To: Work Group 4 From: Buzzy Hettleman 9/13/18

Suggestions for revisions to the Work Group 4 recommendations: Additional Supports for Struggling Learners; Tutor-Student Ratio; and Accountability

The suggestions address three major issues. One, our need to address "Additional Supports" for struggling learners. Two, the inadequacy of the 1:125 tutor-student ratio so far proposed by APA. Three, a reiteration of a proposal for an Accountability mechanism.

"Additional Supports" for Struggling Learners

I think the Commission is in agreement that recommendations for Additional Supports are within the scope of the Work Group 4 charge – "More Resources for At-risk Students." This is expressed in the statement of guiding principle in the Sept 5 draft:

"As a guiding principle, all students who are below proficiency in the foundational skills of literacy and math should receive **additional support** using a wide variety of evidence-based programs and strategies." (my emphasis)

Further, I think we are in agreement that tutoring, though a major component, is not the only Additional Support. Yet, so far, we have only focused on "transitional" tutoring in literacy in grades K-3 and not other Additional Supports. That leaves much work to be done. We must determine:

- 1. What are adequate Additional Supports?
- 2. What will they cost over a certain period of years?
- 3. And where will the costs be covered within the Commission's overall recommendations?

As a practical matter, answering these questions would seem to involve the same process that would be followed in determining a Compensatory Education weight, as discussed further below.

Taking the questions in sequence:

1. What are adequate Additional Supports?

There appear to be two main categories.

- a. Tutoring in literacy and math for all students below proficiency in grades K-12. Part of this tutoring in literacy in grades K-3 has already been recommended. Another part of this would be the support so far unspecified that Group 3 wants for students who, beginning in middle school, are in danger of not meet CCR standards.
- b. Other Additional Supports beyond tutoring, such as before and after school, summer school and pupil support (behavioral and social-emotional). These are largely identified in the APA section on evidence-based "Resources for Special Needs Students."

Within the APA 2016 study, these Additional Supports are principal components in its recommendations for a Compensatory Aid weight. Work Group 4 should take the lead on following up on this. The most straightforward way to do this, I think, is to add an additional

Element that incorporates our guiding principle. For example: Element 4e: Additional Supports for Struggling Learners. A draft is attached. Its basic Design Assumption is the agreed-upon guiding principle: All students who are below proficiency in the foundational skills of literacy and math should receive additional supports using a wide variety of evidence-based programs and strategies.

Staff should provide its recommendations for specific Additional Supports (evidence-based programs and strategies), and cost estimates for each.

2. What will the Additional Supports cost – over a certain period of years?

After the costs are estimated, there is a second crucial step. The overall cost estimates should be refined into what might be called a variable (or transitional) estimate of the costs year by year over a certain time period, taking into account changes in costs that will occur over the years. The variable changes would include, assuming a six-years period:

- Phase-in of implementation of the Additional Supports. For example, implementation of the tutoring expenditures might be phased-in over say 2-3 years so costs will build up in those years.
- Reductions in need for tutoring and in special education. For example, in say years 4-6, there will be reductions/savings as a result of the impact of the tutoring and reductions in special education that lower the costs.

(Of course, other pending recommendations of the Commission – including preK, family supports, teacher quality and CTE – are far-reaching and could also have significant impact on the need for Additional Supports. That impact is, of course, dependent on the extent to which the recommendations are eventually funded, well implemented and effective. We won't know that for years to come, and any likely big impact seems, roughly, at least six years off.)

Staff should project the varying needs and cost estimates over the six years. Such a variable/transitional projection would facilitate the development of phase-in priorities that address Affordability concerns.

3. Where will the costs be covered within the Commission's overall recommendations?

One looks first to the Base. The Base (including Tier 1 instruction within the MTSS/RTI framework) impacts on the need for Additional Supports. But (a), we don't know yet what's in the Base, and (b) the Base, as proposed by APA in its 2016 study, did not appear to measurably reduce the need for Additional Supports.

