C'mon folks: Does This Make Sense? Is This How We Should Evaluate Human Beings?

Source: Public Education Department response to IPRA letter

Grades Five through Eight

The VAS results are lagged by one year due to the New Mexico testing cycle (late spring) and receipt of scores (mid-May).

Once a classroom of students has been assigned to a teacher, the data for each student in the classroom is assembled. The assembled data consists of the results in reading and math for the most current year and two prior years.

Then, Equation A (Eqn A) is calculated for each student in a teacher's current classroom. Generally, Equation A considers how a student is expected to perform on a summative assessment (SBA or EoC) compared to how a student actually performed.

Equation A includes the following as each is an important contributor to a student's academic performance:
o the amount of time a student is enrolled in a course with a teacher (Proportion), and
o the instructional setting (general or intervention) PLUS
o the student's prior two years' of academic performance. Prior academic performance describes a student's readiness in reading and math when starting the current school year.

The result from each student is aggregated and incorporated into Equation B (Eqn B), along with the average math and reading scores for the class from the prior testing occasion and the

New Mexico state average in a tested subject. The average difference between a teacher's students' observed score and their expected summative score is the teacher's unique contribution to the academic performance of his or her students, i.e., value added score (VAS).

All models are weighted, mixed effects models. The weight is the (inverse of) conditional standard error of the outcome score. For all models, the following occurs:
1. VAS is calculated from the Empirical Bayes (EB) estimate of r0j.
2. The EB estimate is normalized.
3. The cumulative distribution function (cdf), which gives the proportion of a population with values less than x and the probability of having a value less than x, is applied to the normalized EB estimate.
4. The result is the percentage of points earned and appears in the STAM measure on the EES Summative Report.

The equation which produces the VAS for grades five through eight is:
(Eqn A) NSYijT = 0j + 1j(NSSM)ijT-1 + 2j(NSSM)ij T-2 + 3j(NSSR)ijT-1 + 4j(NSSR)ijT-2 +

5jInterventionT + 6jProportionT + eijT
qn0j = 00 + 01(NSSM)jT-1 +02(NSSR)jT-1 + r0j
· NSYijT is the SBA (Math, Reading, or Science) or EoC outcome for a student in year = T. For the 2013 VAS, T equals 2013. This score is normalized to the base year of 2012.
· 0j is the intercept, or expected score, for a student in that course group given the student's prior scores, whether the course is an intervention course, and the proportion of time the student was in classroom j.
· 1j to 6j and 01 and 02 are the parameter estimates for the associated variables.
· (NSSM)ijT-1 + (NSSM)ij T-2 + (NSSR)ijT-1 + NSSM)ijT-2 are the math scores from two prior SBA testing occasions in math and reading, respectively. These scores are also normalized.
· Intervention is a variable that indicates whether the student was in an intervention course or not.
· Proportion is the amount of time a student was enrolled in a given teacher's course (as reported in the 40, 60, 120, and EOY snapshots).
· 00 is the New Mexico state mean of student performance for assessment Y by course group.
· (NSSM)jT-1 and(NSSR)jT-1 are the class means of the students' prior assessment occasion scores.
r0j is the unique contribution of a teacher to a student's achievement.
If you have further questions about your teacher evaluation, contact your school principal or your school district testing director.