Real Report Cards For New England's Public Schools:

Unvarnished NECAP Achievement Results Inspire Reform[♠]

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Summary:

Nearly every state in the United States administers achievement tests to public school children in the K-12 years to determine, among other things, who is proficient (at or above grade level) in reading and mathematics skills. The United States federal government also administers the National Assessment of Educational Progress (NAEP), which is also known as the Nation's Report Card, which likewise measures the percentages of children who are proficient in these same two areas.

Important characteristics of the NAEP include:

- A long track record of 38 years, establishing itself as the defacto national standard for achievement.
- The NAEP achievement level of "proficient" defines and measures what it is to be at "grade level."
- NAEP tests children in 4th and 8th grades and reports proficiencies statewide, but not locally.
- In 12th grade NAEP reports only at the national level.

State administered achievement tests, including the NECAP, which is used in New Hampshire, Rhode Island and Vermont, are characterized by:

- Testing sufficient numbers of children to report scores at the school and district levels.
- Typically, setting the achievement standards significantly lower than the NAEP.
- In the case of the NECAP, the proficiency "inflation" ranges up to 110% above the NAEP results.

Since the NAEP exam scores are not reported locally, stakeholders are left in a quandary as to the proficiency percentages in their school or district because they can't rely on the inflated results from the state exams.

We have developed tools that:

- Provide a method to convert state reported proficiencies to more realistic NAEP aligned results.
- When applied to schools serving the disadvantaged confirm the "soft bigotry of low expectations."
- Make available NAEP scale estimates for all public schools and districts within the NECAP states.

Their application then tells us about the state of public education at the local level. We find that:

- The worst schools in urban districts typically have less than 5% of their students proficient.
- The best schools in the best districts rarely have more than 60% of their students proficient.
- Schools that are primarily attended by Blacks or Hispanics see massive social promotion.

Observations based on statewide achievement proficiencies include:

- Vermont has the best schools and the lowest level of proficiency decline over student tenures.
- NECAP math proficiencies in 11th grade show negligible inflation.
- Higher levels of inflation seen in Rhode Island may be tied to its larger special education population.

We conclude with recommendations based on these results. It is proposed that:

- Public school systems should remove the inflation by reporting NAEP scale proficiencies.
- Public and private schools should be incentivized by adopting robust school choice measures.

[♠] This work was conducted by Asora Education Enterprises under contract with OSPRI.

- Social promotion should be ended by adopting self-paced learning in place of group instruction.

A more comprehensive account of our work, including the *Real Report Cards,* is available from the OSPRI website.[i]

Background:

Relationship of sub-proficient to socially promoted

Generally defined, social promotion is the practice of promoting children who are not proficient in a grade level. This means the promotion of children who would be subproficient on the NAEP test or on an achievement test administered by the state or district officials. Ideally, schools would not promote children who are not proficient in their grade levels.

In what follows, unless specifically qualified we will define social promotion in terms of proficiencies measured on the NAEP scale rather than the ones from the NECAP. Our definition then is:

- The *percent socially promoted* of a tested group is the percent found sub-proficient less a "grace" margin of 10%. This margin accounts for statistical errors and other borderline issues.

Thus, for example, if a school achieved 85% proficiency on the NAEP scale we would classify this school as one engaged in social promotion- albeit at a low level of 5%.

Finding that state standards are lax compared to NAEP's

Missouri was the only state that had not inflated its state reported proficiencies in the past, but has recently abandoned that practice- probably in an effort to make their public education systems appear better than they really are. Countering that example is Massachusetts where the inflation has been brought down significantly to the point where it averages only 14% in our latest review of the data. After ranking the nearly 50 states for which test results are available, we find that the median state inflates its test proficiencies about 80%.

To raise proficiency levels legitimately, there are two things educators should do even before considering instructional reforms:

1. Use testing regimes consistent with the NAEP.
2. Use retention and/or other means persistently so as to place each child appropriately.

