

To: QED
From: Paul Tierney
Re: Observations and recommendations

A primary purpose of this memo is to help provide some structure to QED efforts and frame areas for additional work. This memo is based primarily on the work I have done myself to date. on which some comments will be made later. The structure is basically an observation, comment on reason for the observation and perhaps material researched and suggestions for future work.

Please refer to “overall structure” memo also

Goal: The primary goals of my work were to

1. Create a **reasoned intellectual basis** for assessing the performance of Hanover High School and
2. To identify sound methods of assessing performance.
3. Examine and judge HHS cost effectiveness.
4. Provide a basis for reporting to the community about performance and cost effectiveness.
5. An ancillary goal was to identify methods for improving performance.

Observation I: Mission: HHS mission statement itself did not provide me with a basis for identifying the standard of quality or success

Observation II. SAT I and SAT II Scores:

1. Students at HHS obtain higher average SAT I scores than all but a very small number of public high schools in the country. (See spreadsheets and data comments memo)
2. HHS students obtain average SAT II scores in English and Math about the same as those schools where students obtain similar SAT I scores. (See spreadsheets and data comments memo)
3. HHS students obtain average SAT II scores in Science and Language are lower than those schools where students obtain similar SAT I scores. (See spreadsheets and data comments memo)
4. Other than those few schools HHS students obtain significantly higher scores than other schools in NH, VT and in other states.

Observation II. Socioeconomic factors:

1. The schools where students achieve these high results are all school with very favorable socioeconomic factors: high parent incomes and high parent educational attainment. (see spreadsheet and data comments)
2. A UNH study on educational achievement ascribes about fifty percent (50%) of the variance in educational achievement to socioeconomic factors.

Observation III. Lack of other comprehensive comparative assessment data.

1. There appears to be no large scale comparative data for assessing **qualitative factors** such as performance in the arts (music, dance, theater, art etc) or social factors such as (community service, ethics, emotional skills, etc
2. While many states have standards for assessing performance, the adoption of these standards is relatively new and I was unable to find any state that had prepared a statewide report about **performance against the standards**. There was no easily comparable information.
3. Pamela Gray Bennet at NEASC stated that the information in 1 and 2 above does not exist-NEASC does not have it to assess schools for accreditation and to her knowledge no one has it because the state of the art has not progressed to the point where it can be prepared.
4. Individual schools prepare reports on their assessments of performance against standards but the reports are in narrative format and not readily comparable

Observation V. HHS cost per pupil is higher than average in Vermont and New Hampshire and is higher on average than other similar sized schools in New Hampshire. However, I don't have a way for creating a mathematical formula for either justifying or condemning the variance in cost to the variance in student SAT I and II scores.

The UNH study indicates that there is a small but positive correlation between cost per pupil (and teacher salaries) and achievement but there is also a positive correlation between costs and parent income.

More work needs to be done on this.

Observation VI. Development of HHS comparative benchmarks.

Inasmuch as there are no large-scale comparable qualitative indicators and there are no large-scale data on performance against standards HHS should develop its own benchmarks or indicators in these areas. It appears to me that since our school is unusually blessed socioeconomically that our goals should be:

1. To proactively assist **EVERY** student to develop to the fullest given the student's capacity and the students and parents wishes.
 - a. In this regard it seems that an explicit assessment of student potential capacity should be conducted upon entrance to HHS

- b. And an individualized program should be developed between the student, parents and the school to pursue the agreed level of development.
2. To immediately examine those areas where our students are not doing as well on the SAT II's and implement changes to improve, with the goal of HHS students achieving similar results as those other schools.
3. Consider adding AP courses for those highly motivated students. There seems to be correlations between number of AP courses and student score.
4. To identify goals for these other qualitative areas and work very hard to establish a shared comparative information base with other socioeconomically advantaged school systems. Assessment indicators might include:
 - a. Number of: students taking courses in the arts, invitation to statewide events, awards, acceptances at colleges focused on music etc, showings of art, performances etc
 - b. Hours of community service per student, participation in student government,