Investing in Our Future: A World-Class Educational System for Baltimore City Students

Service Requiring a Concentrated Poverty Weight

Draft date: September 13, 2018

This document outlines the services that should receive adequate funding in schools with concentrated poverty. In light of the challenges that many of our students face - including poverty, housing and food insecurity, trauma and limited access to health and mental health resources - the service list below reflects the significant resources needed to comprehensively address the basic needs of these students. Please note, the services in this document represent those that would receive funding or additional funding based on a concentrated poverty weight. There are many other services for children living in poverty that should be funded or receive additional funding through a compensatory weight.

Services receiving a concentrated poverty weight have been organized by the following building blocks:

- Early Learning
- High-Quality Instruction
- College and Career Readiness
- Student Wholeness
- Family and Community Support
- Talent Recruitment, Development, and Retention
- Systems and Structures

City Schools suggests that to ensure adequacy in education for students across Maryland’s local education agencies, a new funding formula would support each service listed in the following tables through a concentrated poverty weight comprised of both a per pupil amount and a fixed amount of additional funding in schools where a certain percentage of students qualify for free or reduced priced meals. We believe that the concentrated poverty weight should kick in for schools with 50% poverty, with additional support provided in schools where the rate reaches 75% and beyond. Finally, City Schools believes implementation of a sliding scale is imperative in order to substantially augment resources and account for relative degrees of concentrated poverty within schools.

Note: This document does not include considerations for special education services or for English learners; those groups will be considered in a subsequent document that also reflects community input.

Key:
- The base allocation column establishes whether a service should be included in a base weight for each student.
- In the tables for each of the seven categories noted above, we indicate whether a service should also receive a compensatory allocation and/or be considered at different levels in schools serving communities with significant (50 to 74% of students) or severe (>75% of students) concentrations of poverty.
<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
<th>Base Allocation</th>
<th>Compensatory Allocation</th>
<th>Additional Funding for Concentrated Poverty</th>
<th>Rationale for Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming for children from birth to pre-k and parent support</td>
<td>Early learning centers to serve children from birth through entry to pre-kindergarten (pre-k)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Children who attended a high-quality early learning program completed more years of education and had higher incomes as adults than did those who did not go to preschool or attended a lower quality program (Murphy, 2009). High-quality learning programs should include open-ended play and arts education. Poor children are less likely to be ready for kindergarten and are more likely to benefit from high-quality early learning programs (Isaacs, 2012). Research shows that young children who have experienced poverty or economic insecurity benefit more from preschool than do more advantaged students (Phillips et al., 2017). Currently, only 5% of three-year-olds in Maryland attend state-funded pre-k (Barnett, Friedman-Krauss, Weisenfeld, Horowitz, Kasmin, &amp; Squires, 2017). In Baltimore, students who attend Head Start for one year and then public pre-k are more ready for kindergarten than those who are in informal care, as measured by the Maryland State Department of Education’s Kindergarten Readiness Assessment (Grigg, Connolly, D’Souza, &amp; Mitchell, 2016). High-quality preschool leads to improvements in test scores in kindergarten, but the sustainability of these effects in later grades remains unclear (Murphy, 2009). However, City Schools’ data contradict mixed national findings, with children showing improved scores even in later grades.</td>
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<td>Yes</td>
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<tr>
<td>Pre-k coaches</td>
<td>A coach for every 20 pre-k classrooms to ensure teachers are supported in implementing high-quality programming</td>
<td>Yes</td>
<td>No</td>
<td>Additional coaches at the ratio of 1 for every 15 pre-k classrooms to ensure teachers are supported in implementing high-quality programming</td>
<td></td>
</tr>
<tr>
<td>Mental health supports for early learners</td>
<td>Related service providers, school psychologists, and school-based staff to provide intervention services to pre-kindergarten through 2nd-grade students to improve language acquisition and reading skills</td>
<td>No</td>
<td>No</td>
<td>Implement core program model at all schools</td>
<td>For City Schools students, this project results in statistically significant improvements in academic literacy outcomes as measured by district benchmark tools, and statistically significant decreases in referral for special education.</td>
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<tr>
<td>Child care centers in High Schools</td>
<td>Child care centers in High Schools with high populations of students who are parents.</td>
<td>No</td>
<td>No</td>
<td>1 daycare center for every four high schools</td>
<td>For City Schools students who become parents while they are still students themselves, accessible child care on-site will enable them to continue their studies.</td>
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# High-Quality Instruction