If schools would implement these two policies, the number of students deemed proficient would approach 100% by virtue of the fact that most of the sub-par students would have been removed from each instructional level. Surely, no policy implementation is going to be perfect, but we would expect proficiency percentages to significantly exceed 90% in every school managed this way. Once over this 90% threshold, every such school would be deemed free of social promotion- consistent with the definitions just given above.

Unfortunately, such policies are rarely followed. And in district after district the fact that very large majorities of the students fail to achieve Proficiency (as defined by the NAEP) is a clear confirmation of most state's (unwritten) policies of social promotion.

In what follows we discuss some of the details about the achievement tests in the three states of New Hampshire, Rhode Island and Vermont and in some other relevant states.

The state reported achievement test results (from the New England Common Assessment Program - NECAP) were obtained from the respective state departments of education.[ii] Our NAEP data has been taken from NAEP's website.[iii] Also, from the NECAP proficiencies reported by the three states, you can see that the local state criteria for proficiency are significantly more relaxed than those of the NAEP.

Before making local proficiency estimates, it is useful to look at statewide proficiencies as reported by the NAEP and by the various state achievement tests, including the three NECAP states. The table below shows state reported proficiencies, their corresponding NAEP proficiencies, and the inflation factors relating the two. Given our current interest in the Northeastern United States, 9 of the 12 states reviewed in the table are in this region.

State	Math State 4th/8th Average	Math NAEP 4th/8th Average	Math Inflation Factor	Reading State 4th/8th Average	Reading NAEP 4th/8th Average	Reading Inflation Factor	Average Inflation Factor
MA	46.5%	54.5%	0.85	65.5%	46.0%	1.42	1.14
VT	60.5%	45.0%	1.34	68.5%	41.5%	1.65	1.50
NH	63.0%	45.0%	1.40	70.5%	39.0%	1.81	1.60
ME	56.0%	38.0%	1.47	66.0%	36.5%	1.81	1.64
NJ '06	73.4%	46.0%	1.60	77.1%	41.0%	1.88	1.74
NY '06	66.0%	36.5%	1.81	59.0%	34.0%	1.73	1.77
PA	73.0%	42.5%	1.72	72.6%	38.0%	1.91	1.81
CA	44.3%	27.0%	1.64	46.0%	22.0%	2.09	1.87
RI	51.0%	31.0%	1.65	62.5%	29.0%	2.16	1.90
CT	80.9%	40.0%	2.02	73.5%	39.0%	1.88	1.95
OK	84.5%	27.0%	3.13	84.5%	26.5%	3.19	3.16
MS	67.5%	17.5%	3.86	71.0%	18.0%	3.94	3.90
USA	NA	35.0%	NA	NA	30.5%	NA	NA

The proficiencies shown in the table here are the averages of 4th grade and 8th grade results as reported by the states and by the NAEP, respectively. Given that the NAEP "benchmark" exams are considered the defacto national standard, the goal is to seek inflation factors near 1.00. The table is ordered by the average inflation factor (last column) with the nation's least flagrant inflator, Massachusetts shown first and its most flagrant, Mississippi, shown last.

It is worthy of comment that the ordering is roughly inverse to that of the NAEP scores, with a number of exceptions being evident. A more complete review (of an expanded Table 1 showing all tested states) shows a significant inverse correlation between NAEP measured proficiencies and the amount of state "introduced" inflation. It suggests that states with the more modest NAEP achievement test proficiencies may be covering their embarrassment by using relatively larger amounts of inflation to deceive their citizens.

At the high school level, where the estimation procedure is more complicated and accordingly more prone to error, we have generated estimates of 12th grade statewide NAEP scores (what they would have been had the 12th grade NAEP been administered at the state level). From these calculations we have generated statewide NAEP scale proficiencies that are interpolated to the 11th grade for 8 states of interest and countrywide. The results are shown in the table to the right. As in the previous table we observe a similar inverse correlation between the high-school estimated NAEP proficiencies and their estimated inflation factors. What is striking and encouraging here is the fact that the state reported 11th grade mathematics proficiencies in New Hampshire, Rhode Island and Vermont are not inflated at all. In fact, the Vermont proficiencies are somewhat deflated. These three states all use the same NECAP test so it is not surprising to see them share these negligible inflation numbers on 11th grade math.

