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# **Committing to Equal Opportunity:**

Examining the Effectiveness of the Public Education Funding Structure in New Hampshire

> Elizaveta Minko Honors Thesis Spring 2012

# **Committing to Equal Opportunity:** *Examining the Effectiveness of the Public Education Funding Structure in New Hampshire*

"Poverty must not be a bar to learning, and learning must offer an escape from poverty." - President Lyndon Johnson, 1965<sup>1</sup>

# **The Big Picture**

We are not born into equal opportunity. We do not choose the parents to whom we are born. We do not choose whether the family we are born into is wealthy or poor. The premise of this country is equal opportunity to pursue your dreams, and education is the one "vehicle" to ensure equal opportunity.<sup>2</sup> Public education is available to every child in this country, but what many individuals do not realize is that "we've rigged the system against the success of some of our most vulnerable children."<sup>3</sup> Many of our low-income students get a lower quality education: they get less experienced and less-educated teachers, less rigorous curriculums, and lower quality school buildings.<sup>4</sup> In other words, these students actually receive a lower opportunity to succeed than their high-income counterparts. The reason for this inequity "is a set of school finance policy choices that systematically shortchange low-income and minority students and the schools and districts that serve them."<sup>5</sup>

The way education has been funded—primarily through a local property tax—has historically resulted in funding inequities. The local property tax is widely accepted because it is deemed that the entire community benefits from a high quality school system.<sup>6</sup> However, a major problem with the use of the local property tax is that it results in funding inequities. Wealthier communities with high property values can keep their tax rates low and are able to have very-well funded schools, while poorer communities with low property values must have high tax rates and may still have underfunded schools. Poorer communities began suing their state for inequitable funding structures, starting with lawsuit against California the *Serrano v. Priest* case in 1971.<sup>7</sup> The lawsuits spread to other states, and the number of rulings that affirmed that the state funding systems were unconstitutional increased from the 1970s to the 1990s.<sup>8</sup>

Despite the courts intervening and many states subsequently reforming their education funding system, funding gaps in education persist today. The reality is that funding based on local property tax creates inequities across communities. These inequities are found across the states today. *The Funding Gap* report, released by The Education Trust in 2006, stated that most states do not have equitable policies in their high-poverty districts, according to 2004 data: "In 26 of the 49 states studied, the highest poverty school districts receive fewer resources than the lowest poverty districts... Four states—

<sup>&</sup>lt;sup>1</sup> PBS.org, "How Do We Fund Our Schools?" September 5<sup>th</sup>, 2008. Retrieved from

http://www.pbs.org/wnet/wherewestand/reports/finance/how-do-we-fund-our-schools/197/

<sup>&</sup>lt;sup>2</sup> Senator Molly Kelly, Interview by author. Tape recording, Concord, New Hampshire, April 3, 2012.

<sup>&</sup>lt;sup>3</sup> Education Trust Fund, "Funding Gaps 2006," (2006), 1. Retrieved from

http://www.edtrust.org/dc/publication/the-funding-gap-0

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Ibid.

 <sup>&</sup>lt;sup>6</sup> Kevin Smith, Alan Greenblatt and Michele Vaughn, States and Localities, (Washington D.C: CQ Press), 496.
 <sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Kenneth Wong, "The Politics of Education," Chapter 12 in V. Gray and R. Hanson, ed., Politics in the American States: A Comparative Analysis. (Washington DC: CQ Press, 2003), 11.

Illinois, New Hampshire, New York, and Pennsylvania–shortchange their highest poverty districts by more than \$1,000 per student per year."<sup>9</sup> Such funding gaps continue to provide an unequal educational opportunity to students in high-poverty districts.

This issue of funding gaps, and subsequent inequities in educational opportunity, is an issue across the nation, as the study mentioned above indicates. It apparently was an issue in the state of New Hampshire at the time of the study in 2004. The question is whether the funding structure of New Hampshire has changed since then, whether funding gaps exist between poor and wealthy districts and whether such gaps are correlated to gaps in student achievement. This research paper sought to explore these questions, with the main purpose of determining whether New Hampshire's funding system for public education is effective in providing an adequate education for all children. The findings from the quantitative and qualitative analyses of this research study suggest that, despite a historically increasing role of the state government, New Hampshire's funding system of public education has not proven to be effective in providing the opportunity of an adequate education to students in poor districts, and gaps in student achievement persist between poor and wealthier districts. The underlying problems of the funding structure are explored, and, finally, this report suggests a list of policy recommendations to make the New Hampshire funding system more effective in providing an adequate education to all children.

# **History of Education Funding in New Hampshire**

Education slowly developed at the local level prior to the sprouting of the United States as an independent nation; and, from the seventeenth century to the early twenty-first century, public education in New Hampshire was continually reshaped and molded by various minute changes and several significant reforms. Pieces and parts, in the form of laws and policies, were added or eliminated, in search of a better way of governing and administrating the education of New Hampshire's children. As this development has taken public education to the system it is today, the funding of public education was certainly a critical component of education that itself changed—shifting from a primarily local burden to greater contribution from the state level— and continues to change as education evolves.

From the early days of the state of New Hampshire, local towns had primary responsibility for education. In 1642, the Massachusetts colony—which at the time included New Hampshire implemented its first school act, which required teachers and parents to teach "reading, citizenship, and religion" to children.<sup>10</sup> Within five years, the *Great School Act of 1647* obliged towns with over fifty households to establish and support public schooling, with not only parents bearing the costs but the "inhabitants in general."<sup>11</sup> New Hampshire separated from Massachusetts in 1680, and, by 1693, town selectmen were required to collect money for schools through an equal tax.<sup>12</sup>

By the end of the American Revolutionary War in 1783, New Hampshire created its New Hampshire State Constitution and ratified it the following year; a vague section on public education was embedded into this document that still is the foundation of the state government today. The sole constitutional basis for public education, Article 83, broadly described the duty of the state government "to cherish the interest of literature and the sciences, and all seminaries and public schools, to

- <sup>11</sup> Ibid.
- <sup>12</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Education Trust Fund, "Funding Gaps 2006," (2006), 6.

<sup>&</sup>lt;sup>10</sup> R. Stuart Wallace and Douglas E. Hall, "A New Hampshire Education Timeline," (New Hampshire Historical Society ), p.1

encourage private and public institutions, etc."<sup>13</sup> In 1789, the legislature decided on the amount needed to be raised by local property taxes for the towns for the purpose of schooling.<sup>14</sup>

Continuing into the nineteenth century, state law concerning education developed further, allowing the creation of school districts and establishing superintending committees. In 1885, over 2,200 school districts existed across the state and the creation of school boards to head these districts was required.<sup>15</sup> More importantly, by 1842, towns had been allowed to raise more money for the purpose of schooling than the amount set by the state.<sup>16</sup>

By 1919, "sweeping education reform law" was passed in the state: the State Board of Education was established with supervising authority over all schools, minimum tax rates and caps were approved, and state aid was allocated to districts on the basis of property wealth.<sup>17</sup> In two years, caps were placed on the state education aid, which soon resulted in insufficient state aid appropriations and, in 1947, the state put in place an aid formula with the intention "to equalize educational opportunities and to improve the public elementary and high schools of New Hampshire."<sup>18</sup> Both of these attempts at reform, in 1919 and in 1947, did increase state education aid to public schools, but "efforts toward equalization in 1919 and 1947 began to fail within 2-4 years of enactment."<sup>19</sup> The reason these efforts were failing was because "…subsequent state government appropriations were inadequate to maintain the commitment that had been made."<sup>20</sup> In other words, the state level was not providing the funds the legislature had promised to make education more equitable.

The state seemed to find political means of bypassing the enacted reforms: "Unwilling to appropriate funds to support the intent of the reform legislation, subsequent legislatures devised methods to distribute less aid to districts than amounts the districts would otherwise been entitled to receive by the reform laws."<sup>21</sup> These methods, legally embedded as "escape clauses," allowed the state to legally fail at appropriately funding education reform.<sup>22</sup>

In the early 1980s, the state was sued for the first time by New Hampshire citizens on education funding.<sup>23</sup> The lawsuit was dropped after the state government "promised to make adjustments to how it helped communities fund education."<sup>24</sup> The government's response was enacting the Augenblick formula in 1984.<sup>25</sup> The goal of the formula was for the state to fund approximately 8% of the cost of public schools, which "left New Hampshire ranking 50th in state aid to education."<sup>26</sup> The formula

<sup>&</sup>lt;sup>13</sup> Ibid., 2.

<sup>&</sup>lt;sup>14</sup> Douglass E Hall, "Lessons from New Hampshire: What We Can Learn from the History of the State's Role in School Finance, 1642-1998," (NH Center for Public Policy Studies, April 1998). Retrieved from

<sup>&</sup>lt;sup>15</sup> Wallace and Hall, "A New Hampshire Education Timeline," (New Hampshire Historical Society, ), 4.

<sup>&</sup>lt;sup>16</sup> Ibid., 3.

<sup>&</sup>lt;sup>17</sup> Ibid., 5.

<sup>&</sup>lt;sup>18</sup> Ibid., 5.

<sup>&</sup>lt;sup>19</sup> Douglass E Hall, "Lessons from New Hampshire: What We Can Learn from the History of the State's Role in School Finance, 1642-1998," (*NH Center for Public Policy Studies,* April 1998).

<sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> Ibid.

 <sup>&</sup>lt;sup>23</sup> Shir Haberman, "Augenblick formula emblematic of past failures to solve education crisis," (Seacoastonline, April 09, 2003). Retrieved from http://www.seacoastonline.com/articles/20030409-NEWS-304099989?cid=sitesearch
 <sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Hall, "Lessons from NH."

<sup>&</sup>lt;sup>26</sup> Haberman, "Augenblick formula."

directed state aid to the school districts of the highest needs, based on equalized valuation per pupil, equalized school tax rate, income levels, and other measures.<sup>27</sup>

Despite the modest promises of the new formula, the state did not fully fund it. After the formula was actually passed into law, the legislature acted in a political fashion in using the minimum amounts as maximum amounts under the formula to keep state taxes low. <sup>28</sup> Scott F. Johnson, the Co-Counsel of the Claremont Coalition, explains, "Funding amounts that were likely seen as minimum figures when the Augenblick formula was debated and passed into law quickly became maximum amounts."<sup>29</sup> Indeed, this was seen even in the first year of the program when "lawmakers decided to fund only \$24.3 million of the \$42.4 million promised to cities and towns...[which] represented 57 percent of the amount promised."<sup>30</sup> The first year was not the only year in which the program was not fully funded. The program was never completely funded: "In 1988, it [the legislature] came the closest, paying for 71 percent of what was due under the formula, but that dropped to a low of 44 percent in 1997."<sup>31</sup>

This underfunding of the Augenblick fit the long-term pattern of the state's role in funding public education in New Hampshire. Since the early attempted funding reform in the early twentieth century, the state contribution did not change significantly: "From 1920 to 1999, the state of New Hampshire generally contributed only between 5 and 10 percent of the total cost of educating its primary and secondary school students. Though the percent was occasionally higher—reaching, for example, 15 percent in 1945—it has been significantly below the 50 percent median across the country.<sup>32</sup> The trend of predominantly local financial responsibility for public education persisted to the end of the twentieth century in New Hampshire.

With the continued inadequate state government appropriations, the property-poor districts decided to approach the issue through the courts again, this time sparking the first of a series of successful lawsuits against the state. The first lawsuit—known as *Claremont I*—was brought to court in 1993. Five property-poor school districts—Claremont, Allenstown, Franklin, Lisbon and Pittsfield<sup>33</sup>—took the state of New Hampshire to the state's Supreme Court, "claiming it perpetuated educational opportunity inequities and disproportionate taxes."<sup>34</sup> The Supreme Court ruled in favor of the plaintiff towns. The headnotes for the decision follow:

Encouragement of literature clause of State Constitution imposes duty on state to provide constitutionally adequate education to every educable child in public schools in state and to guarantee adequate funding; terms "shall be the duty . . . to cherish" are not merely statement of aspiration but, rather, language commands that state provide education to all its citizens and that it support all public schools.<sup>35</sup>

Ultimately, the court found that the broad Article 83, which is the "cherish clause" of the New Hampshire Constitution, asserts that education is a responsibility of the state, including adequate funding.

<sup>&</sup>lt;sup>27</sup> Douglass E Hall, "Lessons from New Hampshire: What We Can Learn from the History of the State's Role in School Finance, 1642-1998," (NH Center for Public Policy Studies, April 1998).