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<tbody>
<tr>
<td>Assistant principals</td>
<td>One assistant principal per school with a ratio of 1 assistant principal for every 600 students</td>
<td>Yes</td>
<td>No</td>
<td>Schools will receive the base allocation plus one assistant principal per school with less than or equal to 400 students and additional AP’s at the ratio of 1:400</td>
<td>Research shows that effective school leaders who are skilled at organizational management are a crucial lever for successful schools (Grissom &amp; Loeb, 2011; Murphy &amp; Torre, 2014). Student achievement has also been shown to benefit from effective and comprehensive school leadership (Bierly, Doyle, &amp; Smith, 2016; Waters, Marzano, &amp; McNulty, 2003).</td>
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<tr>
<td>Extended school day</td>
<td>An additional two hours of instructional time each day for high-needs students</td>
<td>No</td>
<td>Yes</td>
<td>Capacity for 50% of students</td>
<td>Baltimore students will benefit from the opportunity to spend more time in school, where they are safe and have the chance to learn and grow. It is important to note that structured implementation of an extended day across schools is key to the success of such a program. Extended school-day programs in Florida and Massachusetts showed mixed results (Abt Associates, 2012; Folsom, Osborne-Lampkin, Cooley, &amp; Smith, 2017). However, other research suggests that extending in-school time can support student learning when considerations are made for how time is used and if programs target students most at risk of school failure (Patall, Cooper, &amp; Allen, 2010).</td>
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<tr>
<td>Extended school year</td>
<td>Eight weeks of additional schooling for high-needs students in elementary and middle grades</td>
<td>No</td>
<td>Yes</td>
<td>Capacity for 50% of students</td>
<td>When compared to their wealthier peers, low-income students show pronounced levels of summer learning loss (Alexander, Entwistle, &amp; Olson, 2007). Summer academic programming lasting longer than five weeks</td>
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</table>
with significant instructional time in math and language arts has been shown to mitigate this loss (Augustine et al., 2016). It appears that summer programs yield the highest gains for learners in the elementary grades (Quinn, Cooc, McIntyre, & Gomez, 2016). Chaplin and Capizzano (2006) found that low-income students in a voluntary summer learning program gained one month of reading skills. Beyond significant instructional time in math and language, extended school year can provide room for schools to provide additional enrichment opportunities including arts education and AP academy.

<table>
<thead>
<tr>
<th>Math and literacy coaches</th>
<th>Coaches to support teaching practices in math and English language arts, at a ratio of one per 200 students (minimum of two coaches per school; APA Consulting, 2016)</th>
<th>No</th>
<th>No</th>
<th>Yes (at the ratio of one per 200 students)</th>
<th>Yes (at the ratio of one per 200 students)</th>
</tr>
</thead>
</table>

Understanding that math and literacy coaches are a large investment, we recommend that the professional judgment panel’s recommendations be met at schools with concentrated poverty at a minimum, with the option to provide coaches to a broader group of schools as resources are available.

Teachers should learn standards and pedagogy from experts in each content area (Darling-Hammond, Hyler, & Gardner, 2017; Early Literacy Task Force, 2017). This is particularly necessary in a school district serving low-income and minority youth, where students are more likely to be taught by novice teachers (Ladd, 2008). In high-functioning educational systems, teachers receive support and development from coaches (Jensen, Sonnemann, Roberts-Hull, & Hunter, 2016).