State	State 11th	NAEP 11th	Math Inflation	Reading State 11th	Reading NAEP 11th	Reading Inflation	Average Inflation
VT	30.0%	33.9%	0.88	68.0%	48.9%	1.39	1.14
NH	28.0%	27.9%	1.00	67.0%	39.0%	1.72	1.36
MA	62.0%	35.3%	1.76	65.0%	53.1%	1.22	1.49
RI	22.0%	22.4%	0.98	61.0%	29.8%	2.05	1.51
PA	53.7%	30.0%	1.79	65.4%	38.0%	1.72	1.76
NJ	75.9%	30.0%	2.53	83.5%	38.0%	2.20	2.36
CA	59.0%	19.6%	3.01	61.0%	22.8%	2.68	2.84
OK	38.0%	10.4%	3.65	72.0%	31.0%	2.32	2.99
USA	NA	24.3%	NA	NA	32.8%	NA	NA

Levels of inflation in New Hampshire, Rhode Island and Vermont

A U.S. Department of Education report[iv] shows that Pennsylvania's measured inflation of 81% for 4th and 8th grades is close to the median among the states for which proficiencies are available. Rhode Island's inflation of 90% is somewhat larger, while New Hampshire and Vermont's inflation values are somewhat smaller at 60% and 50%, respectively. At these primary school grades such levels of inflation apparently lead to reported "highball" proficiencies that give less concern to stakeholders of these state's public schools than if more accurate results had been provided. In a number of instances at the 4th and 8th grade levels, where the proficiencies reported by the NECAP are 80% or more they have become a matter of mistaken pride when, in fact, the actual NAEP scale proficiencies, now rarely more than 50%, indicate troubled systems.

Giving us some encouragement are the smaller inflation levels seen for high schools in the three states-particularly in mathematics where there is no inflation seen in the 2007 tests. Thus when the NECAP mathematics proficiencies top out at around 60% so do the NAEP proficiencies. The reading proficiencies are still inflated but in the range of 14% to 51% among the three states. Since OSPRI's overall figure of merit is the minimum proficiency number, of math and reading, the high school proficiencies are largely governed by the generally lower math results, which are practically devoid of inflation.

ELQ Mapping Method And Results: Real Report Cards

How we obtain NAEP estimated proficiencies locally

Techniques of applied mathematics were used to generate the formulas we use to convert state reported proficiencies to ones consistent with the NAEP. Many of the details are provided in our more comprehensive report.[v] Our method is called the ELQ mapping, where ELQ is an acronym for "ellipse-quartic" and is suggestive of the fact that our mapping curves (or formulas) are always involving a combination of ellipses and quartic curves. When applied to the NECAP states, the ELQ method operates in a subdomain where the quartic terms vanish. Thus the NECAP mappings are precisely ellipses.

Our NAEP estimates are made for grade levels 4, 8, and 11, which are among the ones tested in the three NECAP states of New Hampshire, Rhode Island and Vermont[*].

The "Real Report Cards" accompany the longer report

We think the label *Real Report Card* gives the appropriate connotation to our results in which we have removed the inflation from the results found in state reported proficiency numbers. It produces a measure that conforms to the well-respected Nation's Report Card and thus warrants our use of the term, "real report card."

The sheer volume of the "real report card" results precludes presenting them here. Instead we have presented them in a spreadsheet workbook, ***NCAP-NAEP-Estimates.xls***, accompanying the longer report.[vi]

About the bottom ten schools in each NECAP state

As the entries in the table to the right makes clear, the ten worst schools in each NECAP state not only "fail" on their NAEP estimated proficiencies, but they also have large majorities of children below the so-called state determined proficiency levels. A trend evident here is a general degradation of the NAEP proficiencies over time.

