Tutoring Work Notes (7/31/18)

The APA approach to tutoring is sound in principle. It recognizes tutoring as the central intervention for "at risk" students, and identifies key issues, like tutor-teacher ratios and the time needed for tutoring sessions. But its fundamental recommendation of one tutor per school in the Base and one tutor per 250 students (or one tutor for every 125 at risk students) is not consistent with the research it cites, and is far below the original proposal presented to the Commission by the national expert on tutoring, Robert Slavin.[1]

In fairness, it is exceedingly difficult to develop projections of need and cost estimates given the large number of complex variables. There is much research on the effectiveness of tutoring (and tutoring is arguably the major reform being considered by the Commission that is most ready to go to scale). Yet, research on tutoring usually shows gains based on one or more years of tutoring but does not show how far below proficiency students remain at the end of the tutoring and whether, even if students attained proficiency, they might at a later point require further tutoring.[2]

We must of course do our best to grapple with these variables while we seek further data and guidance. The recommendation of a six-year categorical tutoring program commendably recognizes these realities. And it underscores the importance of an accountability mechanism that can guide implementation and provide data and other analyses as implementation proceeds. (In this sense the categorical program can be viewed as "transitional.")

Some fundamental design questions for further consideration are outlined below. (This is a work in process, including the need for cost estimates based on the design elements.)

Static or Adjusted funding

A threshold question is whether the 6-years categorical program funding will be Static (the same each year based on current need) or Adjusted (annually?) to reflect shifting factors that affect need and costs. The shifting factors might include:

1. Phase-in of implementation. A possible phase-in schedule should reflect the need for time for standards to be set and for LSS's to structure RTI and recruit and train tutors.[3] A possible phase-in schedule: Year 1, K-3. Year 2, 4-8. Year 3, 9-12.
2. Reductions in the need for tutoring
   a. Impact of the tutoring itself in eliminating and narrowing performance gaps.

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[1] Achieving Proficiency for All, Concept Paper, October 2017 (Slavin)
[2] Dr. Slavin's estimates of Tutor-Years was based on his professional judgment.
[3] Assumes a reasonably ample supply of prospective tutors.

The need for tutoring should diminish each year, as the tutoring eliminates or closes below-proficiency performance gaps. See discussion below.

    b. Impact of other interventions (such as Before and After School programs and Summer School) and policy reforms (such as Early Childhood and Teacher Training) recommended by the Commission. The impact of the other interventions, based on available research, is likely to be relatively slight compared to the tutoring. The impact of the policy reforms is likely to be substantial, but very difficult to project and perhaps not significantly measurable during the 6-years categorical funding.[4]

3. Cost savings in Special Education. I have guesstimated this at 15 percent of special education expenditures (as best determined) per year for years 4 to 6 of the categorical program.[5] This takes into account: one, reductions in the number of students determined eligible for special education; and two, less intense IEP services will be needed for students with IEPs. Students in special education who are below proficiency are included in the overall number of students used to estimate the current need for tutoring, and therefore the categorical funds should be used for IEP services for these students.

4. Changes in tutoring best-practice models based on accountability data collection and analyses. Hopefully the accountability mechanism will produce "R & D" guidance as early as the second or third year, but I believe the impact is near-impossible to project.

Design elements of the categorical tutoring program

Students in need of the tutoring: students below proficiency in literacy in grades K-12

During the 6 years, literacy might be given the highest priority. It is the gateway to student achievement of all academic standards including math.[6]

Amount of tutoring required based on current need

As noted above, there is little research to go on. A starting point (using projections by Dr. Slavin) is to divide students below proficiency into Upper Half (those closest to proficiency) and Lower Half (those furthest from proficiency).

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[4] I believe that Work Group 3 recognizes that it's hoped-for absorption of tutoring in the regular workload of classroom teachers will not be realized within 6 years.

[5] A working assumption: after say 10 years, the costs of special education will be reduced by approximately 60 percent.