 <sup>&</sup>lt;sup>28</sup> Scott F. Johnson, "Gov. Lynch's Proposed Amendment is a Monumental Mistake," (New Hampshire Citizens Voice Project), 1. Retrieved from www.claremontlawsuit.org
 <sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> Haberman, "Augenblick formula."

<sup>&</sup>lt;sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> Oyebola Olabisi, "New Hampshire's Quest for a Constitutionally Adequate Education," 1-2.

<sup>&</sup>lt;sup>33</sup> Ryan J. Tappin and Steve Norton, "New Hampshire's Latest School Funding Formula," (NH Center for Public Policy Studies, March 2009), 13.

<sup>&</sup>lt;sup>34</sup> Obalisi, "New Hampshire's Quest," 2.

<sup>&</sup>lt;sup>35</sup> Const. Pt. 2, Art. 83. Retrieved from http://www.claremontlawsuit.org/Claremont%20I%20web.htm

Apparently, not much significant change took place after *Claremont I* in the funding of public education because the same school districts were back in the New Hampshire Supreme Court only a few years later in 1997, suing the state on the same issue. The taxing system that was supporting education was seen as inequitable by the plaintiffs. Because of variation in property values across the state, communities were able to raise funds to very different extents: "Evidence presented to the Court showed that in the 1994-95 school year, this system resulted in up to a 400 percent difference in tax rates across towns, with a rate of \$6.68 per \$1,000 of property in Rye versus \$25.26 per \$1,000 in Pittsfield."<sup>36</sup> With the local communities almost solely carrying the burden of public education funding through local property taxes, the system of funding for public education now was found to be "unconstitutional" in the case that is known as *Claremont II*.<sup>37</sup> This decision included four mandates—to define, to calculate the cost of, to raise funds proportionally through a uniform rate, and provide accountability for an adequate education.<sup>38</sup>

After *Claremont II*, many proposals were created with the intention of changing the funding system of public education to a constitutionally adequate mechanism. Indeed, "From 1998 to 2006, at least 150 pieces of legislation were introduced to address these issues."<sup>39</sup> The major proposals of this period up to 2006 are briefly summarized below. These were the ABC plan of 1998, HB 999 of 1999, Governor Lynch's proposal for 2005-2006, and HB616 of 2005.<sup>40</sup>

The "Advancing Better Classrooms" (ABC) Plan was proposed by Governor Shaheen in 1998. The ABC Plan was "identical in principle and closely parallel in detail to the state's equalization aid plans of 1919 and 1947."<sup>41</sup> The bill created the following funding mechanism: establishment of a state property tax, an increased tobacco tax and the legalization of video slot machines. <sup>42</sup> The calculated cost of an adequate education was a dollar per pupil amount based on aggregate costs divided by student attendance, and state grants would be given to school districts whose revenues from the state property tax did not cover the calculated cost of education.<sup>43</sup> The legislature requested an opinion of the justices on this proposal and received a sound answer: the plan was declared unconstitutional because property tax than the calculated cost of education): the Court saw this as "an indirect tax abatement," <sup>44</sup> or in other words an alleviation, to the property-wealthy towns.

In the following year, 1999, a proposal of an adequate education funding system was made into law under the bill HB999. The bill declared that the state would fund an adequate education amount equal to half of the total cost.<sup>45</sup> Half of this adequate amount would be raised by a statewide property tax (with a rate of \$6.60 per \$1,000 property value) and the other half by tobacco settlements, increased taxes including the business tax, and education aid raised by another piece of legislation.<sup>46</sup> The adequate education cost was calculated as a per pupil amount based on the costs in schools where 40-60% of 3<sup>rd</sup>

<sup>&</sup>lt;sup>36</sup> Obalisi, 3.

<sup>&</sup>lt;sup>37</sup> Ibid., 2.

<sup>&</sup>lt;sup>38</sup> Stephen Norton, et al. "What is New Hampshire? A Collection of Data for Those Seeking Answers" (NH Center for Public Policy, September 2011), 78.

<sup>&</sup>lt;sup>39</sup> Obalisi, 4.

<sup>&</sup>lt;sup>40</sup> Ibid., 4.

<sup>&</sup>lt;sup>41</sup> Hall, "Lessons from New Hampshire: What We Can Learn from the History of the State's Role in School Finance, 1642-1998," (NH Center for Public Policy Studies, April 1998).

<sup>&</sup>lt;sup>42</sup> Obalisi, 4.

<sup>&</sup>lt;sup>43</sup> Ibid., 4.

<sup>&</sup>lt;sup>44</sup> Ibid., 4.

<sup>&</sup>lt;sup>45</sup> Ibid., 5.

<sup>&</sup>lt;sup>46</sup> Ibid., 5.

and 6<sup>th</sup> grade students passed the statewide standardized tests.<sup>47</sup> However, this was an underestimate because the costs used for the calculation "were typically much lower than the actual expenditure for public education incurred statewide."<sup>48</sup> The major deviation of this legislation from the ABC plan was that excess tax funds of property-wealthier towns had to be rendered to the state for redistribution.<sup>49</sup> Finally, all localities were allocated funding supplements for high school students, special education students, low-income students and transportation.<sup>50</sup>

Thus, the legislature largely responded to *Claremont II* by installing the statewide property tax system, which took effect in the 1999-2000 school year.<sup>51</sup> The graph below, presented in Norton et al. "What is New Hampshire? A Collection of Data for Those Seeking Answers," visually depicts the change in sources of revenue of education after the statewide property tax system was put in place. The majority of the funding for education came from local property tax (77%) in the school year 1998-1999, but in 1999-2000 that portion was down to less than a third of all funding (31%) and the state portion was significant, with 24% coming from the statewide property tax and 23% from state adequacy aid.<sup>52</sup> Again, the importance here is that excess funds raised by wealthy communities were redistributed.

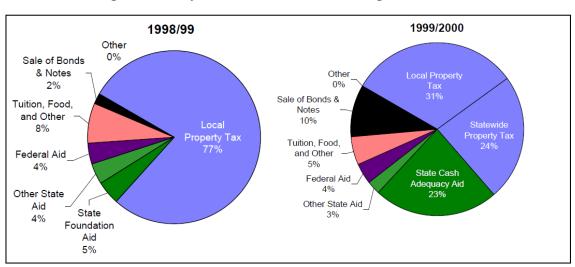


Figure 1. Comparison of Education Funding in 1998 and 1999<sup>53</sup>

Subsequent changes to the formula under HB999, made by legislation in 2003 and 2004, which seemed to move the system back to its historical tradition of a more significant local burden of education funding. Essentially, the changes placed a cap on the growth rate of public education spending, lowered the statewide property tax, and introduced targeted aid to districts with per pupil property valuation below the average.<sup>54</sup> The cap on education spending by the state placed the greater burden on localities once again, as had been characteristic of the state historically, because the

- <sup>47</sup> Ibid., 5.
- <sup>48</sup> Ibid., 5.
- <sup>49</sup> Ibid., 6.
- <sup>50</sup> Ibid., 7.
- <sup>51</sup> Norton et al., 79.
- <sup>52</sup> Ibid., 79.
- <sup>53</sup> Ibid., 79.
- <sup>54</sup> Ibid., 7.

difference between the cost and the statewide tax would be left up to the towns to raise, resulting in "increasingly unequal taxation rates."<sup>55</sup> Indeed, local property tax revenues for education accounted for the same share of total funding in 2004 as in 1998.<sup>56</sup> The mechanism of education funding "was returning to a funding structure similar to the one of the late 1990's – the structure the Supreme Court ruled unconstitutional in Claremont II."<sup>57</sup>

When John Lynch became New Hampshire's governor in 2005, he brought up a proposal for reformed school funding. His plan included an "education equity index," which calculated a town's need based on property valuation, median income, number of students on free/reduced lunch, number of students with limited English, assessment test scores, graduation rates, and the percentage of students going on to college. According to Governor Lynch, this plan was the better option because state aid would go to the communities with the greatest need and education quality would be improved by aiding towns with a low education equity index.<sup>58</sup> The statewide property tax would be eliminated under this plan, meaning "former donor towns with high property wealth would have faced lower property tax rates, while most other communities would have experienced tax increases if their education equity index.<sup>59</sup> This plan did not become law.

At the same time, Senate President Ted Gatsas created an education funding reform proposal that eventually passed into law. This proposal—HB616— did not include the education equity index of Governor Lynch's proposal and did not repeal the statewide education property tax. One reform addition was allowing property-wealthy towns to retain excess funds raised,<sup>60</sup> no longer allowing for the redistribution to needy towns. The education cost was no longer calculated on a statewide per-pupil amount, and, instead, the "equitable education cost" now was calculated by adding the total state aid added to the towns' revenue raised by statewide education tax,<sup>61</sup> essentially not defining the cost of adequacy per pupil. Targeted aid was based on a town's per pupil property valuation, as well as some aid based on transportation, median family income, special education students, students on free/reduced lunch and students with limited English.<sup>62</sup>

This latest reform law did not last long—the law was declared unconstitutional by the New Hampshire Supreme Court in the *Londonderry* decision of 2006. In April of 2006, two lawsuits were filed by the city of Nashua and 19 school districts against the current school funding structure and a Superior Court found it was, in fact, unconstitutional.<sup>63</sup> By September, the Supreme Court found that the school funding mechanism, as outlined by HB616, was unconstitutional.<sup>64</sup> The Court "ruled that the funding formula established the prior year did not meet the criteria put forth in the Claremont decisions" and, furthermore, the Court "established a deadline to meet the court's mandate of defining an adequate education."<sup>65</sup> Essentially, the court said, "we told you what you have to do, we'll give you one year to do

<sup>65</sup> Norton, et al., 81.

<sup>&</sup>lt;sup>55</sup> Obalisi, 7.

<sup>&</sup>lt;sup>56</sup> Norton, et al., 80.

<sup>&</sup>lt;sup>57</sup> Ibid., 80.

<sup>&</sup>lt;sup>58</sup> Obalisi, 8.

<sup>&</sup>lt;sup>59</sup> Ibid., 8.

<sup>&</sup>lt;sup>60</sup> Ibid., 8.

<sup>&</sup>lt;sup>61</sup> Ibid., 9.

<sup>&</sup>lt;sup>62</sup> Ibid., 9.

<sup>&</sup>lt;sup>63</sup> Ibid., 9.

<sup>&</sup>lt;sup>64</sup> Ryan J. Tappin and Steve Norton, "New Hampshire's Latest School Funding Formula," (NH Center for Public Policy Studies, March 2009), 13.

it, and if you don't, we'll do it."<sup>66</sup> The drawn out fencing match between the judicial and the legislative branches continued, and it was again up to the legislature to make the next move.

The legislature responded to the Court's mandate by defining an adequate education and formulating a new funding structure. HB927 of 2007 "defined *an opportunity for an adequate education* as a subset of the state's Minimum Standards for Public School Approval," including both "input (resource) and outcome (performance) requirements that serve as a floor above which schools would be required to perform in order to be granted certification by the state."<sup>67</sup> The following session year, 2008, the legislature passed SB539 which outlined the cost of *an opportunity for an adequate education* and set up a funding formula according to this cost.

The calculated cost for a school district started at the "Universal Cost," a base amount of \$3,450 per pupil applicable to all students.<sup>68</sup> The base cost was increased by an amount of "Differentiated Aid," dependent on the amount of low-income students, special education students and English language learners.<sup>69</sup> Aid for low-income students was based on the indirect measure of percentage ranges of students on free/reduced lunch that corresponded to certain dollar amounts, e.g. a school district would receive \$1,725 for a school that had between 24% and 35.99% of students on free/reduced lunch.<sup>70</sup> As for special education students and English language learners, dollar amounts were allocated per pupil.<sup>71</sup> A third component of the aid was "Fiscal Capacity Disparity Aid," given to towns that had low capacity in raising property taxes; for instance, "Towns that are in the bottom eighth of property wealth, as determined by equalized property value per pupil, and have a median family income less than the state's average would receive an additional \$2,000 per pupil."<sup>72</sup> Finally, the last component of the aid was a "Transition Grant" for towns that would have lost or gained large amounts of funding as compared to prior funding mechanisms. With this system more aid was sent to poorer communities. This formula essentially took the calculated cost (base cost plus any differentiated aid plus fiscal capacity disparity aid), and adjusted it for any major transitioning differences; then, the formula subtracted the Statewide Property Education Tax (SWEPT) amount raised by the local community, and the difference equaled the state adequacy grant.<sup>73</sup>

In 2011, the legislators altered the previous formula to target a couple concerning fiscal issues faced by the state: a) state aid grant caps would expire the next year so the state spending would have increased by millions of dollars, and b) certain federal stimulus funds would no longer be available for the next year.<sup>74</sup> The latest formula of 2011 is very similar to the one adopted in 2008 with some important changes. The first of these is that aid is no longer allocated to communities that have a low capacity of property taxes (i.e. "Fiscal Capacity Disparity Aid" is eliminated). A completely new component of the formula is providing an extra \$675 to schools for every 3<sup>rd</sup>-grade student testing below "proficient" on the standardized reading test.<sup>75</sup> The formula now also gives aid to schools with low-income students on a per student basis, instead of using percentages of low income students.<sup>76</sup>

<sup>&</sup>lt;sup>66</sup> Dr. Mark Joyce, Interview by author, Tape recording, Concord, New Hampshire, March 14, 2012.