Curriculum effects (the positive impact of high-quality curriculum on academic outcomes) hinge on implementation fidelity (Steiner, 2017), and coaches support teachers as they work through curriculum.
Coaches should provide support and instruction that reflects the unique needs of each school and school-community.

| General school materials | Supplies needed to support daily lessons and school activities (as recommended in APA Consulting, 2016) | Yes | Yes | 10% additional for all students | Schools should provide teachers with materials they need to lead students in engaging lessons. More funds for general classroom materials will take pressure off teachers, who spend an average of just under $500 of their own money each year on school supplies for their classrooms (Lee & Burkam, 2002; Murphy, 2009; Public school teacher spending on classroom supplies, 2018). The concentrated poverty allocation should also cover the costs of providing books students can take home. Access to books at home is a consistent predictor of student reading achievement (Brooks-Gunn, Klebanov, & Liaw, 1995; Brooks-Gunn & Markman, 2005; Fryer & Levitt, 2004; Rothstein, 2004); and many students living in poverty have limited access to books (Neuman & Moland, 2016). |

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<td>College and career counselors</td>
<td>Support to prepare all students for postsecondary opportunities</td>
<td>No</td>
<td>No</td>
<td>One counselor for every 100 students</td>
<td>Baltimore City Schools students need access to supportive adults and experiences that encourage post-secondary enrollment. When compared to their wealthier peers, low-income students face additional barriers to achieving postsecondary goals. Students from low socioeconomic communities are 30% less likely to go to college than are students from more affluent communities, and fewer than half take the SAT (Bell, Rowan-Kenyon, &amp; Perna, 2009). Navigating college acceptance or certification processes is more challenging for students who do not have parents or other family members who can provide guidance and support based on their own experiences (Bell, Rowan-Kenyon, &amp; Perna; De La Rosa, 2006). Avery and Kane (2004) suggest that organizing college visits as field trips encourages students to apply to schools at higher rates. Other studies have found that when youth from disadvantaged backgrounds have relationships with adults who have attained higher levels of education, they are more likely to enroll in a four-year institution (Engberg &amp; Wolniak, 2010). However, even if accepted to college, low-income students frequently do not enroll (Castleman &amp; Page, 2014). To reduce “summer attrition,” these students need access to a supportive adult who can help them complete all necessary paperwork, navigate challenges related to finances or family circumstances, and provide</td>
</tr>
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</table>
counseling when needed (Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009). College and Career Counselors can provide this level of support to High Schools students as they navigate the college application and enrollment process.

References


## Student Wholeness

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<tr>
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<tr>
<td>School-based health centers</td>
<td>A school nurse is available at all schools during the school day and extended primary care services are provided at schools in communities of significant and severe concentrated poverty</td>
<td>Yes</td>
<td>No</td>
<td>Additional half-time nurse practitioner for each school</td>
<td>Students with poor health have a higher probability of failing, being retained, and dropping out than students who are free from medical problems (Currie, 2005; Rothstein, 2004). In the United States, income is correlated with health, and children from low-income households experience more health concerns than do their wealthier peers. (Currie, 2005; Murphy, 2009; Woolf, Aron, Dubay, Simon, Zimmerman, &amp; Luk, 2015). Further, children from in low-income households are more likely to have untreated visual impairments, and it is estimated that 50% of minority and low-income students lose academic ground because of these impairments (Wang et al., 2011). Similarly, children from low-income families are more likely to have an untreated hearing and dental complications, both of which can affect school performance (Seirawan, Faust, &amp; Mulligan, 2012). The benefits of school-based health centers are clear and significant for both physical and mental health outcomes for students of all ages. Nationwide, nearly 30 percent of young people are uninsured, and 25 percent of those who are uninsured have no access to healthcare (Centers for Medicare &amp; Medicaid Services, n.d.). School-based health centers have been shown to bolster school enrollment among students, help close racial disparities in access to healthcare by providing in-school access to low-income African American students (Gance-Cleveland &amp; Yousey, 2005), and decrease incidence</td>
</tr>
<tr>
<td>Mental health programs</td>
<td>Mental health services for students, families, and communities through partnerships with service providers</td>
<td>No</td>
<td>No</td>
<td>Funding for a program at each school</td>
<td></td>
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of depression, suicidal ideations, and suicide attempts (Paschall & Bersamin, 2018). Parents have also been shown to feel more confident about their children’s health when their school has a health center (Paschall & Bersamin).