Overall Proficiencies in Bottom Tier

Grade Level	NECAP State	Percent Proficient on NAEP	Percent Proficient on NECAP	Bottom Tier Inflation
4	NH	17.0%	35.5%	2.09
4	RI	7.6%	16.7%	2.20
4	VT	22.9%	36.5%	1.60
8	NH	15.9%	31.7%	2.00
8	RI	8.1%	17.7%	2.18
8	VT	21.6%	39.1%	1.81
11	NH	14.4%	14.4%	1.00
11	RI	2.7%	2.7%	0.98
11	VT	12.5%	10.9%	0.87

For these bottom tier schools, the three-state average NAEP estimates decline from 15.8% at 4th grade to 15.2% at 8th grade to 9.9% at 11th grade. Thus at the bottom of the NAEP proficiency spectrum, the table indicates that the vast majority of these children are sub-proficient. This is indicative of pervasive social promotion. (Even in terms of the NECAP measured proficiencies, large majorities of these children are found to have been improperly advanced or socially promoted.)

About the top ten schools in each NECAP state

In contrast, at the top of the range, for the top ten schools in each state and each grade level, we compare the overall proficiencies of their students as shown in the table on the next page. depicts a situation in which even

[*] More specifically, the NAEP tests at the 12th grade while the NECAP high school test is an 11th grade assessment. Appropriate interpolations are performed to generate a NAEP approximation at the 11th grade.

the best schools are substandard. In terms of our criterion for social promotion, even the NECAP proficiencies here suggest these top schools are practicing some social promotion. We see that the top NECAP determined proficiencies in the 80% range are, in fact, not so high when reckoned on the NAEP scale where the proficiencies are really more in the 60% range. Using the NAEP estimates makes that more apparent as it depicts a situation wherein unacceptable levels of social promotion are found in which anywhere from 30% to 60% of these top schools' students are being promoted even when they are not proficient on the NAEP scale.

Overall Proficiencies in Top Tier				
Grade Level	NECAP State	Percent Proficient on NAEP	Percent Proficient on NECAP	Top Tier Inflation
4	NH	66.9%	87.4%	1.31
4	RI	59.2%	83.1%	1.40
4	VT	64.7%	80.6%	1.24
8	NH	66.0%	86.0%	1.30
8	RI	51.0%	75.2%	1.47
8	VT	59.6%	78.3%	1.31
11	NH	47.1%	47.2%	1.00
11	RI	42.2%	41.5%	0.98
11	VT	49.6%	44.4%	0.89

As we saw for the bottom tier, there is a general degradation of the NAEP proficiencies over time. The three-state average NAEP estimates decline from 63.6% at 4th grade to 58.9% at 8th grade to 46.3% at 11th grade.

Removing the inflation reveals a harsh reality

From the NAEP estimates, alone, we learn that most schools in the state have a majority of their children performing below grade level. Based on the large subset of the state provided data that we deemed reliable, the percentages of schools in the NECAP states where more than half of the children perform at or above grade level are shown here in the table to the right.

Percentage Of Schools Where More Than Half Are NAEP Proficient		
State	Grade	Percentage With More Than Half Proficient
NH	4th	22%
NH	8th	26%
NH	11th	5%
RI	4th	11%
RI	8th	7%
RI	11th	4%
VT	4th	18%
VT	8th	16%
VT	11th	6%

Regardless of grade level, it is only a distinct minority of schools have more than half of their students proficient. As one goes from 4th to 8th to 11th grades, the percentages of such "majority proficient" schools drop into the single digits.

Vast majority of NECAP schools have less than half proficient

Percentage Of Schools Where Less Than 5% Are NAEP Proficient		
State	Grade	Percentage of Low Performing Schools
NH	4th	7%
NH	8th	4%
NH	11th	9%
RI	4th	0%
RI	8th	2%
RI	11th	3%
VT	4th	0%
VT	8th	0%
VT	11th	2%

In each state we find a relatively small minority of schools or districts that have even more than half of their students proficient in both subjects- as seen in the accompanying table to the right. Another thought provoking statistic is the percentage of schools in which less than 5% of its students are proficient in both subjects, which are shown in the table to the left.

