## good public policy depends on excellent math

mathematical effects of the complete
AR.5115.B revisions were not reported
on either Oct 6, 2022 (Review and
Discussion)
or Oct 20 (Review and Action). "Draft for
Discussion"

missing calculation effects of Level 2 can be shown to depress the SED% below the District Average by > 1/4

It can be shown
the Level 2 extra tickets vastly increases
the Level 2 representation (non-SED),
perhaps far beyond the District Level 2
average

The poor and very poor (SED) should *not lose out*by a poor mathematical understanding of *the total effects* of the modified

AR.5115.B. 5&6

The Board should resolve to suspend the use of Level 2 calculations in the 2022-23 lottery.

### 1) <u>Complete</u> CALCULATION of public "draft" example Carried forward with Level 2 example [previously provided to Board by email]

#### Weight Calculations for 2023-24 Enrollment

To calculate weights for the coming year, we will use the enrollment and applicant data from the prior school year (the 2021-2022 school year in this case).

- Step 1: Determine enrollment target for socioeconomically disadvantaged students: We would like to target 27% enrollment of socioeconomically disadvantaged students at choice schools since this is the district percentage of socioeconomically disadvantaged students (SED).
- o At Mistral, there are 54 socioeconomically disadvantaged applicants (SED) out of 109 applicants. This represents about 50% of the applicant pool. Because socioeconomically disadvantaged students are not underrepresented, no weights are provided.
- o At Stevenson, there are 33 socioeconomically disadvantaged applicants (SED) out of 437 total applicants. This represents 8% of the applicant pool, and demonstrates that socioeconomically disadvantaged students are underrepresented by a large margin.
- Step 2: For Stevenson, use the appropriate weight for the enrollment target above. <u>Set weights so that socioeconomically disadvantaged students (Level 1) (SED)</u> are no longer underrepresented in the applicant pool compared to the district's population.
- o A weight of 5 would mean adding 4 entries into the lottery for each socioeconomically disadvantaged (SED) applicant. In PowerSchool terms, this is a weight of 400%.
- o <u>Four additional "tickets" for each socioeconomically disadvantaged student means 132 additional entries in total (33 x 4)</u>. Because each socioeconomically disadvantaged (<u>SED</u>) applicant now has 5 chances in the lottery, there are 165 socioeconomically disadvantaged entries into the lottery in total rather than 33.
- o We have 437 total applicants and have now added 132 additional lottery entries so there are now 569 total entries into our lottery. This means that <u>socioeconomically disadvantaged (SED)</u> applicants now represent 29% of entries into the lottery (165 / 569 = 29%), a proportion much closer to our target of 27%.

#### Why to suspend

o For Level 2 socioeconomically disadvantaged students, use the weight for socioeconomically disadvantaged students (SED) minus 100 percentage points. This means that Level 2 socioeconomically disadvantaged students should be weighted at 300%. —

## - note, the missing calculations effect is added below ...

If there are about 20% Level 2 student applicants, (87/437) there will be 261 additional entries in total (87 x 3). We would now add to the 569 total entries (step above for Level 1) 261 additional Level 2 lottery entries so there are now 830 entries into our lottery (569+261=830). That means SED applicants now represent 20% of entries into the lottery (165/830 = 20%). This is significantly less than 27%, by 2/7ths ( > 1/4 less).

Continue math: **261+87 = 348** Level 2, **348/830 = 42%** Level 2 representation in the lottery!

- Since there is no 'demographic' control on Level 2 numbers in the calculation, it is unclear how much Level 2 demographic <u>now or will become overrepresented</u> at the expense of SED!
- 2) Complete CALCULATION of "draft"
   example
   Carried forward with Level 2 demographics
   raw data by MVWSD via Public Records
   request Dec 15th.

# After 9 work days, the MVWSD could not provide any Level 2 student demographics

I hope the Board has studied this calculation, which I first sent Jan 10th, And Resolves to drop this Level 2 for 2022-24.

And study *the actual effects* of SED (Level 1) Choice Lottery

- fini -

- discussion - action *or inaction* -