[6] A fairly recent article published by the Brookings Institute was titled "A counterintuitive approach to improving math education: Focus on English language arts." Susanna Loeb, "A counterintuitive approach to improving math education: Focus on English language arts teaching." Brookings RSS Updates, April 6, 2017.

For the Upper Half, an assumption could be that they would need 2 years of Tier 2 and no years of Tier 3. For the Lower Half, an assumption could be that they would need 2 years of Tier 2 and 2 years of Tier 3.

(Note 1: The APA 2016 study makes the valid point that not all students in need of tutoring would require the tutoring all year. But we simply don't know the extent to which students would move in and out of Tiers 1, 2 and 3. Further, the huge below-proficiency performance gaps suggest that most students will require Tier 2 and/or Tier 3 tutoring for all or close to all of the school year(s).)

(Note 2: In estimating the cost of the tutors, the cost of the tutor per school in the APA Base can be an offset.)

Teacher qualifications: Perhaps half who are Certified Teachers and half who have bachelor degrees. This strikes a compromise with Dr. Slavin's latest findings that support Teacher Assistants with B.A. degrees. Certified Teachers might be strongly preferred for students in the earliest grades and Tier 3 generally.

Intensity of the tutoring:

Tier 2: 4:1 for 45 minutes daily[7] 7 sessions per tutor per day[8]
Tier 3: 1:1 for 30 minutes daily[9] 10 sessions per tutor per day[10]

Tutor support: (a) Lead Coordinator per 11 tutors[11]; (b) Teacher training: presumably covered by Work Group 2.[12]

Accountability mechanism:

Tutoring within an RTI framework would seem particularly suited to an outside R & D institute that would contract with the overall governing entity. Perhaps along the lines of the child development institutes at Rutgers and UNC. The evidence base for tutoring is strong, and it can be brought to scale relatively quickly. Still, there will be a need for standards, TA, PD and monitoring,[13] and ongoing R & D involving the many 'best practices" variables (including tutor

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[7] Slavin
[8] Slavin
[9] Slavin was 1:1
[10] Slavin
[11] Slavin. I don't know how the cost of this reconciles with the APA recommendation for tutoring coordinators based on tiers of school performance.
[12] My assumption is that tutoring in reading requires basically the same qualifications as teaching reading in regular whole class (Tier 1) instruction.
[13] Perhaps the MSDE regs for the HB 1415 tutoring will be a start.

qualifications, tutor/student ratios and time periods, and other components). Ballpark estimate: $2m for each of 6 years.

Compensatory Education weight consideration

To what extent should the Compensatory Education weight be reduced if the categorical tutoring program is recommended? Tutoring is a significant cost component in the APA estimates that go into the Compensatory Education weight. On the other hand, "at risk" students will need extra assistance for other subjects (including math), for behavioral issues, and associated needs. One possibility: reduce the cost estimates that go into the Compensatory Education weight by half of APA's estimate of the cost of the tutoring in it.

Revision of "Design Assumptions" in the current Work Group 4 document

I am not sure of the current language. But as I have previously noted, past versions do not reflect specific design assumptions currently under consideration. To that end, a possible revision (substitution) is in the footnote below.[14]

Thank you for considering.

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[14] Draft Revision of Design Assumptions:

1. All students who are below proficiency in foundational skills of reading, math and writing should receive timely, evidence-based intervention programs, primarily tutoring, in all grades.
2. Priorities should be literacy in grades K-5, since literacy is the gateway to overall academic success.
3. Interventions should generally be within the well-accepted frameworks of Multi-Tiered Systems of Support (MTSS)/Response to Intervention (RTI). That is, the interventions should be provided as early as possible and progressively intense as needed.
4. Tutoring has a strong research base. Still, there are many different models that vary, for example, with respect to tutor qualifications, tutor to student ratios, and duration. Therefore, a strong accountability capacity is critical, and should encompass the essential elements of ongoing R & D: among them, program standards, dissemination of best practices, technical assistance, data collection, monitoring and annual public reports.
5. The Compensatory Education weight should take into account the availability of a categorical tutoring program.