Percentage Of Schools Where More Than Half Are NAEP Proficient		
State	Grade	Percentage With More Than Half Proficient
NH	4th	22%
NH	8th	26%
NH	11th	5%
RI	4th	11%
RI	8th	7%
RI	11th	4%
VT	4th	18%
VT	8th	16%
VT	11th	6%

Thus, these schools sometimes seem like custodial care centers where the academic development of children is not given any significant priority- thus wasting their human potential. It is evident that social promotion causes of much of this.

Conclusions and Remedies

This report has reviewed achievement test scores of public school students in the States of New Hampshire, Rhode Island, and Vermont. We have done this for every public school and every public school district within these states for which non-trivial NECAP proficiencies have been reported. Rather than accept those state reported proficiency percentages as realistic, we have used a reasonably accurate mapping procedure to convert these results into ones consistent with the Nation's Report Card (NAEP examinations). This provides

stakeholders with more useful and yet troubling results. The information we use and the analysis we have applied to it is providing us with a clearer picture of dysfunctional public schools- particularly with regard to the problems of social promotion. It also helps us understand what steps can be taken to begin their reform. We think these results are sufficiently reliable, in comparison to the state reported proficiencies, that we label our NAEP scale proficiencies accorded to any school or district as the Real Report Card for that tested group.

Manipulating the testing environment to control inflation

One way to understand the inconsistent proficiency levels between the NECAP and the NAEP is to recognize the interplay between content standards and cut-scores when determining which students should be accorded the status of proficient. Assuming that the tests used by the states reliably measure mastery of their content standards, there are at least two ways to artificially raise proficiency percentages above those obtained from the NAEP tests. They are:

- Lowering the cut scores.
- Reducing the content standards, thus making the tests easier.

Ideally, by adjusting these cut scores and content standards up or down, each state should be able to align its proficiency percentages to those reported by the NAEP. However, since states tend to allow other considerations (including political factors) to influence the cut scores and content standards, it is not surprising to find large discrepancies and ones that in almost every case significantly inflate student performance. It is not likely that these discrepancies are due to technical difficulties in the administration of the tests, for if they were, one would expect the state tests to sometimes report lower proficiencies than found on the NAEP. It is more likely that test administrators designed their testing regimes to provide results that make their public school systems look better than they really are. Thus we believe that the inflation is there primarily by design and is generally not the result of inadvertent errors.

As we saw above in Table. 2, there is an exception to the NECAP inflation policy: grade 11 mathematics examinations. This lack of inflation in one test suggests that the NECAP authorities are politically able to set their cut scores and other examination parameters in such a way to produce NAEP scale proficiencies without inflation. Having removed the inflation for one of the six NECAP examination types, we wonder if they will do it for the others?

Relationship to NCLB concepts and requirements

Under the *No Child Left Behind* (NCLB) legislation, states are expected to maintain what is called, *Adequate Yearly Progress* (AYP), in each public school. Each year the requirements are increased until 2014, when every public school student will be expected to score proficiently on the state's achievement tests.

This seemingly rigorous requirement is not so because states are free to set their own proficiency standards. We already mentioned Missouri, which recently relaxed its achievement test standards in a questionable attempt to raise their proficiencies. And as we have already noted, the NECAP states' reported numbers of proficient students ranges from 50% to 90% above the NAEP numbers. Under NCLB, states are free to weaken their standards. By moving the bar low enough, all students can be made to appear proficient by year 2014.

By using tests consistent with (aligned with) the NAEP or by removing the inflation from the state reported proficiencies, states can then report meaningful proficiency percentages. Typically, these numbers are low. Stakeholders can respond by employing various remedial measures. Of those measures, we think the ending of social promotion is key to improving proficiencies if there is to be any hope of legitimately meeting the NCLB goal of 100% proficiency by 2014.

Vermont: Best schools and the most school choice

Not only do we see that public schools in Vermont perform better in an absolute sense that either Rhode Island or New Hampshire, we find that the well known tendency for proficiencies to fall as students move longitudinally through their K-12 years is the smallest in Vermont as indicated in the following table. That rate of decline appears to accelerate in the high school years.