<sup>&</sup>lt;sup>67</sup> Tappin and Norton, 1.

<sup>&</sup>lt;sup>68</sup> Ibid., 1.

<sup>&</sup>lt;sup>69</sup> Ibid., 8.

<sup>&</sup>lt;sup>70</sup> NH Department of Education, "FY2010 How State Aid Was Determined," (November 18, 2008), Retrieved from http://www.education.nh.gov/data/state\_aid\_explain\_fy2010.htm

<sup>&</sup>lt;sup>71</sup> Ibid.

<sup>&</sup>lt;sup>72</sup> Tappin and Norton, 12.

<sup>&</sup>lt;sup>73</sup> NH Department of Education, "FY2010 How State Aid Was Determined."

<sup>&</sup>lt;sup>74</sup> Norton, et al., 82.

<sup>&</sup>lt;sup>75</sup> Ibid., 82.

<sup>&</sup>lt;sup>76</sup> NH Department of Education, "FY2012 How State Aid Was Determined," (July 1, 2011), Retrieved from http://www.education.nh.gov/data/state\_aid\_explanation\_fy2012.htm

Another change is that the formula "limits increases in a district's state aid to no more than 5.5 percent of the previous year's aid."<sup>77</sup> It also allows wealthier communities to keep any excess property tax funds within their community. Basically, this system takes the calculated cost (base cost plus differentiated aid plus third grade proficient aid) for a school district, subtracts the SWEPT tax revenue that that school district raises, and provides a state grant to cover any remainder—including a stabilization grant for those communities whose calculated grant is less than the prior year's grant.<sup>78</sup> Dr. Joyce had an insightful metaphor about this new system:

The metaphor I like to use is that three years ago, they erected a bridge over a river that was a certain elevation and its architecture underneath it supported that. The bill last year, SB383, actually reduced the amount of architecture under the bridge by 140 million dollars of grant [money] a year, quite significant. But they kept the amount of money the same for two years with a stabilization grant. In other words, now the bridge is at the same elevation but the architecture doesn't support it there. They said we will keep it there for two years.<sup>79</sup>

Essentially, the stabilization grant was a short-term fix for the reductions that the legislature has approved for the near future.

The current formula is the latest of the funding structures the legislature has built up, as the Court has intervened and toppled several of the previous structures on the claim of unconstitutionality. As a result, the state has, in general, become more involved with funding public education, particularly with the onset of the statewide property tax—however the statewide property tax has essentially become just another name for the local property tax because the money is raised and kept locally, without any funds going back to the state for redistribution. The issue of education funding is not new today in the state, nor was it new in the 1990s when the first Supreme Court case was ruled on. As early as 1919, New Hampshire attempted to increase the state contribution to public education and to provide a more equal opportunity in public education, but the state struggled with insufficient appropriations. Yet, the same question still stands today: is the funding system effective in providing all children of New Hampshire with an equal opportunity for an adequate education?

# **Quantitative Analysis**

## Methodology

In order to assess the funding of and the difference in quality of education between wealthy and poor districts, it was necessary to select "wealthy" and "poor" districts to study. Wealth can be defined in various ways and different factors may categorize a town as "wealthy" or "poor." Towns may have high property valuation (that is a sign of high wealth) due to commercial property but families may still be in low economic wealth circumstances (a sign of low wealth). Indeed, the relationship between property wealth and actual wealth of the persons in the town may not always be a strong relationship. Obalisi points out that attention in the funding debate in New Hampshire is typically paid to property taxes, which has resulted in formulas that "have not effectively targeted aid to economically disadvantaged children, who are arguably in particular need of an improved education." <sup>80</sup> She explains that recent funding formula bills assume that property values accurately reflect family income, family educational achievement, and other factors that ability to provide proper educational opportunities to

<sup>&</sup>lt;sup>77</sup> Norton, et al., 82.

<sup>&</sup>lt;sup>78</sup> NH Department of Education, "FY2012 How State Aid Was Determined."

<sup>&</sup>lt;sup>79</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>80</sup> Obalisi, 11.

students.<sup>81</sup> Yet, Obalisi states that "the correlation between equalized property value per pupil and median household income for New Hampshire towns is weak."<sup>82</sup> Since this paper sought to assess whether the funding structure in New Hampshire has been providing an equal opportunity of an adequate education to poor children as to wealthy children, it is important to take into account both the property wealth and the family economic wealth of a school district.

Thus, in order to differentiate communities into "low wealth" and "high wealth" communities, two factors were considered: equalized valuation per pupil (a measure of property wealth) and median household income (a measure of family economic wealth). First in order to assess similar districts, all cooperative districts were removed and only single-town districts were used (for simplicity of using appropriate equalized values and median incomes). Second, the school districts were ranked twice.<sup>83</sup> School districts were first ranked according to median incomes (2010 values). Then, they were ranked according to equalized valuation per pupil (2010 values). The state average was ranked among all of the school districts as well.

Districts that had both ranks for income and for equalized valuation that ranked below the state average rank were labeled "low wealth," and districts that had both income and equalized valuation figures that ranked above the state average rank were labeled "high wealth." Districts that had split ranks, i.e. one rank above state average and the other below state average, were not considered for this study because the study sought to isolate the truly low wealth and truly high wealth districts in order to compare how the funding structure has affected student achievement in both. Please see the table below for the wealth capacity rankings.<sup>84</sup> Please note that a lower rank means a lower median income or a lower equalized valuation per pupil—a lower rank means a lower wealth capacity.

| School District | 2010<br>Equalized<br>Valuation per<br>pupil <sup>85</sup> (EVPP) | EVPP<br>Ranking | 2010 Median<br>Household<br>Income <sup>86</sup><br>(MHI) | MHI<br>Ranking |
|-----------------|--|-----------------|---|----------------|
| State Average   | \$831,680  | 77              | \$63,033  | 71             |
| ALLENSTOWN      | \$416,573  | 7               | \$55,752  | 54             |
| ANDOVER         | \$765,443  | 63              | \$58,313  | 61             |
| BERLIN          | \$309,471  | 2               | \$40,199  | 10             |
| BETHLEHEM       | \$748,720  | 60              | \$48,397  | 33             |

#### Table 1. Wealth Capacity Rankings New Hampshire School Districts

<sup>81</sup> Ibid., 11. Formulas based on bills HB608, SB302 and HB616.

<sup>&</sup>lt;sup>82</sup> Ibid., 11.

<sup>&</sup>lt;sup>83</sup> Abigail Newcomer, "Do Opportunities Matter in Public Education?" NH School Administrators Association, 2002. The method of ranking districts to determine wealthy capacity was used by Abigail Newcomer to select six school districts as a case study for a NHSAA Research Report.

<sup>&</sup>lt;sup>84</sup> The complete table of the rankings is available in the Appendix on page 39.

<sup>&</sup>lt;sup>85</sup> NH Department of Education, "EQUALIZED VALUATION PER PUPIL, 2010-2011," (February 2, 2012). Retrieved from http://www.education.nh.gov/data/financial.htm

<sup>&</sup>lt;sup>86</sup> NH Office of Energy and Planning, "Median Household Income of NH Towns and Cities," (July 7, 2011). Retrieved from http://www.nh.gov/oep/programs/DataCenter/ACS/individual\_reports.htm

| CLAREMONT      | \$419,170   | 8   | \$39,486  | 7   |
|----------------|-------------|-----|-----------|-----|
| COLEBROOK      | \$596,545   | 28  | \$29,643  | 1   |
| CONCORD        | \$747,057   | 59  | \$52,592  | 40  |
| DOVER          | \$759,888   | 62  | \$58,756  | 62  |
| FARMINGTON     | \$389,593   | 5   | \$45,811  | 24  |
| FRANKLIN       | \$460,034   | 13  | \$46,644  | 28  |
| HILL           | \$607,036   | 29  | \$53,958  | 47  |
| HINSDALE       | \$539,762   | 23  | \$46,514  | 27  |
| KEENE          | \$714,097   | 53  | \$51,375  | 39  |
| LITTLETON      | \$769,357   | 64  | \$43,069  | 17  |
| MANCHESTER     | \$586,637   | 26  | \$52,906  | 42  |
| MARLBORO       | \$702,097   | 50  | \$60,913  | 66  |
| MARLOW         | \$744,964   | 58  | \$53,922  | 46  |
| MIDDLETON      | \$585,679   | 25  | \$54,408  | 50  |
| MILAN          | \$700,286   | 49  | \$55,433  | 53  |
| MILTON         | \$629,073   | 32  | \$63,674  | 73  |
| NEWPORT        | \$477,319   | 14  | \$45,565  | 23  |
| NORTHUMBERLAND | \$333,649   | 3   | \$39,250  | 6   |
| PEMBROKE       | \$493,936   | 18  | \$57,837  | 59  |
| PITTSFIELD     | \$447,524   | 12  | \$56,463  | 57  |
| PLYMOUTH       | \$708,832   | 52  | \$45,909  | 25  |
| RAYMOND        | \$629,974   | 33  | \$54,108  | 48  |
| ROCHESTER      | \$491,884   | 16  | \$50,382  | 37  |
| SOMERSWORTH    | \$537,021   | 22  | \$53,430  | 45  |
| STEWARTSTOWN   | \$797,633   | 71  | \$39,773  | 9   |
| STRATFORD      | \$669,334   | 43  | \$33,472  | 2   |
| UNITY          | \$782,427   | 70  | \$61,786  | 68  |
| WARREN         | \$694,580   | 46  | \$40,268  | 11  |
| WINCHESTER     | \$424,513   | 9   | \$40,821  | 13  |
| CHESTERFIELD   | \$1,115,971 | 98  | \$65,139  | 80  |
| CORNISH        | \$914,407   | 89  | \$66,964  | 84  |
| ELLSWORTH      | \$1,507,516 | 116 | \$65,938  | 81  |
| GILMANTON      | \$851,426   | 81  | \$68,984  | 88  |
| GRANTHAM       | \$1,166,378 | 101 | \$81,167  | 113 |
| GREENLAND      | \$1,310,584 | 109 | \$82,216  | 116 |
| HAMPTON        | \$1,507,659 | 117 | \$63,548  | 72  |
| HAMPTON FALLS  | \$1,186,141 | 103 | \$114,107 | 140 |
| HANOVER        | \$1,616,231 | 120 | \$99,053  | 132 |



| HOLLIS            | \$858,648    | 83  | \$116,168 | 141 |
|-------------------|--------------|-----|-----------|-----|
| JACKSON           | \$4,482,578  | 137 | \$69,625  | 89  |
| LYME              | \$1,172,632  | 102 | \$84,821  | 120 |
| MASON             | \$850,696    | 80  | \$78,403  | 109 |
| MOULTONBOROUGH    | \$4,628,128  | 138 | \$75,813  | 101 |
| NELSON            | \$1,543,512  | 118 | \$64,375  | 78  |
| NEW CASTLE        | \$6,352,757  | 139 | \$75,227  | 100 |
| NEWINGTON         | \$12,404,835 | 142 | \$81,250  | 114 |
| NORTH HAMPTON     | \$1,682,061  | 123 | \$77,832  | 107 |
| RYE               | \$2,549,216  | 130 | \$77,064  | 104 |
| SALEM             | \$889,482    | 88  | \$70,813  | 93  |
| SOUTH HAMPTON     | \$1,308,105  | 108 | \$78,375  | 108 |
| STRATHAM          | \$1,409,354  | 114 | \$103,271 | 135 |
| SURRY             | \$1,228,849  | 105 | \$71,083  | 95  |
| WATERVILLE VALLEY | \$11,975,133 | 141 | \$66,250  | 82  |
| WINDHAM           | \$833,373    | 78  | \$113,867 | 139 |
| WINDSOR           | \$861,111    | 84  | \$75,000  | 99  |

## **Education Funding in Low and High Wealth Districts**

Low and high wealth school districts were compared in terms of their per pupil elementary school expenditures. As seen in Table 2, which shows average per pupil spending in 2005, 2008, and 2011, the results demonstrate that the average per pupil spending in low wealth districts is lower than that in high wealth districts. For instance, in 2011 the average that low wealth districts spent was \$14,511, while high wealth districts spent an average of \$17,854. Table 3 shows the 2011 data, with the range for both categories of districts, as well as the 25<sup>th</sup> and 75<sup>th</sup> percentile. Again, although this shows that the spending is closer at the 25<sup>th</sup> percentile and further apart at the 75<sup>th</sup> percentile for the two categories of districts, the general trend is that low districts do spend less on education. The ranges of spending in low and high wealth districts are distinct as well. In 2011, one high wealth district spent \$31,548 per pupil, while the maximum spending of the low wealth districts was \$18,298. The same trend follows with the minimum per pupil amount out of the low wealth towns was a low of \$9,873. Thus, the average per pupil education spending data shows that high wealth districts spend more, on average, than low wealth districts. Figure 2 below shows this trend visually.

