-Prado et al., 2019). In education preparation programs, teacher candidates of color often report feeling silenced and marginalized (Amos, 2010; Gist, 2017). In schools, teachers of color express feeling equally marginalized, isolated, and overlooked as potential leaders (Kohli, 2018) and often experience emotional fatigue and burnout (Cerna-Prado et al., 2019), which is associated with greater student racial disparities in perceived school climate (Bottiani et al., 2014).

Many states, including Illinois, currently have recruitment practices in place that specifically target racially and ethnically diverse individuals for teaching (Villegas et al., 2012). One such program is the Grow Your Own (GYO) initiative that allows states to create a model for recruiting, preparing, placing, and retaining culturally responsive community-grounded teachers of color to improve educational outcomes for all students (Gist et al., 2019; Rogers-Ard et al., 2019). The Illinois GYO program currently provides teacher candidates with coaching, loan forgiveness, and social and educational supports offered through an inclusive peer group (Grow Your Own Teachers, n.d.) where discussions are held on social, racial, and economic inequities impacting hard-to-staff schools. Unfortunately, no studies have evaluated the role of GYO on teacher preparedness, efficacy, or student outcomes.

The type of training teacher candidates of color receive or engage with may promote their retention in schools. Participation in a professional development series centered on culturally relevant education (CRE-PD) may promote the critical consciousness teachers need to educate students of color (Jackson & Knight-Manuel, 2019; Kohli, 2019). These professional development series may include varied practices, such as racialized affinity circles (Bristol et al., 2020; Pour-Khorshid, 2018), awareness-raising, and critical reflection through equity explicit dialogue and written reflection (Gay & Kirkland, 2003; Ebadi & Gheisari, 2016; Jackson et al., 2021); counternarratives (Henning et al., 2018); and community-based organizing (Martinez, Valdez, et al., 2016). One such program, the Institute for Teachers of Color (Institute for Teachers of Color Committed to Racial Justice, n.d.), cultivates a community of critical educators with the following approaches:

- (1) Strengthening racial literacy
- (2) Building community
- (3) Developing leadership
- (4) Focusing on health and wellness

Educational stakeholders may leverage institutional support for the trajectories of justice-oriented teachers and CRE-PD, given that some programs are aimed at directly supporting Black and Latino male students' college and career readiness (Jackson & Knight-Manuel, 2019).

Recently, ISBE adopted Culturally Responsive Teaching and Leading Standards to engage in work to diversify Illinois' educator pipeline and ensure that all teachers practice culturally responsive teaching (ISBE, n.d.). The standards will be implemented in educator preparation programs to assist emerging educators in building the skills they need to teach diverse students. This is a initiative, so fidelity of implementation cannot be assessed at the time of this memo. However, efforts should be developed and implemented to evaluate the effectiveness and outcomes of this statewide equity-explicit program.

School Leadership Promoting Equity in Schools. In addition to reforming teacher practices, studies have found that school leaders also determine the extent to which schools may show reductions in racial achievement gaps. For instance, one study found that school leaders' race-ethnicity and willingness to examine racial disparities (e.g., students and parent experiences with racial discrimination) determined equity-explicit intervention engagement and uptake (Allen et al., 2021). Turner and Spain (2020) found that district administrators' interpretations of equity in tracking can prove highly consequential for equity-oriented reform. More specifically, they found that even in times of budgetary and other environmental pressures, school leader found "policy windows" to promote equity in their schools (Turner & Spain, 2020, p. 806), reinforcing the critical role of administrators in leading the charge of reducing racial inequities in schools. Moreover, Rorrer and colleagues (2008) posited that district-level leaders can contribute to a successful, systemic reform by:

- (1) Providing instructional leadership
- (2) Reorienting the organization
- (3) Establishing policy adherences, and
- (4) Maintaining an equity focus.