Longitudinal Statewide Proficiency Trends					
Grade Level	NH Averages	RI Averages	VT Averages	NECAP Averages	National Averages
4	41.0%	31.0%	41.0%	38.0%	32.0%
8	37.0%	27.0%	41.0%	35.0%	29.0%
11	28.0%	22.0%	34.0%	28.0%	22.0%

It is also interesting to notice that New Hampshire has the most pronounced fall-off among the three states. Clearly, the vast majority of schools are not keeping their children proficient in these two subject areas. Given the definition we set on page 2, every school in these states, for which we have data, is practicing social promotion. Rather than helping children catch up to a proficient level as they progress through the K-12 years, the distinct trend is an increase in the subproficient populations as a result of these schools progressively lower standards for promotion.

We should remember that these are not just numbers. These low proficiencies indicate that most children in these schools are not receiving anything close to a good education. Thus the systems are harming them. While it is not the central focus of this report to discuss precise remedies for these ills, we nevertheless believe that ending social promotion is a key reform that would likely lead to significantly higher proficiencies.

Lastly, are public school authorities misleading their stakeholders when they award high school diplomas to students with sub-par levels of proficiency? In New Hampshire where only 28% of its 11th grade students are estimated to be proficient, in Rhode Island where only 22% are estimated to be proficient, and in Vermont where only 34% are estimated to be proficient, the answer would appear to be "yes." When averaged over the NECAP states, approximately 70% of their diplomas attest to skills not yet mastered by those receiving them.

The poor performance of disadvantaged ethnic groups' children

We also examined proficiencies according to ethnic groups at the statewide level because they provide us an independent measure of the errors in our mapping method. Both NAEP and the NECAP tests provide these proficiencies. They reinforce the common perception about the very low proficiency percentages of black and Hispanic students. They motivate us to understand why. Are there reasons beyond the usual socio-economic factors involved? Of course, social promotion is involved. Higher percentages of poorly performing students are promoted to levels beyond their skills compared to their counterparts among more affluent groups. One wonders if this is a form of discrimination? Is it, as President George W. Bush famously said, an example of "the soft bigotry of low expectations?"

Inconsistent inflation and special education

From the longer report's spreadsheet, the statewide inflation factors in 4th grade for the two subjects of math and reading are shown next in the nearby table. It shows that the NECAP introduces a significant amount of inflattion- particularly for the reading assessments. The relatively larger factors for Rhode Island depend to some extent on the state's unusually large population of special education students.

	4th Math	4th Reading
VT	1.27	1.66
NH	1.31	1.80
RI	1.59	2.06

Reporting results that embed (and effectively hide) these levels of inflation, as is done by the NECAP, can sometimes deceive stakeholders, which then fosters more tolerance for the status quo than is warranted.

As is evident in the table to the right, the maps in 8th grade for the three NECAP states are qualitatively similar to the ones we just showed for 4th grade except here the inflation tends to be somewhat higher. As at the 4th grade, Rhode Island inflates its NECAP test proficiencies more than the other two states.

	8th Math	8th Reading
VT	1.44	1.64
NH	1.53	1.81
RI	1.71	2.26

In reviewing the inflation levels among the three NECAP states, we would have expected them to be more closely grouped than what we see. The differences are not enormous but are larger than the sampling errors of the NAEP examinations and therefore suggest some sort of systemic cause. We know from our mapping studies that Rhode Island has the lowest proficiencies of the three states when measured on the NAEP scale and yet we also find for any tested subgroups within the three states with identical NAEP scores that Rhode Island has the highest NECAP proficiencies among the three?