Table 2. Average Per Pupil Education Spending in Low and High Wealth Districts<sup>87</sup>

|                         | 2005 Average<br>Education<br>Spending | 2008 Average<br>Education<br>Spending | 2011 Average<br>Education<br>Spending |
|-------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Low Wealth<br>Capacity  | \$9 <i>,</i> 826                      | \$12,605                              | \$14,511                              |
| High Wealth<br>Capacity | \$12,269                              | \$14,952                              | \$17,854                              |

Table 3. Range and Percentiles of 2011 Average Per Pupil Education Spending in Low and HighWealth Districts<sup>88</sup>

|                         | 2011 Average<br>Education<br>Spending | 2011 Minimum<br>Education<br>Spending | 2011 Maximum<br>Education<br>spending | 2011 25 <sup>th</sup><br>Percentile<br>Education<br>Spending | 2011 Maximum<br>75 <sup>th</sup> Percentile<br>Education<br>spending |
|-------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|--|
| Low Wealth<br>Capacity  | \$14,511                              | \$9,873                               | \$18,298                              | \$13,138   | \$15,322   |
| High Wealth<br>Capacity | \$17,854                              | \$11,861                              | \$31,548                              | \$13,545   | \$17,026   |

See the Appendix, Table 2, on page 43 for a complete table of the districts used (that have comparable data).

<sup>&</sup>lt;sup>87</sup> NH Department of Education, "Cost per pupil by district," http://www.education.nh.gov/data/financial.htm Data is based on school districts used in wealth capacity rankings from Table 1 using elementary school per pupil spending data. Some districts are excluded; <u>only</u> comparable school districts were used, as defined by DOE. "It is appropriate to compare two districts only when they have the same grade range. Even when the grade ranges are identical, only the total figures should be considered comparable because different formulas may have been used to allocate district-wide cost."

<sup>&</sup>lt;sup>88</sup> See the Appendix , Table 2, on page 43 for a complete table of the districts used (that have comparable data).

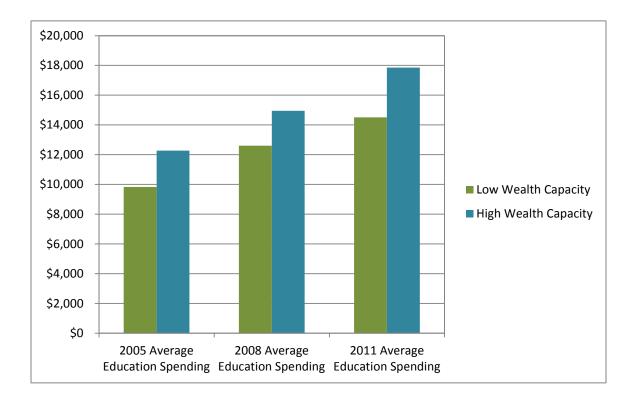


Figure 2. Average Per Pupil Education Spending in Low and High Wealth Districts

## Targeting: Changes in State Aid

As it was discussed in the *History of Education Funding in New Hampshire* above, the state aid formulas have changed over the years. The property-poor communities took the state to the Supreme Court of New Hampshire on several occasions, claiming the system was unconstitutional because it did not equitably fund the poorer school districts and, thus, did not provide an equal opportunity for an adequate education.

A report titled "New Hampshire's Latest School Funding Formula," by New Hampshire Center for Public Policy, discusses the targeting of state aid grants in their paper where they compare the FY2009 formula to the FY2010 formula: "Towns in each of the quartiles experienced approximately a 9% increase in their per pupil amounts from the old system to the new system. That is, this formula does not target more effectively than the previous formula. Simply, it increases aid across the board."<sup>89</sup> Figure 3 is the graph from the report that shows how aid is targeted to towns categorized by median income.

In addition, the authors of "New Hampshire's Latest School Funding Formula" separately analyze targeting from the perspective of property wealth for the FY2009 formula versus the FY2010 formula. Their results show towns with the lowest capacity to raise taxes received the largest grants; however, highest property value towns had a higher increase in the grant aid than all other towns: "towns with the highest property values will experience an increase of 24% on a per pupil basis – at \$102 – compared to roughly the 9% – or \$294 – average increase per pupil of the other three quartiles."

<sup>&</sup>lt;sup>89</sup> Tappin and Norton, 16.

<sup>90</sup> Ibid.

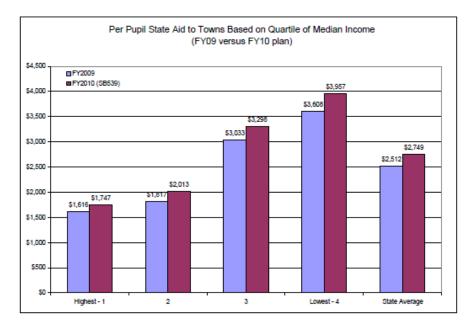


Figure 3. Per Pupil State Aid to Towns Based on Quartile of Median Income<sup>91</sup>

In a similar manner to the targeting analysis conducted in "New Hampshire's Latest School Funding Formula," this paper analyzed state aid targeting for the low and high wealth districts, as they are categorized by the combination of factors of property wealth and family economic wealth. State aid grants were calculated for various years, including 2005, 2008, 2011, and 2013,<sup>92</sup> seen in Figure 4 below. As would be expected, the state aid grants for low wealth districts have been higher than the state average, and those for high wealth districts have been lower than the state average. Also as expected, the state aid grants the board.

<sup>&</sup>lt;sup>91</sup> Tappin and Norton, 15. This paper provides the graphs of data for the targeting analyses based on property wealth and education outcomes as well.

<sup>&</sup>lt;sup>92</sup> State aid grants were calculated by taking the total state aid grant money and diving by the appropriate Average Daily Membership (i.e. student attendance) to get a per pupil state grant. See page 44 of the Appendix for Tables 3, 4, 5, and 6 of the complete data used for the calculations.

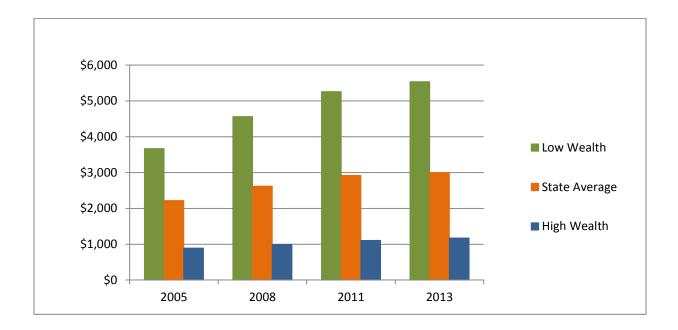
State aid grants data from:

NH DOE, "Adequate Education Aid," (2005, 2008, 2011, 2013). Retrieved from

http://www.education.nh.gov/data/state\_aid.htm

ADM district data from:

NH DOE, "Equalized Valuation per pupil," (2001, 2004, 2006, 2008). Retrieved from http://www.education.nh.gov/data/financial.htm

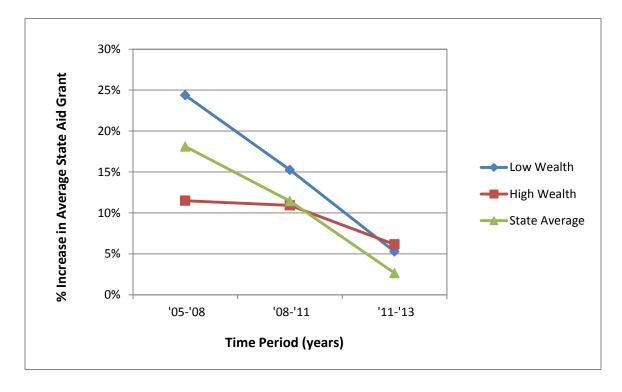


## Figure 4. Average State Adequacy Aid Grants, Compared by Low and High Wealth Districts

Figure 4 evidences that state aid grants have increased across the board—for low wealth, high wealth, and the state average—but to assess targeting, the changes in state aid increases over time had to be assessed. The increases to average state aid grants of low wealth, high wealth and state average were evaluated for the following time periods: 2005-2008, 2008-2011, and 2011-2013. Table 4 and Figure 5 on the next page depict this analysis. The trend is that state aid grants have increased less and less over the years and low wealth districts have experienced proportionally larger drops in funding increases. It appears that from 2011 to 2012, the increase was less for low wealth towns and the state average than high wealth town. This is likely due to the implementation of the stabilization grants. Some communities would lose state aid under the new formula because of the large cuts to the state aid—the cuts Dr. Joyce compared to the river under a bridge in the *History of Education Funding in New Hampshire* above —which was counteracted by stabilization grants for a two-year period.

# Table 4. Percent Increase in Average State Aid Grants for Different Three-Year Time Periods(2005-2008, 2008-2011, 2011-2013)

| Districts     | Increase of<br>State Grant<br>('05-'08) | Increase of<br>State Grant<br>('08-'11) | Increase of<br>State Grant ('11-<br>'13) |
|---------------|---|---|--|
| Low Wealth    | 24%                                     | 15%                                     | 5%                                       |
| High Wealth   | 11%                                     | 11%                                     | 6%                                       |
| State Average | 18%                                     | 11%                                     | 3%                                       |



# Figure 5. Percent Increase in Average State Aid Grants for Different Three-Year Time Periods (2005-2008, 2008-2011, 2011-2013)

# **Quality of Education: Student Achievement**

Analysis of student achievement scores is one way of assessing the quality of education. The assumption is simple: if the students are receiving an adequate education, their scores on standardized tests should reflect this. Prior to the federal law No Child Left Behind (2002), New Hampshire administered a standardized test to public school students three times in their schooling: in third, sixth, and tenth grade.<sup>93</sup> However, No Child Left Behind "ramped up the requirements."<sup>94</sup> The New Hampshire Department of Education, Rhode Island Department of Education, and Vermont Department of Education developed common expectations for the different grades and a standardized exam called the New England Common Assessment Program (NECAP) that tests students on mathematics and reading in grades 3-8 and grade 11.<sup>95</sup>

The NECAP scores for reading in third grade and the NECAP scores for mathematics in sixth grade were used to assess the quality of education in low and high wealth districts. Below, Figure 6 summarizes the findings for both grades for three years (2005, 2008, and 2011). It also includes the state average. It can be seen that the average proficiency of low wealth districts is below state average, while

<sup>&</sup>lt;sup>93</sup> Melanie Asmar, "Federal Law Means More School Testing," *Concord Monitor*, (April 1, 2005). Retrieved from http://www.concordmonitor.com/article/federal-law-means-more-school-

testing?CSAuthResp=1336273108%3A0c80u7km84pme4ph674gmgikc3%3ACSUserId|CSGroupId%3Aapproved%3A 52CC4166AE290ECBD84B6A70A9A79B54&CSUserId=94&CSGroupId=1

<sup>&</sup>lt;sup>94</sup> Ibid.

