Dimensions of Resource Equity

While resources are not the only factor in student outcomes, they are an important one. There are a number of resource elements that are allocated to schools and students, with funding being only one element of the larger picture. This document aims to create a framework to look at how various resources are distributed and differentiated in relationship to student needs. We can assess the level of equity of each of these types of resources by exploring the extent to which this resource is differentiated across schools and students *consistent* with differences in student need (where higher needs students have access to more of these resources) or differentiated *inversely* with student need (where lower needs students have access to more of these resources).

Research and experience tell us that students with differing levels of need must have access to differing levels and types of resources in order to have similar opportunities for success. Therefore, a central responsibility of school and system leaders is to allocate resources in ways that give all students the best chance of succeeding after graduation.

Framing the dimensions of resource equity can enable system leaders to take stock of their investments in equity and make deliberate decisions about how to reallocate and invest to align these resources with need, consistent with district strategy and context. This framework does not assert that in order to achieve equitable outcomes, all of the dimensions of resource equity must be differentiated in a specific way.[1] Instead, it provides the structures and indicators to help system leaders understand the ways in which their schools and systems are currently differentiating resources and explore options for reallocation. In particular, as system leaders consider resource equity across the dimensions below, it must be in the context of student outcomes; leaders must be clear on the performance challenges that they hope to address, such that they can understand how reallocating resources across the dimensions below may address those challenges.

1) **Access to Effective Teaching**
   Consistent access to a highly effective teacher has a dramatic effect on student achievement.[2] However, too often districts have difficulty in attracting and retaining their most effective teachers in high needs schools. This can create a vicious cycle of new teachers being assigned to higher needs schools and students and turning over at higher rates. Possible ways of assessing the extent to which teacher effectiveness is differentiated consistent with need include:
   a. Highly effective teachers: How are highly effective teachers (as defined by state and local systems) distributed across schools and students of different need levels?

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[1] That said, certainly a system that had *equal* distribution of each of these resources across students and schools with no differentiation based on need couldn't possibly expect that schools with higher concentrations of higher needs students could have equal outcomes to lower needs schools.

[2] See relevant research cited at end of this document

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b. Novice teachers: How are novice teachers distributed across schools and students of different need levels?

c. Note: also, consider compounding effect of highly effective teachers and novice teachers – student assignment to novice or less effective teachers for multiple years will have the effects on student achievement compounded – and conversely those assigned to highly effective teachers for multiple consecutive years positively compounded.

2) **School Leadership**

Similar to access to highly effective teachers, students enrolled in schools with highly effective leaders tend to perform better[3]. Like equity of teacher effectiveness, areas to consider when assessing the equity of access to effective school leadership include effectiveness, experience, and stability.

3) **School Funding**

Students with higher needs, such as low-achieving students, English Language Learners, students with disabilities, require additional resources to support those needs. Examples of systems that may differentiate funding levels based on need include using need-based funding weights or differentiated staffing ratios based on student need. Key questions to consider are: to what extent do schools with higher need levels spend more on a per pupil basis? If novice teachers disproportionately teach in higher needs schools, do the extra resources allocated to these schools more than offset the inequities associated with teacher pay?

4) **Personalized Time and Attention**

We want students to have a school experience that aligns with their needs and interests, which means that student groupings, learning time, technology, and programs should be matched to individual student needs. Areas to consider include:

a. Course offerings: To what extent are students able to enroll in courses based on their specific goals or interests? How does this ability differ for students with higher needs or students in schools with high concentrations of higher need students?(For example, do schools give their struggling students sufficient time in areas where they are behind? Do schools prioritize instructional time in areas of high priority? Do schools provide diverse course offerings such that students are able to take courses in areas of interest to them?

b. Individual attention: To what extent are schools differentiating class and group sizes to provide greater individual attention to students with greater academic needs?

5) **Early Intervention and Remediation**

This dimension considers student access to early services to support learning. Areas to consider include:

a. Pre-K: To what extent are higher needs students enrolled in high quality Pre-K programs before starting kindergarten?

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[3] See relevant research cited at end of this document

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    b.   Early intervention: To what extent do students who fall behind have access to Response to Intervention (RTI) and other early intervention supports, without having to rely on referral to special education as the means of providing supplemental supports?