Rhode Island is unique among the three states in having a much larger percentage of students designated as special education pupils- at about 24% of the school population. This is about twice that of the other two states. It's relevant to note that special accommodations are made for special education students on both the NAEP and the NECAP but these accommodations are more extensive for the latter. This suggests that Rhode Island students at any given NAEP level would score a little higher as a result of these helping factors. This may explain its somewhat higher inflation levels. Needless to say, providing special accommodations tends to compromise the notion of a level playing field. Unless the "help" given on the NECAP is the same as that given on the NAEP, these special accommodations will tend to distort the results. As we see here, this is more of a problem when comparing states that have markedly different percentages of special education students, which suggests that the criteria for having that designation is not consistent from one to the next.

What about private schools?

We have not addressed private schools in this report. Nationwide, NAEP reports approximately 45% of such students to be proficient. This suggests that while better than most public schools, America's private schools also suffer from having a majority of their students below grade level and from having far too many graduates lacking 12th grade skills. Similar to the public schools, we believe these problems in private schools stem from similar causes- particularly from social promotion.

Raising integrity is the first reform

From the foregoing it should be evident that the inconsistent reporting of proficiency levels is confusing and tends to exaggerate the quality of public schools within the NECAP states. We think it a reasonable proposal that these three states move towards a testing environment more aligned with the NAEP. This would mean adjusting the curricula to include the content tested on the NAEP, but does not limit these states from the teaching and testing of content that goes beyond it.

When the NECAP proficiencies align with the NAEP measured ones within a few percent, then the report cards produced by the NECAP will be meaningful. In the meantime, stakeholders can apply mapping techniques, such as the ELQ formula, to produce more realistic and more useful proficiencies. That should enable them to better see where their schools are deficient and where further improvements should be made.

Establishing school choice is the second reform

External to the results developed by our examination of the NECAP and NAEP proficiencies, there are a number of reasons for supporting a parent's right to choose the schools their children attend. The arguments favoring school choice generally take two lines of reasoning.

- The more fundamental is a legal argument based on the United Nations Declaration of Human Rights, which the United States has ratified. Since one of the rights enumerated there is a parent's right to direct the education of their children, it is argued that the United States is bound to provide this right to its citizens.

- The other line of reasoning is based on the successes of various forms of school choice, including voucher programs, private scholarships, and tax incentives.

In this report we have shown Vermont to have the superior proficiencies among the three NECAP states. Consistent with this status, we argue, is the fact that Vermont has the most school choice of the three states. Their systems is a form of a voucher system- called "tuitioning" whereby children can attend private schools at government expense.

The theoretical argument for school choice is simply one of free market economics. By empowering parents to participate in a free market of educational service providers, it is reasoned that competition will increase the presence of some schools while driving others out of business. This process, if it operates similarly to that in other industries, will engender higher quality products and services at lower costs.

Ending social promotion is the third reform

Lastly, the problems that were confirmed and revealed by our mapping project suggest that student proficiencies will not improve much unless social promotion is ended. Many educators have tried to end it and failed. We believe that such efforts will be futile until its great enabler, age-based group instruction, is replaced with something better.

Our insights into the essential problems of age-based group instruction are not new. We came across the lamentations of 19th century educator William Shearer who saw the deficiencies of it through the eyes of one who had thrived teaching in a rural one-room school house and then later became responsible for a public school system in Philadelphia.[vii] In that traditional one-room schoolhouse a rudimentary form of self-pacing reigned while in the city's school system the regimentation of age-based groupings held sway. He saw- well over a hundred years ago- that what appeared efficient on paper was gravely deficient. Reforming the systems in his age with the tools of that time would have been very difficult; reforming those same systems with the tools of our modern age is more feasible. We think it can be done effectively and inexpensively.

So how can social promotion be ended?

The purpose of this report has been mainly to provide estimates or report cards on the proficiencies of the NECAP states' local public schools and school districts in terms of how well children would have performed on the Nation's Report Card- the NAEP. Among the various problems seen (in not only public schools but also in their private counterparts) we found social promotion to be the key issue. In fact, our definition of social promotion directly relates its magnitude to that of the tested group's proficiency. Our defined magnitude of it is 90% less the NAEP scale proficiency percentage. Our analysis has depicted pervasive social promotion, not only in the NECAP states' public schools, but also in almost all public schools nationally. Beyond our shores, there is similar evidence of this dysfunction in European and Asian school systems.