<sup>&</sup>lt;sup>95</sup> NH Department of Education, "New England Common Assessment Program," (2010). Retrieved from http://www.education.nh.gov/instruction/assessment/necap/index.htm

the average proficiency percentage of high wealth districts has been consistently above state average. The following pages present the findings in more detail.<sup>96</sup>

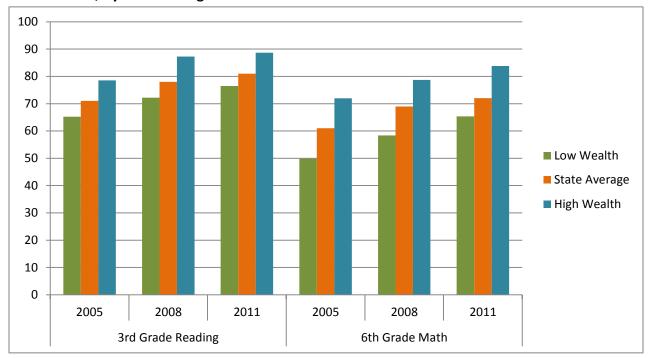


Figure 6. Summary of Average Percentages of Students Proficient on NECAP Reading and Mathematics, by Low and High Wealth Districts<sup>97</sup>

Average percentage of third graders proficient in NECAP reading tests were found for low wealth and high wealth districts for three years (2005, 2008, and 2011), and are presented in Table 5 below. Figure 7, below, shows that the average percent of 3<sup>rd</sup> graders proficient in NECAP reading is lower in low wealth districts than high wealth districts. The coefficient of determination values  $(R^2)$  show that the data is very close to being linear for the three years analyzed. However, it was not assessed whether the improvements in percentages proficiency were statistically significant.<sup>98</sup>

<sup>&</sup>lt;sup>96</sup> NH DOE, "Test Results & Interpretation Materials," (2005, 2008, and 2011).

http://www.education.nh.gov/instruction/assessment/necap/results/index.htm.

Percent above proficiency was calculated by adding the percentage of students that scored at Level 4 (Proficient with Distinction") to the percentage of students that performed at Level 3 ("Proficient"). Those that performed at Level 2 are considered "Partially Proficient" and those that scored at Level 1 are considered "Substantially Below Proficient" (these were not included in the data).

See page 51 of the Appendix for Tables 7 and 8 for a complete set of data that was used for average percentages proficiency. <sup>97</sup> Ibid.

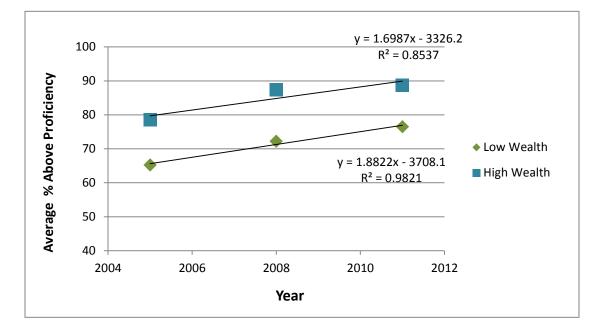
<sup>&</sup>lt;sup>98</sup> NECAP, "Guide to Using NECAP Reports," (2011), Retrieved from

http://www.education.nh.gov/instruction/assessment/necap/results/documents/guide 2011.pdf To assess whether percentages of proficiency across different districts and across various years, the Table "Percentage Difference in Student Achievement Level Classification Denoting Minimally Statistically Significant Differences for Group Results" from the "Guide to Using NECAP Reports" had to be consulted. To determine whether changes in proficiency percentages are statistically significant, the number of students tested has to be

Table 5. Average Percent of 3<sup>rd</sup> Graders Testing Above Proficiency on NECAP Reading in Low and High Wealth Districts<sup>99</sup>

| Districts   | Average | % Above Profic | ency |
|-------------|---------|----------------|------|
| Districts   | 2005    | 2008           | 2011 |
| Low Wealth  | 65      | 72             | 77   |
| High Wealth | 79      | 87             | 89   |

Figure 7. Average Percent of 3rd Graders above Proficiency in NECAP Reading



Average percentage of sixth graders proficient in NECAP mathematics tests were found for low wealth and high wealth districts for three years (2005, 2008, and 2011),<sup>100</sup> and are presented in Table 6 below. The following Figure 8 demonstrates that the average percent of 6th graders proficient in NECAP mathematics is lower in low wealth districts than high wealth districts—the same trend as seen above for the third grade reading proficiency data. The coefficient of determination, R<sup>2</sup>, values (0.9968 and

- <sup>100</sup> NH DOE, "Test Results & Interpretation Materials," (2005, 2008, and 2011).
- http://www.education.nh.gov/instruction/assessment/necap/results/index.htm.

known—this data had not been gathered for this study but can be easily accessed in the NH DOE "Test Results and Interpretation Materials."

<sup>&</sup>lt;sup>99</sup> Please note that NECAP achievement data was not available for some districts. See page 51 of the Appendix for complete set of data that was used for average percentages.

0.9933) shows that the data is extremely close to being linear for the three years analyzed; again, the data was not analyzed as to whether the improvements across the years and districts were statistically significant as defined by the "Guide to Using NECAP Reports."

# Table 6. Average Percent of 6th Graders Testing Above Proficiency on NECAP Mathematics inLow and High Wealth Districts

| Districts   | Average % Above Proficiency |      |      |  |
|-------------|-----------------------------|------|------|--|
| Districts   | 2005                        | 2008 | 2011 |  |
| Low Wealth  | 50                          | 58   | 65   |  |
| High Wealth | 72                          | 79   | 84   |  |

# Figure 8. Average Percent of 6th Graders above Proficiency in NECAP Mathematics

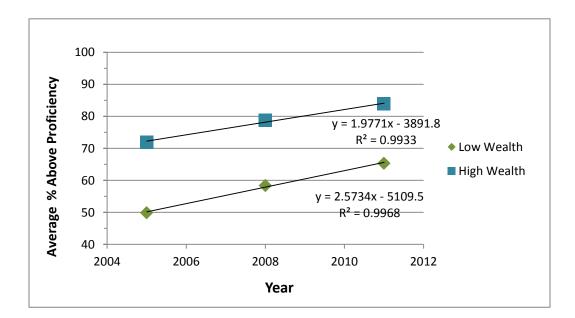
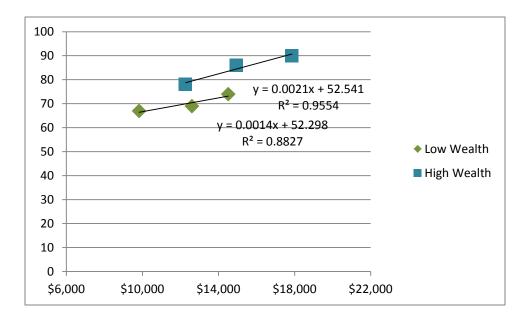


Figure 9 below shows average education spending versus percent of students that scored above proficient on the 3<sup>rd</sup> Grade NECAP test. The data points are from the following year: 2005, 2008, and 2011.<sup>101</sup> The graph shows there is a linear relationship between education spending for both low wealth and high wealth districts. Overall, the relationship is not perfectly linear if considering all of the points as one data set, but the trend that increased spending is related to increased student achievement is evident.

# Figure 9. Education Spending versus Percent Proficiency of 3<sup>rd</sup> Graders on NECAP Reading



Advancement to higher education was another measure of quality of education that was examined for low wealth and high wealth districts. For the low wealth districts, the DOE has data for 19 corresponding high schools. For the high wealth districts, the DOE has data for only 2 high schools (this is probably due to the fact that many of the high wealth single-town districts to not have a single-town high school but have cooperative districts or move students to other school districts for high schools). Although this may present inaccuracies because of a small number of high wealth high schools, the data shows the following trend: the percentage of students going on to a 4-year college for low wealth districts is less than the percentage of high wealth districts. For example in 2011, the low district average of high school graduates entering a 4-year college was about half the average of high wealth districts. The rate has decreased over time for the low wealth districts, while it has increased for the high wealth

<sup>&</sup>lt;sup>101</sup> Only the comparable school districts that were used to find the average education spending, as defined by the DOE in http://www.education.nh.gov/data/financial.htm, were included to obtain the average proficiency.

districts (again, please note that only 2 high wealth districts had relevant data for high schools). See Figure 10 below.

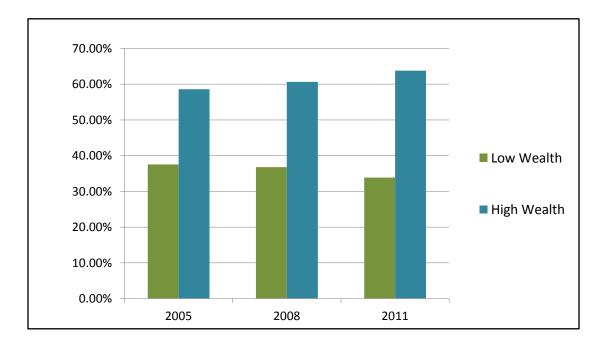


Figure 10. Percent of High School Graduates Entering a 4-year College<sup>102</sup>

Overall, the quantitative analysis of this paper provides several conclusions on the funding structure of public education in New Hampshire. First, less wealthy districts (those with lower property wealth and lower median incomes) have lower funding of education, on average. Second, targeting of state aid funds to the neediest districts has decreased over the period of 2005 to now—state aid has increased proportionally less for low wealthy districts than high wealth districts. Third, achievement results on the NECAP exam reflect that low wealth districts, on average, have lower percentages of students scoring above proficient, but both low wealth and high wealth districts have improved over the years.

### Limitations of Quantitative Analysis

The quantitative data does not present a causal relationship between education spending and student achievement, as measured by the NECAP proficiency percentages. It presents a correlation. Education is a complex issue that involved many factors that could not be accounted in this analysis (for a discussion of other factors that influence student achievement, please see the section *Money Does Matter* on page 32).

The data shows a general trend but the data does not fit this trend perfectly. For instance, in terms of the per pupil education spending, not all low wealth districts spent less than the high wealth

See page 56 of the Appendix for Table 9 that contains the complete data on advancement to 4-year colleges.

<sup>&</sup>lt;sup>102</sup> NH Department of Education. "High School Completers: Where do They go?" (2005, 2008, 2011). Retrieved rom http://www.education.nh.gov/data/dropouts.htm

district. A specific example of this is that the low wealth district of Plymouth had an average elementary school spending of \$16,842 per pupil, while the high wealth district of Stratham had an average elementary school spending of \$13, 545 per pupil.<sup>103</sup> However, on average the general trend was that low wealth districts have been spending less on education than high wealth districts in New Hampshire over the time period examined. Yet, it cannot be determined whether these individual comparisons provide inconsistencies to the general trend because the districts were not ranked within their categories. In other words, all of the low wealth districts. This makes comparison on an individual basis inappropriate.

No consistent standardized test data exists from before the Claremont I decision to today; thus, a longer-term trend could not be determined. Also, the system keeps changing and it is difficult to point any changes or improvements in student achievement to specific changes in the funding formula. Thus, the next section provides a qualitative analysis that is better able to examine the effectiveness of the funding structure in providing an equal opportunity at an adequate education.

# **Qualitative Analysis**

## The Funding Structure Has Improved

In order to receive qualitative and subjective perspectives on the funding structure in New Hampshire, interviews with experts and stakeholders on the issue of public education funding were conducted. Interviewees included Dr. Mark Joyce (NH School Administrators Association), Dr. Maureen Ward (Superintendent, Franklin and Hill), Dr. George Cushing (Superintendent, New Castle, Newington Greenland, Rye), Senator Nancy Stiles (Chair of Senate Education Committee, Republican), Senator Molly Kelly (Senate Education Committee, Democrat), and Ms. Kristy Roney (Senate Policy Director).

Overall, there was a general consensus that the funding system has improved since the *Claremont* cases, but several major problems are seen with the current system. The qualitative analysis supports the conclusion from the quantitative analysis that not enough money is targeted to poorer districts under the current system. However, different experts interviewed presented various underlying reasons for this occurrence. Another major problem of the funding system, as it has been traditionally and still today, is that the system over-relies on local property taxes and is not driven by a strong state role. Thus, the state's cost of adequacy is not adequate, resulting in unequal opportunities for children from poorer districts. An important concern was raised about the current funding system lacking stability and consistency, which fits into the historical trend of school funding in New Hampshire. Varying degrees of perceived effectiveness of the funding system were observed among those interviewed; yet, the several important concerns of the system that were discussed demonstrate that the system is not fully effective in its current form and further policy reform is needed.