Currently, the Illinois Report Card does not report the racial-ethnic demographic characteristics of school or district leaders. The National Center for Education Statistics (2020) reported that nationally, in 2017-18, principals were 78% White, 11% Black, 9% Latinx, and 2% Other. Given that school and district leaders are in many cases the gatekeepers of schoolwide initiatives and research shows that their race-ethnicity may help explain program implementation (Allen et al., 2021), stakeholders in pursuit of creating more equitable schools may want to focus on developing anti-racist administrators as well as support initiatives aimed at diversifying the workforce of school leaders.

Culturally Relevant Pedagogy

Ethnic Studies Courses -- Scholars posit that culturally relevant pedagogy, especially ethnic studies courses (i.e., interdisciplinary programs of study that focus on the experiences of historically marginalized communities of color with a particular emphasis on past and present struggles and social movements), help to ameliorate racial-ethnic educational inequities by creating relevant and meaningful curriculum that affirms

students' identities and draws from their funds of knowledge (Cammarota & Romero, 2009; Gay, 2010; Ladson-Billings, 2014; Tintiangco-Cubales et al., 2015). Educators intentionally use the classroom space to promote engagement between themselves and students by constructing collaborative, equitable, reciprocal relationships, which help to build students' critical intellectualism. These educational praxes provide students with tools for identifying, reflecting upon, critiquing, and acting against systemic racism and other forms of oppression (Duncan-Andrade, 2005; Tintiangco-Cubales et al., 2015).

Ethnic Studies Courses and Student Outcomes -- Mounting evidence suggests that culturally relevant pedagogy has a positive impact on students' standard educational outcomes, such as their grades, test scores, behavior, and school completion (Cabrera et al., 2014; Dee & Penner, 2017). Most notable are a number of studies on the effects of Latinx student participation in the now-defunct Mexican American Studies (MAS) program in the Tucson Unified School District. A small-scale descriptive study by Cammarota (2007) focused on the Social Justice Education Project (SJEP), fielded among 17 at-risk Latinx students in a Tucson high school over four semesters between 2003 and 2005, reported that these students were successful both in completing high school and in engaging with advanced courses. Cammarota and Romero (2009) reported that Latinx students enrolled in SJEP significantly outscored White students on state standardized tests and attained higher graduation rates. Relying on administrative data from roughly 8,400 students over four cohorts (i.e., graduating classes from 2008-11), Cabrera et al. (2014) found that participation in the MAS program was associated with an increased probability of graduating by 9.5% across all annual cohorts, independent of student demographic characteristics, prior academic achievement, and school-level context. A more recent study examined the causal effects of a ninth-grade ethnic studies course piloted over several years in the San Francisco Unified School District (Dee & Penner, 2017). Specifically, using data on 1,405 students from five school-by-year cohorts, Dee and Penner (2017) found that participation had large, positive effects on student outcomes (e.g., attendance, grade point average, and credits earned).

Nevertheless, efforts should be established that evaluate the extent to which districts are enforcing, schools are advancing, and educators are ethically teaching culturally relevant curriculum. A recent study by the Illinois Black History Curriculum Task Force and facilitated by the Illinois State Board of Education assessed the extent to which districts in Illinois included required topics of Black history in their curricula and testing (ISBE, 2021b).¹⁶ The findings suggest that while most districts include required topics in their curricula and testing, such as the history of the African slave trade and the history of slavery in the Americas, districts are least likely to include the topic of Black history in the sciences in their curricula or testing (ISBE, 2021b). It is important to note, however, that the one-time audit examined district representatives' self-reported answers to a survey, which does not effectively capture implementation and outcomes of including required topics of Black history in district curricula and testing. Thus, stakeholders should consider how to consistently examine the fidelity of implementation of required culturally relevant content areas in curriculum and testing.

¹⁶ Required topics of Black history include the contributions of individual African Americans in government, the arts, humanities, and sciences; the socio-economic struggle African Americans collectively experience striving to achieve fair treatment; the history of the African slave trade and the history of slavery in the Americas; and the vestiges of slavery in the United States (105 ILCS 5/27-20.4, 2005; see also ISBE, 2021b).