We close our report on K-12 public school proficiencies in New Hampshire, Rhode Island and Vermont with some ideas on how social promotion might be remedied.

Ending social promotion is possible but difficult in an age based grade level system

In the context of a school using a grade level system, our analysis shows that ending social promotion will improve proficiency levels to above 90%. It would likely have at least one other important consequence: larger numbers of older children would end up retained into lower grades. That may at first seem like an unacceptable side effect. But upon further consideration, the high levels of retention would provide feedback to stakeholders that further reforms- say, regarding instruction- need to be undertaken. It would shine a bright light on troubled schools and that may, in turn, induce action. That would be better than the current situation.

On this point, we understand that the school systems in India♠ have a fairly strict process based on grade level exit examinations that largely prevents social promotion. Many children are forced to repeat grade levels. Yet, this seems somewhat on the draconian side, when a child's deficiencies may be only in a few subject areas and where they may not be an entire year behind. We believe there are better ways to overcome social promotion.

Replacing age based grade levels with a self-pacing format

We believe that social promotion can be eliminated by employing a redesigned instructional system. We propose using online, self-paced instruction that would have higher quality content while at the same time trimming costs. This would prevent social promotion by removing the concept of age based grade levels. A child's academic placement, in the new regime, would be strictly a function of what courses they have mastered. Retention, in such a system, is effectively replaced by having a child work at a slower pace or by having the child spend more time per week on a difficult subject.

This is not a new concept. In the adult world we are all accustomed to professions that require certifications- such as CPA. No one asks an accountant for his or her age when they are considered for the designation of CPA. Rather they must pass a skills based test. Similarly, at the YMCA the swimming achievement levels have nothing to do with a child's age. Rather they depend on the child's demonstrated skills.

There is in this the prospect that slow learners can master material that they would otherwise have not learned. Instead of dropping out, they may end up being awarded a genuine high school diploma. The extra effort on their part may require more hours each week or perhaps one or two additional years of study. But these children will more often succeed and face life better prepared to face its challenges.

Endnotes:

[i] Please see our more comprehensive report, ***How Would Public Schools In New Hampshire, Rhode Island And Vermont Do On The Nation's Report Card*?** to learn more about the methods, results and conclusions of our studies in this area. It is available on the OSPRI website at **www.oceanstatepolicy.org.** Also available there is the Excel workbook, ***NCAP-NAEP-Estimates.xls*** containing the NAEP scale school-by-school and district-by-district proficiency percentages that we call the *Real Report Card*.

[ii] For New Hampshire the data was directly available from its Department of Education website at http://www.ed.state.nh.us/education/data. While Rhode Island provides the needed local school and district NECAP proficiencies, its website at http://www.eride.ri.gov/reportcard/07/schools.aspx does not provide it in convenient tables that could be downloaded. Instead we requested and received the needed spreadsheet tables via email attachments from the Department of Education directly. For that we acknowledge and thank Mr. Van Yidana for generating and transmitting the needed files. In the case of Vermont, the data for 4th and 8th grades was not to be found from the state's Department of Education. Instead we obtained the grades 3 – 8 average results at http://education.vermont.gov/new/html/maindata.html.

[iii] The NAEP data can be obtained directly from the NAEP Data Explorer located on the NCES website at http://nces.ed.gov/nationsreportcard/nde/

[iv] Found in ***Mapping 2005 State Proficiency Standards Onto the NAEP Scales***, Research and Development Report, June 2007, U.S. Department of Education, Institute of Education Sciences, NCES2007-482. Report is downloadable from http://nces.ed.gov/nationsreportcard/pubs/studies/2007482.asp .

[v] See reference 1 above.

[vi] Ibid.

[vii] William J. Shearer, *The Grading of Schools*, H. P. Smith Publishing Co., 1899, p 19.

♠ Susarla Murty, Private Communication. Dr. Murty was schooled in India and has had first hand experience with their public education systems.