6) **Social and Emotional Supports**
Students who have unmet social or emotional needs or even just do not feel physically safe struggle more with academic coursework and are at greater risk of poor performance. Areas to consider:
    a.   Physical safety: To what extent do higher needs students report feeling physically safe in and around their school? What are the rates of incidents of violence in schools with more high needs students? How do these compare with rates for schools with fewer high needs students?
    b.   Social/Emotional supports: To what extent do higher needs students have access to targeted social and emotional services, programs, and resources (e.g. counselors, social workers or other mental health resources)? How does this access compare to lower needs students?
    c.   Disciplinary process: Is there a consistent and fair disciplinary process across all schools?

7) **Instructional Time – Length of Day/Year**
The amount of time spent on school and schoolwork can vary greatly across students, schools, and systems. Intuitively, students who are further behind likely need to spend more time learning in order to catch up. Areas to consider include:
    a.   Hours of instruction for students: To what extent do students who have greater needs spend more time in school per week or year than students with lower needs? Does this vary across schools or across students within schools?
    b.   Total time on schoolwork: Independent of length of the school day, to what extent do students who have greater needs spend more time engaged in schoolwork in their specific area of need (e.g., after-school programming) per week or year than students who are further ahead?

8) **Rigor of Curriculum and Instruction**
Research has shown a relationship between the level of expectations that districts, schools, or teachers set for their students and their students' subsequent levels of achievement[4]. As such, lower expectations, whether as expressed through less rigorous assignments, course offerings, or grading practices, can play out as a resource inequity, holding back higher needs schools and students from meeting outcomes. Areas to consider when assessing rigor include:
    a.   Access to advanced coursework: Do schools with higher needs students offer AP and advanced coursework at similar levels as schools with lower needs students? Do students with similar performance levels across schools get placed into advanced or AP classes at the same rates across high and low needs schools?
    b.   Rigor of instructional practice and assignments: Are assignments in equivalent courses equally challenging across high and low needs schools? Do teachers use equally rigorous questioning and engagement practices across higher and lower needs student populations?

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[4] See relevant research cited at end of this document

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    c. Grading practices: Do the relationships between student grades and state assessment outcomes reflect all students being held to high standards?

9) Achievement of Peers

Our analysis of student performance across districts shows a relationship between a student's performance and the performance of his/her classmates.. In fact, across most districts, an economically disadvantaged student in a low needs school outperforms a non-economically disadvantaged student in a high needs school. The composition of students across schools, such that low-performing students are in the same schools (and the same class within schools) as their high-performing peers can be a powerful lever for equity. Areas to consider include:

    a. Economic disadvantage: To what extent are economically disadvantaged students attending schools/classes with non-disadvantaged students? How does this compare to the overall district composition of economically non-disadvantaged students?

    b. School transitions and student performance: To what extent are low performing students who are transitioning from elementary school enrolling in middle schools with higher-performing classmates? How does this compare to the experience of high-performing students transitioning from elementary to middle? To what extent does this relationship continue for the middle-high school transition?

10) Parental Involvement

Parent engagement in their students' learning is a critical factor impacting student achievement. In our analysis, we often see that parent engagement varies significantly across schools and neighborhoods. Key questions to consider for parental involvement include:

    a. How involved are parents in partnering with schools to meet student learning goals? Potential ways to measure this include: principal surveys, parent surveys, assessing number of touchpoints with parents, etc.

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Relevant Research:

- **Access to Effective Teaching**
  - Roland G. Fryer J. <u>The Production of Human Capital in Developed Countries: Evidence from 196 Randomized Field Experiments</u>. In: Handbook of Field Experiments. Vol. 2. Amsterdam: North-Holland ; 2017. pp. 95-32
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  - Goddard, Roger, et al. "A theoretical and empirical analysis of the roles of instructional leadership, teacher collaboration, and collective efficacy beliefs in support of student learning." *American Journal of Education* 121.4 (2015): 501-530.
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- **Rigor of Curriclum and Instruction**
  - Roland G. Fryer J. <u>Injecting Charter School Best Practices into Traditional Public Schools: Evidence From Field Experiments*</u>. Quarterly Journal of Economics (2014). 2014;129 (3) :1355-1407.
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