

Analysis of the Grade Eight Midterm in January 2010, a Commentary on the Positive Role of Differentiated Instruction Method, and an Examination of the Improvement of a Uniquely Low-performing Cohort over Seven Months
January 2010
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The midterm examination in US History 8 (class of 2014) given in January 2010 was the multiple-choice section of the New York State Intermediate Social Studies Test given to students at the close of grade eight in June 2009 (class of 2013). The exam followed ten days of review and students had access to test questions from old exams (none of which were questions on this test). The usual five day review period was doubled this year owing to the particularly weak performance of this group in grade seven.

The test score entered in the record as a midterm examination was adjusted to account for test included questions we did not yet cover in class. These counted in the student's favor if correct and ignored if incorrect. Papers got two grades: the grade they would get if it were June and the adjusted grade.

The class has performed impressively well:

- They have the second highest current class average for this time of year among classes in the past five years.
- They have the second highest class average on this midterm among classes in the past 5 years.
- The five students who failed grade seven Social Studies and who took summer school to continue into 8th all passed the midterm with scores ranging from 69 to 81.
- 18 (64%) of these students could pass the State Test this month (That is, if questions on material they had not yet been taught were scored).
- We increased the overall class average by 10% in seven months.
- 57% scored above 84 on the midterm (level 4)
- 32% would have scored level 4 if the exam were today (that is, if the questions covering material they had not yet been taught were counted).
- **Eleven** students significantly out-performed themselves (defined as scoring 8 points or more higher on the midterm than their overall class average).

Getting a midterm measurement was not the only reason for administering this exam. It intended to give students a high stakes reason and opportunity to review what we have learned so far since seventh grade toward enhancing performance on the June exam. It was also a program evaluation for my own information.

I think I can safely categorize this class as “normal” now, perhaps even above average.

31 students took the test. 28 passed. Class average on the test was 82.

Class of ...	Class average overall to date <i>Rounded to nearest whole</i>	Class average on M-C portion of State Exam, adjusted	% likely to score 3-4 on State Exam today, if all questions were counted.	Correlation, class average to midterm adjusted grade
2010	74	61	NA	NA
2011	76	75	55%	NA
2012	77	77	48%	0.72
2013	82	83	68%	0.76
2014	77	82	64%	0.75

Students whose scores were particularly good relative to their class average received an extra credit bonus to their class average for the second marking period. This bonus is **not** included in these calculations.

Special Considerations in 2010

There are two special considerations to address in 2010: (1) the role of differentiated instruction in the achievement of this class and (2) the progress of this particular group in light of particularly weak performance in grade seven.

The Role of Differentiated Instruction

The reader is referred to the separate study I conducted on the exclusive use of a highly differentiated classroom model in place since September 2009 for details. It was my intention to follow up on this study with results from this midterm, since performance on the midterm is highly indicative of progress toward the State Standards and likely performance on the State Test in June.

The results of this exam are consistent with the findings of that study. As a whole, students performed better than their class averages: current class average is 78 and average on this exam was 82. **Eleven** students significantly out-performed themselves (defined as scoring 8 points or more higher on the midterm than their overall class average).

Though differentiated instruction is not some “magic bullet”, I cannot help but to conclude that it played a positive force in the improvement of these students since grade seven.

An Examination of This Particular Group

Around a quarter of the seventh grade failed this class last year and that is extremely unusual and worrisome. Despite the offering of a strong summer school program, four students repeated seventh grade. No one reason seems to explain this: there are different causes of the sub-standard performance of each student, some causes of which are not within the student’s own control. The purpose of this section is to follow up on the progress of that seventh grade

with a view to explain any improvements and to inform my handling of future classes that fit this profile.

The class composition is different this year: two new students moved into the district and there is the four who were left behind. In this section, the only students to be examined are those who sat for the final exam in grade seven and who are still in the district in one of my classes (either grade seven or eight).

The students repeating grade seven did not have the opportunity for the review or examination that their once-peers had in grade eight. As such, their progress cannot be assessed by comparing the score on this midterm.

The correlation between scores in my class and scores on the grade eight NYS Social Studies test for grade eight averages 0.82. The correlation between the final average in grade seven and final average in grade eight is 0.9. Given these high correlation coefficients, I think it's reasonable to look at current overall average as a means of assessing progress.

N=35	June 2009	January 2010
Average	69	77 (10% increase)
Passing	26 (74%)	27 (78%)
Failing	9 (26%)	8 (22%)

Of the 9 students failing in June 2009, 5 are still failing. 3 of those 5 are repeating grade seven, the other two are in grade 8. There is some improvement, however: the average overall score of these 5 was 42 in June 2009 and is currently 47 and two of these students have scores sufficiently in the 60s to consider them likely candidates to pass.

Of the 9 students failing in June 2009, 4 were left back to repeat grade seven. One of them is passing with a healthy 78 this year. One has a 61.

All of the 5 who completed summer school and continued into grade eight passed this midterm examination. Their scores were 81, 69, 69, 72, and 78 (averaging 74). This is a healthy enough margin for me to predict they will pass (score at least level 3 on) the State Test in June.

If the State test were given today, one of the five students who failed grade 7 would have passed (67).

Conclusions

It is very difficult to draw solid conclusions because the number of variables is so very large. Nonetheless, I think if I list the actions taken for this group, we have an explanation for their improvement that at least covers variables school can act upon. This group improved overall and individually.

An important conclusion I draw is the lesson for me as teacher that there are no quick fixes: it takes months of rightly directed effort to produce a change. Being unafraid to retain students is useful, with the idea that additional support must be provided these students to help them meet the demands. I also conclude that for some, there seems likely no way the school can overcome the things that are causing them to fail.

What We Did About It...

In no particular order, these are the actions we took in response to the poor performance of these students:

- Quality summer school program, instructed by Mr. Cutting, to focus on the most important concepts.
- Frequent parent communication in 2008-2009
- An hour of AIS a week in grade seven, thirty-minutes a week in grade eight (but with increased class time).
- Increase class time in 2009-2010 to 230 minutes a week from 200.
- Increase frequency of class meeting in 2009-2010 to daily meetings.
- Introduce fully-differentiated instruction in grade eight.
- Introduce fully-differentiated instruction in grade seven starting in January 2010 (once preliminary training was completed).
- Teacher-produced video lessons posted online.
- Monthly conferences with students initiated 2009-2010 to address grades and study methods.
- Established a required notebook with monthly notebook inspections during the monthly conference.

In no particular order, these are many of the standard supports available for US History seven and eight:

- Monthly essay topics are provided a week in advance.
- Short response test questions are provided a week in advance.
- Practice multiple-choice test questions online.
- Almost unlimited opportunities to extend the lessons independently.
- Class notes published online.
- Multiple presentations of material in each lesson: auditory, reading, activity.
- Direct instruction in how to study, read, etc.
- Full period review before the class.
- Textbook available in audio version.