

Selecting Diagnostic Measures to Identify Students Needing AIS in Grade 7
David Jones, 12 May 2009
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Purpose

What elementary level 6th grade assessments can be best used to identify students needing Academic Intervention Services in grade 7 Social Studies?

Data

The data reflect scores of forty-six students who were in grade 6 in June 2006 and June 2007, who are still enrolled at SLCS, who have been enrolled since 6th grade, and who have not been retained.

The following data were collected on each of the 46 students: sixth grade ELA raw score, sixth grade ELA scaled score (1-4), sixth grade English report card year end average¹, sixth grade Social Studies year end average, seventh grade Social Studies year end average, eighth grade Social Studies year end average, and eighth grade NYS test grade.

~~Data for 2008-2009 on the current 8th grade is reliable, but possibly subject to some modification in June as there are 6 weeks remaining of school and 3 weeks before they take the NYS Social Studies test. The score for grade 8 Social Studies is their overall class average as of 12 May 2009 and the score used for the NYS Social Studies Test is the score they got on the midterm, which was the multiple-choice section of the previous year's NYS Social Studies test with questions on topics not yet covered omitted.~~ The results have been updated to include the 2009 eighth grade NYS Social Studies test scores.

For purposes some of these comparisons, the sixth grade year end averages were converted to the scale of 1-4 as used on the NYS tests (4 = 85-100; 3 = 65-84; 2 = 44-64; 1 = 0-43).

The year end Social Studies average of the cohort was 89 for grade 6, 81 for grade 7, 80 for grade 8.

Students' year end averages in Social Studies in grade 7 were 8.02 points lower than grade 6. Students' year end averages in Social Studies grade 8 were 9.17 points lower than grade 6.

The following are the correlation coefficients reviewed for this study:

- 0.64 = Social Studies 6 Year End Average - Social Studies 7 Year End Average
- 0.49 = Social Studies 6 Year End Average - NYS Social Studies 8
- 0.16 = NYS ELA 6 - Year End Average English 6
- 0.55 = NYS ELA 6 - NYS Social Studies 8
- 0.90 = Social Studies 7 Year End Average and Social Studies 8 Year End Average

¹ The sixth grade report cards separately list Reading, Writing, and English. I collected the average of 4 quarters of the grade identified as "English Pt I". This study will need to be revised if it turns out this is not intended to measure ELA performance. However, as a general rule, grades across these areas were very consistent.

- 0.77 = NYS Social Studies 8 - Social Studies 8 Year End Average, Scale of 100
 - 0.65 on a scale of 1-4

Students Scoring at Each Level 2006 and 2007

NYS ELA 6		NYS Social Studies 8	
4	5 (10.9%)	4	19 (41.3%)
3	33 (71.7%)	3	21 (45.6)
2	7 (15.2%)	2	6 (13%)
1	1 (2.1%)	1	0

- Of the 33 students scoring 3 on the NYS ELA 6, 31 scored 3 or 4 on the NYS SS 8.
- Of the 8 students scoring 1-2 on the NYS ELA 6, 4 scored 3 or 4 on the NYS SS 8.
- All 5 students who scored 4 on the NYS ELA 6 scored 4 on the NYS SS 8.

Conclusions

It is assumed that the NYS tests measure the state standards, and so it is also assumed that the degree to which the classroom grades correlate highly with the scores on the state tests indicates the degree to which the local curriculum is addressing the standards and the degree to which local assessments are actually measuring the standards.

The score on the 6th grade ELA would seem to be the best indicator of students needing Academic Intervention Services in grade 8 Social Studies. This variable bears the highest correlation to performance on the NYS Social Studies 8 exam of the other variables examined here. Year end average in Social Studies 6 does not appear to highly predictive of performance in Social Studies 7 or 8.

Students should be assigned to AIS Social Studies 7 if they scored 1-2 on the NYS ELA in grade 6 because this appears to have the highest predictive value with regards to progress in Social Studies as measured by the State test.