Disciplinary Actions in Schools

Racial Disparities in Disciplinary Action-- Greater exclusionary discipline in academic settings is associated with poorer academic outcomes for students (Gregory et al., 2010; Barrett et al., 2021), and punitive school policies increase youths' likelihood of contact with the juvenile and adult justice system (Curtis, 2014; Rocque & Paternoster, 2011).¹⁷ A host of research have found that Black and low-income students face harsher, exclusionary discipline, such as suspension and expulsion (Barrett et al., 2017; Marchbanks et al., 2018; Ramey, 2015). A study on national educational data from 2013-14 found that while White students and female students were underrepresented in student suspensions, Black students, male students, and student with disabilities were overrepresented in suspensions and expulsions regardless of the type of disciplinary action (e.g., office referrals, suspensions), level of school poverty, and type of school attended (U.S. Government Accountability Office, 2018). However a closer look at national data revealed that Black males students (17.6%) are most likely to receive out-of-school suspensions, followed by Black female students (9.6%), American Indian male students (9.1%), and males students who report two or more races (7.4%; National Center for Education Statistics, 2019). Regarding students' demographics and teachers' perceptions of student conduct, Black elementary school students were 27% more likely to be disciplined (i.e., whether the student was referred to the vice principal's office for misconduct at any time of the 2005-06 academic year) than their White, Asian and Latinx counterparts (Rocque & Paternoster, 2011). In other words, Black students are more likely to be disciplined compared to other racial groups, and this disparity is not explained by differences in their behavioral or academic performance in classes. These teacher-initiated and school-supported disparities in student discipline have the potential to negatively impact a student's engagement with the justice system.

Reforms to Student Discipline -- Current reforms to student discipline are characterized by principles of conflict prevention (e.g., improving school climate to reduce likelihood of conflict) and conflict intervention (e.g., focus on developing student and educator skills in constructive resolution of conflict). Conflict prevention is promoted via supportive student-teacher relationships, increased academic rigor, culturally relevant and responsive teaching, bias-free classrooms, and respectful school environments (Gregory, Bell, et al., 2016; Mayworm et al., 2016). Scholars suggest that greater presence of mental health and instructional support personnel, along with culturally relevant and responsive training, may help reduce racial disparities in student disciplinary actions (Blake, Gregory, et al., 2016; Skiba & Losen, 2016; Gregory & Roberts, 2017). Relatedly, research suggests that when discipline problems occur, educators should intervene by inquiring into the cause of conflict, problem-solve approaches to discipline, include student and family voices and perspectives on conflict sources and solution, and re-integrate students after conflict. Studies have shown that alternative disciplinary methods are associated with positive student outcomes, such as lower office referral and suspension rates among Black and Latinx students (Gonzales et al., 2019; Anyon et al., 2016).

School-based restorative justice programs, founded on community building, hold promise for reducing racial disparities (Song et al., 2020). For example, the Oakland Unified School District's Whole School Restorative Justice (WSRJ) program has been shown to reduce the disparities between Black and White student suspension and discipline gaps and improve academic outcomes in participating schools (Jain et al., 2014). The WSRJ program was guided by three overarching goals:

- (1) Build community in classrooms;
- (2) Repair harm with family group conferencing, circles, and conflict resolution; and

¹⁷ Unfortunately, fully detailing the school-to-prison pipeline phenomenon is beyond the scope of this memo. Interested readers may want to read Clark, 2020; NAACP Legal Defense and Educational Fund, Inc., n.d.)

- (3) Re-integrate highest risk individuals and ensure 1-on-1 support for successful re-entry and re-integration into the school or classroom after a serious incident of harm.