The Concentrated Poverty weight could be a source but while it contemplates the possibility of extended day funding (if schools choose to use some of the funds in this way), it is clear from research and expert opinion that tutoring, particularly for younger students, should be part of the regular instructional school day.

So the bottom-line source of funds would have to fall within the Comp Ed weight calculation and/or categorical programs, including tutoring. Which brings us back to the task of calculating the Additional Supports within the Comp Ed weight. The Commission is of course committed to considering the Comp Ed weight and the Additional Supports Element, proposed above, would seem to be the main way to get at it.

As discussed below, the very large costs of the Additional Supports, including tutoring, will be substantially reduced by a variable/transitional projection over say six years.

The inadequacy of the 1:125 teacher-tutor to student ratio.

APA's recommendation, incorporated in the Sept 5 draft on tutoring, calls for one tutor for up to 125 students who are struggling in reading. In the 2016 study, APA reviewed evidence on tutoring and made clear that it is the major component in any determination of adequate Additional Supports for struggling learners within a Comp Ed weight. But it has never aligned the research with its 1:125 recommendation.

How is the 1:125 derived? How should any tutor-pupil ratio be calculated? Based on what estimates as to how many students will need how much tutoring for how long and with what tutor-student ratios and time allocations within a Tier 2 and Tier 3 MTSS/RTI framework? Robert Slavin, in his presentation to the Commission, tackled such an approach. And I have submitted a shorter and less expensive version.

Asked about this on Sept. 5, the APA representative did not specify any specific calculation. He referred to Layers of Resources and the transitional tutoring but without any calculation that justified the 1:125 ratio.

Of course, it is very difficult to arrive at a precise calculation. There are not only all the variables in tutoring models themselves but the transitional variables mentioned above (the cost of the tutoring will vary over the years based on phase-in and reduction-in-cost factors). Still, it is very clear, based on the Slavin presentation and APA's own discussion of evidence-based tutoring, that the 1:125 ratio falls far short.

Let me try to capsulize how it falls far short, while suggesting a variable/transitional approach for a truer estimate.

Assume an Elementary School of 450 students. Assume that 240 students are below proficiency.¹ Assume, conservatively, that two-thirds need Tier 2, one-third need Tier 3. Assume Tier 2 at 1:4 for 45 minutes; Tier 3 at 1:1 for 30 minutes. One tutor-teacher can serve 28 students

¹ 60% of 450 =s 270 students who are below proficiency. But I have reduced the number by 10% to 240 students to factor out very roughly most of the students in SE who are below proficiency (in diploma or Alternate Assessment programs). Their "Additional Supports" though their IEP services should be substantially covered by the SE weight.

per day in Tier 2 and 10 students per day in Tier 3. That calculates to roughly 13 teacher-tutors needed per school.

The number of 13 teacher-tutors is far more than the APA recommendation. As best as I understood the APA representative, I took him to say that such a school would only need 3 or 4 tutors.

Another way of stating the difference is that 13 teacher-tutors for 240 students =s a rough ratio of about 1:19 students. That compares with APA's say 4:240 students, a 1:60 ratio. The connection between APA's stated 1:125 ratio and the 1:60 ratio is not clear, even allowing for figuring in the 1 pupil per school in its Base estimate.

Assuming the 1 tutor-teacher per school in the base, the remaining 12 teacher-tutors would have to be funded through the Comp Ed weight or a categorical tutoring program.²

The adequacy cost – projected across all K-12 schools – would be huge if considered as a static amount of funding in each year. However, that's not the way it would work. **In reality, the huge cost would be substantially less if projected over say 6 years.**

Such a variable/transitional projection might work as follows. For example, assume phase-in implementation over three years. E.g., Year 1, one-third of all students; Year 2, two-thirds of all students; Year 3, 100% of all students. However, at the same time, beginning in say Year 3, reductions in the need for tutoring will start to kick in because of the positive impact of the tutoring. Let's suppose the impact of the tutoring results in a reduction of the need by say 10% per year. Further, suppose beginning in Year 4, the cost of the tutoring was offset by a reduction in the cost of SE by say 10% per year, taking into account fewer referrals to SE and less intense IEP services.³

(This same variable/transitional approach would apply as well to the other Additional Supports beyond tutoring.)