<table>
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<tr>
<th>Enrichment opportunities</th>
<th>Opportunities for students to experience art, music, theater, and other cultural experiences</th>
<th>Yes</th>
<th>No</th>
<th>$250 additional per pupil</th>
<th>Enrichment helps children acquire vocabulary and background knowledge to support academic and life success. In 2006, the wealthiest 20 percent of families spent about $8,000 more per child per year (in 2012 dollars) on enrichment than did the poorest 20 percent of families, resulting in a $100,000 spending gap over the course of a child’s K-12 school career (Duncan &amp; Murnane, 2014). To address this opportunity gap, schools must provide enrichment opportunities for students.</th>
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</thead>
<tbody>
<tr>
<td>School counselors: pre-k to 8th grade</td>
<td>One counselor for every 450 students to provide social-emotional support and ensure all students can learn</td>
<td>Yes</td>
<td>No</td>
<td>Increased counselors to reach a ratio of one for every 200 students</td>
<td>Increased counselors to reach a ratio of one for every 150 students</td>
</tr>
<tr>
<td>School psychologists</td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>One additional psychologist per school</td>
<td>n/a</td>
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<tr>
<td>Social workers</td>
<td>Social workers at a ratio of one to every 400 students</td>
<td>Yes</td>
<td>Yes</td>
<td>An additional half-time social worker per school</td>
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<tr>
<td>Student wholeness room specialist</td>
<td>A staff member to encourage student social-emotional development and provide support in de-escalating conflict</td>
<td>No</td>
<td>No</td>
<td>One per school</td>
<td>n/a</td>
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# Family and Community Support

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<tbody>
<tr>
<td>Before- and after-school care</td>
<td>One hour of before-school care and two hours of after-school care for elementary students</td>
<td>No</td>
<td>Yes</td>
<td>Capacity for 50 percent of students to attend</td>
<td>Capacity for 100 percent of students to attend</td>
</tr>
<tr>
<td>Housing specialists</td>
<td>School-based staff to provide housing support to families</td>
<td>No</td>
<td>No</td>
<td>One for every 200 students</td>
<td>One for every 150 students</td>
</tr>
<tr>
<td>Community schools coordinators</td>
<td>Staff members to bring together key neighborhood stakeholders, oversee the district’s community school strategy, ensure engagement with city agencies, and develop partnerships to provide wrap-around services</td>
<td>No</td>
<td>No</td>
<td>All schools with significant poverty rates</td>
<td>All schools with severe poverty rates</td>
</tr>
</tbody>
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academic achievement. While research around community schools has yet to be standardized (as community school programs often emphasize different student, family and community supports), a meta-analysis revealed community schools have shown academic gains in math and reading, typically over a 2-3 year span, as well as community-wide benefits like reduced crime rates and lower hospitalization rates.

Community schools serve as service hubs, providing students and families with access to services and resources in a safe, supportive environment. While there is no standard community school model as each school exists within a unique set of neighborhood conditions, services provided can include counseling, medical care, transportation assistance, legal counseling, food and nutrition services, and more. Research has shown that community schools work to resolve out-of-school barriers to learning and replicate practices found in high-quality schools, with the results that students have improved attendance, behavior, social relationships, and academic achievement. These schools help close opportunity and achievement gaps particularly for students from low-income families, English learners, students of color, and students with disabilities (Dryfoos, 2000; Maier, Daniel, Oakes, & Lam, 2017; Rothstein, 2004).

| Family engagement programs | One staff member for every five schools along with district-level support to expand outreach to families and to engage them more fully as partners in their children’s education | No | No | Additional staff member for every 10 schools of either high or severe concentrations of poverty | Family and engagement bolsters students’ grades and graduation rates (particularly for low-income African Americans) and improves student behavior (Annie E. Casey Foundation, 2008; Halle, Kurtz-Costes, & Mahoney, 1997; Mendez, 2010). Family involvement in schools has also been shown to be a stabilizing factor for those families (Blank, Melaville, & Shah, 2003). |
| Laundry equipment | Washers and dryers for family use, to ensure student lack of clean uniforms or other clothes is not a barrier to school attendance | No | No | 1 washer and dryer per school | Access to laundry facilities is an attendance barrier in many of our school communities. |
Parenting classes