Although many school communities are currently engaging with restorative justice programs (Losen & Hayes, 2016), schools with proportionately more Black students are less likely to use specific restorative justice techniques (e.g., student conferences, peer meditation, restitution, and community service; Payne & Welch, 2015). As stated previously, school leaders' decision making and engagement in interventions and reform practice are critical to reducing racial inequities in schools, including student discipline. Moreover, according to the authors, "a more effective and far-reaching approach [to use restorative programs in schools] would be to focus on public policy initiatives that address educational imperatives" (Payne & Welch, 2015, p. 20). Thus, stakeholders should consider a restorative justice model as an essential approach to eliminating structural racism in schools.

Whole System Approach

It is critical that educators engage with multiple approaches to reduce structural racism in schools. Scholars argue that stand-alone and isolated programs that solely provide materials or are unstructured discussions may be ineffective or worse, likely doing more harm by reinforcing racial tokenism (Beelmann & Heinemann, 2014). In contrast, research-based interventions considered most effective are those that target structural, systemic, and institutional change as well as individual-level attitudes and beliefs (Howard, 2019; Priest et al., 2021). One example of a multicomponent school-wide intervention spanned six mutually reinforcing elements (Priest et al., 2021):

- (1) Teacher training and development
- (2) Curriculum and class-room materials
- (3) Student support and development
- (4) Parent and community involvement
- (5) School policies and guidelines
- (6) Monitoring and reporting of racial discrimination

Importantly, however, scholars caution against using a universal "one-size fits all" approach to address racial disparities, possibly leading to further exacerbated student racial disparities. Rather, they argue, systemic changes should be based upon research based, data-driven goals and contextualized solutions (Carter et al., 2017; Howard, 2010).

Illinois State Board of Education Strategic Plan

The Illinois State Board of Education has developed a roadmap for all schools called the *2020-2023 Strategic Plan*, built around four principles that guide work at ISBE - equity, quality,

collaboration, and community (ISBE, 2020). The plan is grounded in three equity-explicit goals:

1. Every child will make significant academic gains each year, increasing their knowledge, skills, and opportunities so they graduate equipped to pursue a successful future, with the state paying special attention to addressing historic inequities.
2. All districts and schools will receive the resources necessary to create safe, healthy, and welcoming learning environments, and will be equipped to meet the unique academic and social and emotional needs of each and every child.
3. Illinois' diverse student population will have educators who are prepared through multiple pathways and are supported in and celebrated for their efforts to provide each and every child an education that meets their needs.

Within Goal 2, ISBE holds two priorities: (1) student well-being and (2) resource allocation. Specific goals integrated within each priority speak to the myriad of approaches to reducing structural racism in schools previously reviewed. For instance, student well-being will be promoted by adopting Culturally Responsive Teaching and Leading Standards for educator preparation programs, supporting implicit bias trainings through professional development, and embedding the history and accomplishments of historically underrepresented groups (e.g., Latino/a, African-American, LGBTQ) in the Illinois Social Science Learning Standards. In order to assess the efficacy of the Strategic Plan, ISBE developed an internal Equity Impact Analysis tool and is currently developing an Equity Journey Continuum tool that will be incorporated into each district's public Report Card (ISBE, 2020).

Discussion

This memo aimed to review scientific literature on current approaches to addressing systemic racism in schools and equity-explicit intervention effects on student outcomes. Given the limited timeframe and exponential bodies of scientific educational research on this topic, the review was limited to work that targets teacher-student relationships; teacher-student racial-ethnic matching; school leaders' roles in promoting equity; culturally relevant pedagogy; alternative methods to student discipline; and interventions that take a systemic, whole school approach. The review suggests that individual methods can be taken to dismantle structural racism in educational settings; however, successful initiatives may be those that consider multifaceted approaches to reducing prejudice in administrators and teachers, use culturally responsive pedagogy and curriculum that engenders students' critical thinking skills and sociopolitical engagement, as well as those that use equity-explicit alternative approaches to creating a safe learning environment for all students to thrive.

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