My suppositions and calculations are back of the envelope. I am sure they can be refined and revised by staff. But they are a starting point. And whatever assumptions the Commission makes should be assessed and costs adjusted accordingly at least bi-annually. The ability to do that requires the kind of Accountability system that the Commission is seeking.

Accountability Mechanism

As previously discussed, Additional Supports, especially tutoring, seem ripe for an outside R & D institute for major Accountability purposes. Such an institute could contract with the overall

² As noted above, any extended day program under the Concentrated Poverty weight would not be appropriate for evidence-based tutoring.

³ If SE costs say \$ 2b per year, a 10 % reduction in Year 4 would be a \$200m offset to the costs of Additional Supports.

governing entity, perhaps along the lines of the child development institutes at Rutgers and UNC. The evidence base for Additional Supports is strong, and Additional Supports can be brought to scale relatively quickly. Still, there will be a need for standards, technical assistance, professional development, monitoring and other ongoing R & D, involving the many 'best practices'' variables.⁴

Ballpark estimate of costs for such an institute: \$2m for each of 6 years.

Such a proposal can be deferred until the Commission further considers Accountability. Still it is important to realize how a strong Accountability system is crucial to the variable/transitional costs and effectiveness of Additional Supports over the years.

Thank you for considering.

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⁴ Perhaps the MSDE regs for the HB 1415 tutoring will be a start.

DRAFT DESIGN ELEMENT: ADDITIONAL SUPPORTS FOR STRUGGLING LEARNERS

Element: Additional Supports for Struggling Learners. All students in grades K-12 who are below proficiency in the foundational skills of literacy and math should receive additional supports using a wide variety of evidence-based programs and strategies.

Design Assumptions:

- 1. Additional Supports supplement policies and programs in the Base and other categorical programs, and are customarily estimated and included in the determination of a Compensatory Education Weight. Pending the Commission's consideration of the Compensatory Weight, this Element of Additional Supports would inform (and possibly be deducted from) the eventual Compensatory Education weight.
- 2. The Additional Supports programs and strategies, consistent with the usual methodology for determining ta Compensatory Education weight, would appear to fall into two major categories..
 - a. Tutoring in literacy and math for all students below proficiency in grades K-12, less the transitional tutoring program in literacy in Grades K-3 as recommended by Work Groups 3 and 4. (That is, literacy tutoring in grades 4-12 and math tutoring in grades K-12 must still be estimated.) Included would be the Additional Supports unspecified so far that Work Group 3 proposes for students who, beginning in middle school, are in danger of not meet CCR standards.
 - b. Other Additional Supports beyond tutoring, such as before and after school, summer school and pupil support (behavioral and social-emotional) largely addressed in the APA section on "Resources for Special Needs Students."
- **3.** Priorities for Additional Supports should be literacy in grades K-5 since literacy is the gateway to overall academic success.
- 4. Projections of the cost estimates of Additional Supports should be made over a minimum period of six years to allow annual or bi-annual cost adjustments. The cost adjustments would reflect such factors as: phase-in of implementation; the impact of the Additional Supports (and other policies and programs recommended by the Commission) in reducing the need for Additional Supports in general education and special education; and effectiveness data from an accountability system that incorporates the components of ongoing R & D.
- 5. The funding for Additional Supports for Struggling Learners would be net of other funding (e.g. the Base, categorical programs like the transitional tutoring in literacy in grades K-3, and other weights) recommended by the Commission that directly provide such Additional Supports.

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