Classes provided by partner organizations to support parents of students in kindergarten to third grade at schools in communities of severe concentrated poverty, focused on understanding child development and parenting techniques

No

No

n/a

1 program per school

Parenting contributes to cognitive development, with some parenting practices supporting development more effectively than others (Murphy, 2009; Rothstein, 2004). Providing parents with the tools and knowledge necessary to employ effective parenting practices will support the academic performance of their children. Participation in parenting classes has been shown to benefit children’s language and cognitive development as well as increase child-parent connection (Chang, Park, & Kim, 2009). Such programing is particularly needed in schools with high concentrations of poverty because low-income parents benefit from becoming familiar with practices that benefit children’s development.

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<tbody>
<tr>
<td>Principal support and development</td>
<td>Programs, coaches, and other opportunities/materials to support principal growth and improvement</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Additional funds allocated to schools for leadership training and support</td>
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<td></td>
<td>Strong principals are an essential component of high-functioning schools (Hallinger &amp; Heck, 1996; Murphy &amp; Torre, 2014) Successful principals shape the vision for their schools and have a strong influence on school culture, which is associated with teacher satisfaction and retention (Kain, Rivkin, &amp; Hanushek, 2004; Robinson, Lloyd, &amp; Rowe, 2008). Schools that serve low-income students often struggle to attract staff (Darling-Hammond, LaPointe, Meyerson, Orr, &amp; Cohen, 2007), and their principals are more likely to transfer to schools with fewer at-risk students if they have the opportunity to do so. Moreover, schools serving large numbers of low-income students are more likely to have a first-year principal than schools with wealthier students (Horng, Kalogrides, &amp; Loeb, 2009). Investment in leadership support and development is essential to ensure that all schools have strong principals, regardless of socioeconomic status of the students they serve.</td>
</tr>
<tr>
<td>Salary bonuses for teachers</td>
<td>Signing, performance, and retention bonuses for teachers in hard-to-staff subjects and high-needs schools</td>
<td>Yes (hard to staff subjects)</td>
<td>No</td>
<td>n/a</td>
<td>Signing bonus</td>
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<td>Under City Schools’ contract with the Baltimore Teachers Union, teachers have the opportunity to advance along career pathways and be rewarded with salary increases based on both performance and longevity. Nevertheless, the district faces challenges in recruiting and retaining staff, particularly for certain subject areas and for high-needs schools. Recruitment bonuses have been shown to support efforts to fill vacancies in high-needs schools and/or hard-to-staff subjects (Clotfelter, Glennie, Ladd, &amp; Vigdor, 2008; Cowan &amp; Goldhaber, 2015; Glazerman, Protik, Teh, Bruch, &amp; Max, 2013; Lankford, Loeb, &amp; Wyckoff, 2002). To be effective in achieving their goal, bonuses must be substantial (Kaimal &amp; Jordan, 2016; Wellington, Chiang, Hallgren, Speroni, Herrmann, &amp; Burkander, 2016).</td>
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<td>Transportation</td>
<td>Sufficient district-owned buses to meet all student transportation needs, including after-school activities</td>
<td>Yes</td>
<td>Yes</td>
<td>Access to school programs</td>
<td>Providing access to extended school-day, extracurricular activities, and enrichment opportunities in communities with low vehicle ownership requires a comprehensive transportation system, including a sizeable fleet of buses, to ensure that transportation is not a barrier to student success.</td>
</tr>
<tr>
<td>District office staffing</td>
<td>Increased district office staffing, proportional to increases in staff at the school level and to expanded use of third-party program providers, to provide appropriate monitoring, oversight, and support</td>
<td>Yes</td>
<td>Yes</td>
<td>As necessary</td>
<td>With the envisioned expansion of school-level programs and staffing to meet student need, the district office must add staff proportionally to ensure successful implementation through appropriate oversight, monitoring, and support</td>
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