Generally, the interviewees were in consensus that the New Hampshire system has improved since the *Claremont* decisions were made, which had mandated the state to define adequate education, figure out the cost, and fund it. Senator Stiles, Republican Chair of the Senate Education Committee, believes the changes due to *Claremont* have been positive because students are funded at least to adequacy.<sup>104</sup> In a similar light, Senator Kelly, a Democrat on the Senate Education Committee, said she has very much supported the reforms that have resulted from *Claremont* because "we are the state—all of us—we have a responsibility to educate every child in the state."<sup>105</sup> Dr. Cushing, who is in his 40<sup>th</sup> year

<sup>&</sup>lt;sup>103</sup> See Appendix Table 2 on page.

<sup>&</sup>lt;sup>104</sup> Senator Nancy Stiles, Interview by author, Tape recording, Concord, New Hampshire, March 22, 2012.

<sup>&</sup>lt;sup>105</sup> Senator Molly Kelly, Interview by author, Tape recording, Concord, New Hampshire, April 3, 2012.

in the education field and currently the superintendent for the communities of New Castle, Newington, Greenland and Rye, was the principal of Rye Junior High School at the time of the Claremont lawsuit; he saw a definite need for an adequate education for all students. Dr. Cushing testified in the case at the Superior Court, describing the various types of programs that were available in his school in Rye, and his testimony was contrasted by the lack of programs in the schools described by the chair of the Allenstown school board.<sup>106</sup> Dr. Cushing recalled: "You can see the dramatic contrast by a zip code: if you lived in Rye, NH, you get all these extra clubs and science labs and technology; if you lived in Allenstown, you didn't have any of that. It's dramatic—something needed to be done."<sup>107</sup> Thus, the *Claremont* decisions did initiate a needed change.

Similarly, Dr. Joyce shared the view that positive changes took place after the school funding lawsuits. Dr. Joyce has had over 40 years' experience in education in various roles. For the last 15 years, he has been the Executive Director of the NH School Administrators Association, whose organizational mission is to "Effectively advocate for an equitable and comprehensive public education for all children, wherever they may reside."<sup>108</sup> In the interview, he said, "I think [the changed funding structure] has improved our reach to meet that ambitious goal."<sup>109</sup> He believes the system has equalized the opportunities provided to children, despite which part of the state they may live.

#### Perceived Effectiveness of the Current System

Although no discrepancy was observed among the stakeholders interviewed about the notion that a greater state role mandated by the *Claremont* decisions had improved the funding structure, the views varied on the effectiveness of the current system. One view is that the system as it is now may need some changes but is mostly effective. Senator Kelly articulated this view: "I think this formula works because of the commitment to every child. It's the principles, not necessarily the amount of money, but it's working for every child."<sup>110</sup> She explained that the current formula is working, not only because it aims for adequacy for every child, but also because it has room for targeting for various indicators, like special needs, low income, and 3<sup>rd</sup> grade reading proficiency. She suggested that the system should stay in place for the near future: "Let's keep it that way for now, but let's spend more time on the outcomes before we start continuing to talk about whether we need to fund more or less."<sup>111</sup>

A similar conclusion was reached by Senator Stiles, who thinks the state does need to target more money to poorer communities but is generally satisfied with the current structure. Senator Stiles was a key player in the latest change to the formula, the addition of the 3<sup>rd</sup> grade proficiency component to state aid. She fought for this change because "There was a problem there."<sup>112</sup> She explained that it was important for additional money to reach kids that were not proficient in reading by 3<sup>rd</sup> grade. She further explained, "If we find out there are other problems, maybe there are other places we need to provide additional resources. Until that time, I think we have a very good formula."<sup>113</sup> Thus, from the perspective of the stakeholders at the policy end, it seems the system is perceived to be in a decent working state.

 <sup>&</sup>lt;sup>106</sup> Dr. George Cushing, Interview by author, Tape recording, Greenland, New Hampshire, March 16, 2012.
 <sup>107</sup> Ibid.

<sup>&</sup>lt;sup>108</sup> NHSAA, "New Hampshire School Administrators Association," Retrieved from http://www.nhsaa.org/

<sup>&</sup>lt;sup>109</sup> Dr. Mark Joyce, Interview by author, Tape recording, Concord, New Hampshire, March 14, 2012.

<sup>&</sup>lt;sup>110</sup> Senator Kelly, Interview by author.

<sup>&</sup>lt;sup>111</sup> Ibid.

<sup>&</sup>lt;sup>112</sup> Senator Stiles, Interview by author.

<sup>&</sup>lt;sup>113</sup> Ibid.

### A Definitional Problem

This view that the current funding formula is generally working and effective was contradicted by the view of those in the field, the superintendents. To the question of whether the current funding system is working and effective, both Dr. Cushing and Dr. Ward replied that they do not think the current way of funding education works for all schools.<sup>114</sup> The first major problem is that the defined cost of adequacy is too low. Dr. Cushing, who is the superintendent of three districts that all fall into the high wealth category as defined by this report, explained that \$3,450 as the per pupil cost for an adequate education is not realistic; at his schools, the costs are more like \$14,000 or \$15,000 per student, "which is what a good education really costs."<sup>115</sup> He elaborated on this point: "I think if one district can afford to pay a lot more than another district to their teachers, then you're going to get the choice of the best teachers in the state. I just think there are still a lot of disparities between education based on funding and the ability of the town to pay, even with the [state] aid..."<sup>116</sup> When asked whether he thinks all schools have enough funds to provide a quality education, including proper resources, low teacher-student ratios and so on, Dr. Joyce directly and concisely answered: "Some do, many do not."<sup>117</sup> Indeed, this is supported by the quantitative data analysis of this report: on average, low wealth districts spend less on education, which correlates to lower student achievement (an indicator of education quality).

Dr. Ward, who is the superintendent of the districts of Franklin and Hill, both of which are low wealth districts as defined by this report, claimed that the defined adequacy cost in New Hampshire is too low, as well. The real cost of education is significantly more than the \$3450: "We and Hudson are the lowest two funding cities of New Hampshire. We're around \$10,000 per pupil, and that's not enough. It's simply not enough to provide an adequate education... \$3450 does not come close."<sup>118</sup> Education requires relatively substantial amounts of money, especially because of the technology that is needed today. Dr. Ward explained that resource costs are not only attributed to purchasing books and paper, but buying and paying for the servicing of technology, software, and so on.<sup>119</sup> Thus, a town like Franklin, which is very low income and has a taxation cap, cannot supply the rest of the money, above the \$3,450, needed to provide adequate education.<sup>120</sup> With the remark that the \$3,450 base cost of adequacy "won't even keep my buildings open with heat and electricity,"<sup>121</sup> Dr. Ward made the clear point that this defined cost in not indicative of real costs, and poor districts have a difficult time providing sufficient additional funding in order to have a truly adequately funded education.

#### The Question of Responsibility

Aside from this definitional problem of the cost of adequacy, the chief structural problem of education funding in New Hampshire stems from the lack of strong state role and the overreliance on the local property tax. However, the traditional value of local control in education is consistently upheld by policymakers, or, at best, the desired relationship of the locality and state is viewed as a partnership. Despite representing different political parties, Senator Stiles and Senator Kelly, share a similar answer to this question. Both view education as a collaborative responsibility between the localities and the

<sup>&</sup>lt;sup>114</sup> Dr. Cushing, Interview by author. Dr. Maureen Ward, Interview by author, Tape recording, Franklin, New Hampshire, March 23, 2012.

<sup>&</sup>lt;sup>115</sup> Dr. Cushing, Interview by author.

<sup>&</sup>lt;sup>116</sup> Ibid.

<sup>&</sup>lt;sup>117</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>118</sup> Dr. Ward, Interview by author.

<sup>&</sup>lt;sup>119</sup> Ibid.

<sup>&</sup>lt;sup>120</sup> Ibid.

<sup>&</sup>lt;sup>121</sup> Ibid.

state. Senator Kelly said that the responsibility needs to be "a combination and a balance... an equal, balanced partnership."<sup>122</sup> Indeed, Senator Kelly recognizes the consequences of this: "The adequacy amount certainly doesn't cover education but the state structure is a local control with [some] state government. So the state is never going to cover the full tuition because then you lose control."<sup>123</sup> Senator Stiles's comments in the interview resonated with this point: "I think it should be a partnership and I think the state needs to provide support to those communities that don't have tax base and the wherewithal to the education. I still think that education should be driven locally."<sup>124</sup> Finally, Ms. Kristy Roney (the Senate Policy Director) reiterated this point even further when speaking of the view of the Senate leadership and majority as looking at the state and the local levels as partners in the responsibility of education funding.

Despite the policymakers' general concept of a state-local partnership driven by local control, as was found in the qualitative analysis, the role of the state is largely overestimated as being a partner because the bulk of the funding burden still remains with the local community. As Dr. Cushing stated in the interview, "There's something to be said about the way we do business [in New Hampshire], but unfortunately, it puts a large burden of the tax dollars on the local districts."<sup>125</sup> This results in an inequity in funding, as Dr. Ward described: "If you take the high capacity districts, Exeter, North Hampton, and those types of districts that have the high tax [capacities], that have people with enough money, that have industry, that have supports in other ways, and you take the Franklins, the Hudsons, the Altons, the Berlins, we can't even complete... we can't even come close."<sup>126</sup> Simply, those communities that have lower property values, and thereby lower tax capacities, will have fewer resources with which to fund education.

Dr. Joyce, who is also a fellow at the American School Finance Association, described how New Hampshire, in general, lacks a diverse taxing structure, which is problematic.<sup>127</sup> During the interview he further related the notion that overreliance on the local property tax creates inequities: "Well, you have this great New Hampshire mythology of the New Hampshire advantage of low tax. But see that's perpetuated by those of us who are making [a lot of] money. The New Hampshire advantage is not very good for senior citizens, retired or a person who just lost their job, yet their property taxes keep going up because the state won't pay the bills it owes."<sup>128</sup> He cited that the legislature decided last year that it will not fully fund special education aid or vocational aid and put a moratorium on school building aid, as well as to not pay the retirement they used to. He explained how such changes on the part of the state affect localities: "So who paid that? The local property tax. So if you're making \$100,000, your tax went up a 100 bucks a year. But if you're making \$20,000, your tax also went up 100 dollars a year. Big difference." The localities already carry the high burden of funding education and, when the state reduces its role in funding some areas, the localities must increase their taxes or face reductions in those areas. And, again, it is the poorer districts that face more difficult circumstances: "...when we have an overreliance on property tax, it by definition benefits those who have money and discriminates against those who do not have money...that's just basic economic theory." With the overreliance on the local property tax for education funding, it is evident that the state does not have strong role.

<sup>&</sup>lt;sup>122</sup> Senator Kelly, Interview by author.

<sup>&</sup>lt;sup>123</sup> Ibid.

<sup>&</sup>lt;sup>124</sup> Senator Stiles, Interview by author.

<sup>&</sup>lt;sup>125</sup> Dr. Cushing, Interview by author.

<sup>&</sup>lt;sup>126</sup> Dr. Ward, Interview by author.

<sup>&</sup>lt;sup>127</sup> Dr. Joyce, Interview by author. Please note that Dr. Joyce stated that his views on taxes are his own personal opinions, as the organization NHSAA does not take stances on taxing policies: "[It is] not our role [as an organization] to design state policy about where to raise revenue so we do not take a position for or against any particular tax." <sup>128</sup> Ibid.

Dr. Ward provided an especially insightful perspective on the strength of the state in education funding because she has experienced two other very different educational systems. Dr. Ward spend 26 years in the British Columbia system in Canada and then served as an administrator for 10 years in Arizona, prior to taking the position of superintendent in New Hampshire in 2006.<sup>129</sup> She cites both of the other systems as much more equitable and providing a better opportunity for an adequate education than the New Hampshire structure. Both of the systems are much more centralized at the state level than New Hampshire: "I think that Arizona had a super model... There was truly an adequacy in education so that there was a base rate of somewhere around \$7,000 per student when I was there. And it was added to, if you had special education, if you had [low income students], if you had an English language learner, so you got a little more money for those types of students."<sup>130</sup> The state of Arizona had a system based on a much more reasonable cost of adequacy that the state guaranteed. Yet, there was a sense of local control because "...each town could augment with a taxation rate on their folks, so that if you had a town with a very high tax cap that wanted to put it into education, they could have all the bells and whistles, but we knew that the money we got from the state was enough to really give a basic education."<sup>131</sup> In her experience, the Canadian system was very similar to the system of Arizona, as Dr. Ward explained: "It was all funded through the central provincial government. And then, each community raised [funds] over and above the basic education."<sup>132</sup> The Arizona and British Columbia systems contrast that of New Hampshire in the definition of adequate cost and in the commitment of the state to fund that adequate cost.

## Instability and Inconsistency

The fact that New Hampshire has a funding mechanism that burdens the localities and does not guarantee a realistically adequate cost at the state level is further weakened by the instability of the system. One major concern about the funding structure is that it is changed so frequently and, thus, does not seem to provide the stability that public education needs in order to help students achieve. Dr. Joyce stated in an interview, "I think the fundamental danger we have right now is that nothing has been certain over time. It's so volatile that it's constantly fluctuating."<sup>133</sup> Constant fluctuations do not help student achievement: "One of the things that research points out is that money does matter in outcomes for students but only if it's spent in the right way over time. One year gross increase, another year reduction, another year growth, another year reduction does not contribute to consistent improvement. And also adds to anxiety of the taxpayer locally."<sup>134</sup> He further explained that each year school districts write their budgets in March and if the legislature is still working on its budget, the school district will be uncertain of the state portion at the time of passing of the budget and cannot be expected to "invest wisely" if no assurance of revenue exists form year to year.<sup>135</sup>

Dr. Joyce cited the example of Hanover district to show that consistent funding over the longterm positively affects students' achievement. Hanover has "above average wealth but what's interesting is that their special education students, who are the same kind of special education students throughout the state achieve at a very high level."<sup>136</sup> What is unique about the special education program in Hanover is that it is a rich program of support for students that has been constant over time.

136 Ibid.

<sup>&</sup>lt;sup>129</sup> Dr. Ward, Interview by author.

<sup>&</sup>lt;sup>130</sup> Ibid.

<sup>&</sup>lt;sup>131</sup> Ibid.

<sup>&</sup>lt;sup>132</sup> Ibid.

<sup>&</sup>lt;sup>133</sup> Dr. Mark Joyce, Interview by author, Tape recording, Concord, New Hampshire, March 14, 2012.

<sup>134</sup> Ibid.

<sup>&</sup>lt;sup>135</sup> Ibid.

As Dr. Joyce further said, "When you look at subgroups that are typical of other subgroups, they [special education students from Hanover] perform at a an extraordinarily high level over time, and to me, that's an indication that the supports they are given from when they enter school to 12<sup>th</sup> grade are consistent and rich."<sup>137</sup> The fluctuations of the funding structure, evident throughout New Hampshire's history, do not provide stability to school districts who set the budgets, to the tax payer as an investor and to the students, whose achievement is affected by instability and inconsistency.

## The Issue of Targeting

Another major concern that was brought up by the majority of the interviewees was the issue of targeting of state funds to the neediest communities. Ms. Kristy Roney described how the Senate majority and the Senate leadership definitely view targeting of funds as an issue: "Not being able to target more money to the towns that need it is really the crux of the problem."<sup>138</sup> Likewise, the issue of targeting, or in other words the need of poorer communities to receive more funds, is recognized by those in the field. Dr. Ward answered in the interview that more aid should be targeted to poorer communities, elaborating, "I know there is an issue donor towns and raising money for our own people but they're creating haves and have-nots within their own state and really destroying the structure of the state."<sup>139</sup> The concern for targeting is one that is supported quantitatively by this report; the data demonstrated that on average, low wealth districts spend less on education, and, moreover, the targeting of state aid to low wealth districts versus high wealth districts has slowed down over time; in other words, low wealth districts have proportionally experienced smaller increases with time than high wealth towns over time.

Despite recognizing the issue of targeting, the stakeholders' had different explanations as to the cause of this issue. One view is that the current formula does not allow more targeting. It is argued that the judicial branch has too strong of a role in education funding and, because adequacy is required, more funds cannot be allocated to poorer districts.<sup>140</sup> Those who identify with this opinion are proponents of proposed solution to give more power to the legislative branch, so it can target more funds to the communities that need it. This view and the proposed solution in the form of a constitutional amendment are discussed in detail below in the section, *Projections to the Future*, on page 33.

On the other hand, an underlying reason for the inability to target more effectively was conveyed by other interviewees. In this view, expressed by Dr. Joyce, the cause of the targeting issue is a general lack of funds for education because of the taxing structure of New Hampshire.<sup>141</sup> Dr. Cushing related the root problem of lack of funds: "For years there has been discussion of a broad tax, an income tax or a sales tax, something that could be earmarked for education. Other states do it that way. Other state Departments of Education have a much larger role in education in local communities because they give financial support for that."<sup>142</sup> Simply put: there may not be enough money in the pot in the first place. As was explained earlier concerning the inequities created by an overreliance on the local property tax, the issue of targeting arises less due to a distributional issue (i.e. poorer towns are not getting enough funds distributed to them) and more due to a resource issue (i.e. there is a general lack of funds for education at the state level). The difference in opinions on the cause of lack of targeting

<sup>&</sup>lt;sup>137</sup> Ibid.

<sup>&</sup>lt;sup>138</sup> Ms. Kristy Roney, Interview by author, Tape recording, Concord, New Hampshire, March 22, 2012.

<sup>&</sup>lt;sup>139</sup> Dr. Ward, Interview by author.

<sup>&</sup>lt;sup>140</sup> Ms. Roney, Interview by author. Senator Stiles, Interview by author.

<sup>&</sup>lt;sup>141</sup> Ibid.

<sup>&</sup>lt;sup>142</sup> Dr. Cushing, Interview by author.

leads to different policy solutions. Again, this point is discussed in detail in one of the following sections, *Projections to the Future*.

# **Money Does Matter**

### Indeed, Money Does Matter

How do the findings that student achievement is correlated to education spending, described in the sections above, fit into existing research on education funding? The question of whether money matters in education has been asked for several decades.<sup>143</sup> Political rhetoric, arguing that "improving the quality of schools has little or nothing to do with the amount of money spent on public education,"<sup>144</sup> has been more prevalent recently. For example, New Jersey Governor Chris Christie has stated that spending \$22,000 per student in the Newark schools has not led to better performance, and Florida Governor Rick Scott recently cut education spending, saying, "We're spending a lot of money on education, and when you look at the results, it's not great."<sup>145</sup> Thus, a rising notion among many policymakers is that money spent by schools has little correlation to student achievement.

In his report, "Revisiting the Age-Old Question: Does Money Matter in Education?", Bruce D. Baker's extensively examined the literature answering this question. He traces back the birth of this question to a 1966 national quantitative analysis study by James Coleman, titled "Equality of Educational Opportunity."<sup>146</sup> This report explored relationships between various school factors and measures of student achievement, concluding that "the strongest correlations with student outcome measures were not found in schools, but rather among factors related to parental income and education levels and resources in the home."<sup>147</sup> The conclusions of this study led many individuals to assume that allocating more money into schools in an attempt to better the quality of education would probably not matter, in terms of improved student achievement.<sup>148</sup>

Another report, published in 1986, essentially perpetuated this conclusion that money does not really improve student outcomes. This paper by Eric Hanushek reached the following conclusion: "There appears to be no strong or systematic relationship between school expenditures and student performance."<sup>149</sup> This study became widely cited by those arguing that money, essentially, did not matter in education.<sup>150</sup>

Bruce D. Baker, after reviewing an extensive body of literature on the correlation of expenditures and student outcomes, answered the very question that the title of his report, "Revisiting the Age-Old Question: Does Money Matter in Education?" His answer was a direct and decisive: "Money does matter."<sup>151</sup> In fact, later re-analyses of the Coleman and the Hanushek reports, including up-to-date statistical techniques and important adjustments of parameters, found that a strong, positive relationship between expenditures and student outcomes.<sup>152</sup> Newer studies have confirmed this

<sup>&</sup>lt;sup>143</sup> Bruce D. Baker, "Revisiting the Age-Old Question: Does Money Matter in Education?," *The Albert Shanker Institute* (2012).

<sup>&</sup>lt;sup>144</sup> Ibid., 1.

<sup>&</sup>lt;sup>145</sup> Ibid., 1-2.

<sup>&</sup>lt;sup>146</sup> Ibid, 3.

<sup>&</sup>lt;sup>147</sup> Ibid.

<sup>&</sup>lt;sup>148</sup> Ibid.

<sup>&</sup>lt;sup>149</sup> Ibid., 4. Baker points out this conclusion was italicized for emphasis in the original publication as well. E.A. Hanushek, Economics of Schooling: Production and Efficiency in Public Schools. Journal of Economic Literature, (1986), 24 (3) 1141-1177.

<sup>&</sup>lt;sup>150</sup> Ibid., 4.

<sup>&</sup>lt;sup>151</sup> Ibid.,

<sup>&</sup>lt;sup>152</sup> Ibid., 3-5.

correlation as well.<sup>153</sup> Thus, Baker has found that, on average, measures of per pupil spending positively correlate to higher students outcomes.<sup>154</sup> He has also found that schooling resources that cost money (reduction of class sizes, teacher salaries, and so on) are important to better student achievement.<sup>155</sup> Finally, he concluded that school funding reforms—in terms of "improvements to the level and distribution of funding across local public school districts"— do matter for student outcomes.<sup>156</sup> This author recognized that money by itself cannot guarantee a high quality education; the way money is spent certainly matters as well, but "sufficient financial resources are a necessary underlying condition for providing quality education."<sup>157</sup>

Further, the notion that money matters in education is supported by a 2002 research report focused on New Hampshire districts. In a case study of six districts, a New Hampshire School Administrators Association Research Report by Abigail Newcomer examined the educational opportunities that high and low wealth capacity districts provide. The author studied the relationship between monetary inputs and high schools' outputs in these districts. The following inputs were used to measure the opportunities provided in the districts: pupil to teacher ratios, teacher salaries, teacher educational attainment, student to computer ratios, number of students taking AP courses, and others. The measured outputs were SAT scores, dropout rates and other data. This study demonstrated that in "virtually every case, schools with a high wealth capacity provided more money to teachers, maintained teachers with higher degrees of education, had smaller student to teacher ratios and higher numbers of computers in classroom."<sup>158</sup> Moreover, measurable outputs were better in high wealth capacity districts. Thus, numerous sources that have found that money matters in education support the conclusions of my analysis of the New Hampshire funding system, described above.

### **Educational Productivity**

A 2011 Center for American Progress study, "Return on Educational Investment," approaches the question of whether money matters in education in a different way by comparing different school districts of a state based on an economic model. The model uses a "basic return on investment index" (ROI). The center explains that this "measure rates school districts on how much academic achievement a district gets for each dollar spent relative to other districts in their state," and the center indicates that the study has "adjusted for a variety of factors including cost-of-living differences as well as higher concentrations of low-income, non-English-speaking, and special education students to avoid penalizing districts where education costs are higher."<sup>159</sup> The present study compared the ROI of the districts of New Hampshire. Two of the low wealth districts, Claremont and Berlin, turned out to have lower ROI. One of the high wealth districts, Salem, had one of the highest ROI. However, it is not clear-cut. For

<sup>156</sup> Ibid., v.

<sup>159</sup> Center for American Progress, "Return on Educational Investment," (April 5, 2011), Retrieved from http://www.americanprogress.org/issues/2011/01/educational\_productivity.

Please note that the authors have the following disclaimer: "We hope you use this site to evaluate educational productivity in your community, but ask that you interpret individual district evaluations with caution. The connection between spending and educational achievement is a complex one, and our data does not capture everything that goes into creating an effective school system. We're also aware that some of the data reported by states and districts have reliability issues. Nevertheless, we believe that our calculations are the best available given existing research methods."

<sup>153</sup> Ibid.

<sup>&</sup>lt;sup>154</sup> Ibid., iv.

<sup>&</sup>lt;sup>155</sup> Ibid., iv.

<sup>&</sup>lt;sup>157</sup> Ibid., 18.

<sup>&</sup>lt;sup>158</sup> Abigail Newcomer, "Do Opportunities Matter in Public Education?" (NH School Administrators Association, 2002), 22.

instance, another low wealth district, Dover, has a relatively high ROI. Therefore, this Center for American Progress study shifts the emphasis of whether money matters to whether money is being spent efficiently.<sup>160</sup>

Studies like the "Return on Education Investment" need to be examined and used carefully to avoid an implication that education outcomes can be simplified to a productivity model. Indeed, public education is much more complicated than an assembly-line product or a stock investment. Dr. Joyce explained this point very well in an interview:

People will argue that money doesn't matter because a test score isn't related to a dollar amount. Well that analogy is really false when you deal with human behavior rather than product creation. Much like building a gadget, in an organization, if I control all the raw material and have a specification I can do it perfectly and then do it faster. In our business, I do not control the raw material, the raw material is highly variable, but yet we have a common set of expectations. But our raw material, if you will, students, come from all different points of view. Yet we're being expected to have them at the same point. And so it is not a per unit productivity measure. It needs to be over time and money spent in the right way.<sup>161</sup>

Thus, viewing education funding as a productivity model needs to be done with caution because education is a complex, multifaceted issue, composed of many elements and influenced by many factors.

### **Other Factors that Matter**

Indeed, there are many factors that influence student achievement that can be categorized as school factors and non-school factors. School factors include school funding, the types of programs available, the education level of the teachers and so on. Non-school factors are those which the school clearly cannot control. Dr. Cushing listed "the level of education of the parents, the nuclear family, the stress that's put on people, work hours of parents, children having time alone, [and] the role-modeling that students get"<sup>162</sup> as non-school factors that can seriously affect student learning.

Another way of looking at the factors that influence student learning are by "the five big areas of impact,"<sup>163</sup> as described by Dr. Joyce. One is genetic, biological tendencies that are inherited; these could be talents or challenges for learning. Another is non-genetic, biological impacts that impact one's ability to learn: "an example of that might be a young child born to a drug-addicted mother."<sup>164</sup> This biological factor could have a significant impact on the learning abilities of that child. A third area of impact is the "positive learning environments from prenatal through [a child's] entry into some sort of external education system." An example of this is whether parents read to children. A fourth area of impact is the social context that a child grows up and lives in. As Dr. Joyce said, students may be in school 6 hours a day but outside of school for 18 hours a day. That potion of time outside of school certainly affects learning potential. The final factor that impacts learning, according to this model, is school. Schooling can play a very significant role: "it can remedy, or moderate, or help assist to adapt from issues that came from the other s [other factors]."<sup>165</sup> Thus, as one of the five factors, school

<sup>&</sup>lt;sup>160</sup> This is a very extensive report that has in-depth findings regarding the productivity and efficiency of districts, as well as policy recommendations for policymakers. It is highly recommended that this study be examined by policymakers and school districts but done with caution.

<sup>&</sup>lt;sup>161</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>162</sup> Dr. Cushing, Interview by author.

<sup>&</sup>lt;sup>163</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>164</sup> Ibid.

<sup>&</sup>lt;sup>165</sup> Ibid.

accounts for roughly 20% of the impact on student learning and, therefore, student achievement. Indeed, the school environment is very important because "...it has more than 20% impact if done well, but it does not have 100% impact."<sup>166</sup>

Considering all of the non-school factors that influence student learning, it is obvious that the relationship between education spending and student outcome is infused with complexity. Nonetheless, it is clear that education expenditures are important to better student outcomes. The conclusions based on the quantitative and qualitative analyses of this study are supported by multiple research studies that have found that money does matter for student achievement. Moreover, a recent study found an even more broad relationship between spending and children's outcomes. Looking at indicators like "child mortality, elementary test scores and adolescent behavioral outcomes,"<sup>167</sup> the study found that states that have more public spending on education and social programs for children have better outcomes. This is an important finding to consider for New Hampshire, which has recently cut spending on several social programs, including the CHINS (Child in Need of Services Program), Dropout Recovery Council, and child care centers.<sup>168</sup> Thus, not only does money matter in education, but it matters in a comprehensive way. As discussed above, many factors influence student potential and ability to learn, and the state can impact that potential and ability to learn by allocating adequate funding to not only school districts but also to social programs that support the other areas of impact. Such a comprehensive commitment will consequentially help improve student learning and achievement in a comprehensive way.

# **Projections to the Future**

#### Immediate Horizon: A Constitutional Amendment

How will the current funding system continue to change? Obviously, this question cannot be answered with any certainty. The fact is that the system is fluid and does change continually, and perhaps the only lens through which we may attempt to view the future of the system is by referring, again, to the historical trends: a more significant state role but also state reluctance to sufficiently fund its promises. Moreover, the historical tug-of-war between the courts and the legislature is likely not over. Dr. Mark Joyce, Executive Director of NH School Administrators Association, described the current situation to the point: "I think we are at a crossroads, an immediate crossroads. Will the legislature approve a constitutional amendment to go to voters? And, then, what will voters decide next November? Will they, in a nutshell, protect the right of every child to education as a basic right or will they surrender to the legislature's control over what that is? I think that's the immediate horizon."<sup>169</sup> Dr. Joyce is certainly correct: the immediate horizon is whether a constitutional amendment will be adopted. Yet, there are varying perspectives on how such an amendment will affect the funding structure of New Hampshire.

There have been over 40 constitutional amendments on the state's role in public education, which would have important implications for the funding structure, since the *Claremont* decisions.<sup>170</sup> All of those have been defeated by one body of the legislature or the other. This session, one such constitutional amendment on education (CACR-12) has passed in both chambers of the legislature, although in different versions (which now involves a committee of conference, where members of both

<sup>&</sup>lt;sup>166</sup> Ibid.

<sup>&</sup>lt;sup>167</sup> Kristen Harknett, "Are Public Expenditures Associated with Better Child Outcomes in the U.S.? A Comparison across 50 States." *Analyses of Social Issues and Public Policy* (2005). 5, 1: 103-125. Retrieved from http://www.kidscount.org/kcnetwork/issues/documents/Education.pdf

<sup>&</sup>lt;sup>168</sup> Dr. Cushing, Interview by author.

<sup>&</sup>lt;sup>169</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>170</sup> Ibid.

bodies attempt to create a compromised version of the amendment). The amendment would still have to be approved by the governor, who has publicly stated that he supports such an amendment.<sup>171</sup> The language of CACR-12 states that, "the legislature shall have the full power and authority and the responsibility to define standards for public education, establish standards of accountability, mitigate local disparities in educational opportunity and fiscal capacity, and have full power and authority to determine the amount of state funding for public education."<sup>172</sup> The debate on the amendment is whether it will allow more targeting of funds to the neediest communities and will improve the funding structure.

Those that support this constitutional amendment argue that it will allow the legislature in the future to target more funds to the poorest communities. This reasoning is explained by the Governor John Lynch's public statement: "It is my strongly held belief that the state has a responsibility to ensure that every child in New Hampshire has the opportunity for a quality education. But to accomplish that goal, we need an amendment that allows the state to target aid to communities with the greatest needs, and that is what this amendment will do." <sup>173</sup> The senators and representatives that have voted in support of CACR12 reason along the same lines. For instance, Senator Stiles (Chair of the Education Committee) voted in support of CACR12. When interviewed, she stated: "... right now we're paying first to last dollar of adequacy. That means that every school has to be provided with \$3450 plus whatever the extra aid for each kid. We have been sending money to some property-rich towns, when there are smaller communities that don't have the tax base in order to raise that kind of money because the values are so different. We need to try to bring everyone up to adequacy."<sup>174</sup> Essentially, the argument is that a constitutional amendment will allow more targeting to poor communities, which need state aid the most.

Yet, the argument for the constitutional amendment goes deeper, as it is related to the relative power of the courts and the legislature on the issue of public education. This goes back to the *Claremont* decisions, when the Supreme Court of New Hampshire mandated that the state has a responsibility to adequately fund education. Essentially, by adding to the constitution that the legislature has "full power, authority and responsibility" on this issue lessens the influence of the courts and allows the legislature to have more discretion on how it wants to change the funding structure. The Senate Policy Director, Ms. Roney (who had worked closely with the Senate leadership and individual Senators who are key proponents on this amendment to conduct research, coordinate discussions among stakeholders, and on technical aspects of the legislation) said in an interview: "My understanding is that nowhere else in the constitution does the judicial branch have the authority to look at funding levels. The legislature sets the funding level... And here you have education funding, where the courts have essentially said they are the final word on what the funding levels are. And, you don't find that anywhere else in state government."<sup>175</sup> The constitutional amendment would correct this, once again, with the argued intention of allowing more discretion on targeting of funds. As did Ms. Roney, Senator Stiles also explained that the oversight of the courts would not be completely removed by the amendment: "It still leaves in the oversight of the courts so that if a community feels it's not reasonable, they can still take it to court and have it reviewed by the court. And I think that's the proper thing to do. I don't want to take

<sup>&</sup>lt;sup>171</sup> Press Release: "Governor Lynch Proposes Education Funding Constitutional Amendment." (October 21, 2011). http://www.governor.nh.gov/media/news/2011/102119-education-funding.htm

<sup>&</sup>lt;sup>172</sup> "CACR12". NH General Court Website (2/15/12). Retrieved from

http://www.gencourt.state.nh.us/legislation/2012/CACR0012.html

<sup>&</sup>lt;sup>173</sup> Press Release: "Governor Lynch Proposes Education Funding Constitutional Amendment."

<sup>&</sup>lt;sup>174</sup> Senator Stiles, Interview by author.

<sup>&</sup>lt;sup>175</sup> Ms. Roney, Interview by author.

the courts out of it completely."<sup>176</sup> Thus, proponents of the amendment argue that it will allow more targeting and lessen the inappropriate power of the courts in the issue without removing their oversight.

Others, like Dr. Joyce, disagree with the idea that limiting the courts' power on education funding is a wise move and see the potential consequences as negative. Dr. Joyce explained his position in an interview: "At the heart of the constitutional amendment, what is essentially says is that we are going to take the courts' oversight of education as a basic right of every child, diminish it, and say the legislature can define what that interest is, what it costs, and who gets money from it."<sup>177</sup> The only way that the Supreme Court could override the education funding structure if a constitutional amendment was in place, is by proving it was "unreasonable... a very high threshold for legal intervention."<sup>178</sup> Thus, Dr. Joyce believes it would be very difficult to change the legislatures' decision if they decided to alter the funding structure.

Similarly, Dr. George Cushing (Superintendent of New Castle, Newington, Greenland, and Rye) is concerned about a potential decreased ability of the courts to be involved in the issue of education funding. He stated: "I actually prefer the courts be involved if things are not working right. And, if we have a very conservative legislature, which we do, they could really gut some of the good things that are happening in education. Who checks the legislature if they are running amok? If we didn't have the courts, we wouldn't have had a *Claremont* decision. We wouldn't have started to give aid to communities that were so poor."<sup>179</sup> Dr. Cushing skeptical of the move to lessen the power of the courts that has historically helped the poor communities.

But why would an alteration of the funding structure to target more money to the poor districts be a bad decision that would have to be taken up in the courts? Indeed, the lawsuits against the state began because the poor districts did not receive enough money. However, because of lack of funds dedicated to education, there would be great danger to the concept of adequacy. The constitutional amendment would likely results in a targeting-adequacy tradeoff. Dr. Joyce explained that targeting of aid is done with the current system, but a constitution amendment will only put the goal of adequacy at risk:

Now, targeting of aid, in other words sending more money to those in need, is possible now. The court did not say that you cannot target. What they said was you can't target in place of offering an adequate education to everyone. In other words, all of what the court said was "Here is basic foundation level, if you want to do more than that for those that need it... you can still do that." You only need an amendment if you're going to target instead of adequacy, not in addition to it.<sup>180</sup>

The loss of the notion of adequacy means funding of a certain basic level of education may no longer be available to all communities. Dr. Ward explained that as she understands the amendment, in this new scenario, communities would be assessed and aided on a case-by-case basis, instead of a policy or formula that ensures a basic level for everyone: "What happens if my arguments are better or I have more flash and dash than the superintendent in Berlin does and I get the money that Berlin doesn't, I still have a district that needs funds."<sup>181</sup> Again, her view is that adequacy would no longer be upheld and

<sup>&</sup>lt;sup>176</sup> Senator Stiles, Interview by author.

<sup>&</sup>lt;sup>177</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>178</sup> Ibid.

<sup>&</sup>lt;sup>179</sup> Dr. Cushing, Interview by author.

<sup>&</sup>lt;sup>180</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>181</sup> Dr. Ward, Interview by author.

targeting may not reach all of the districts. Most concerning to Dr. Ward, is that the new policies would be at "the whim of the legislators that are there."<sup>182</sup>

What the legislature could ultimately decide for the funding formula and policies is very unpredictable. A possible situation is one that Dr. Joyce describes: "And so what you have, I think, is legislators who struggle with the state budget, saying our jobs would be a whole lot easier if we didn't have adequacy because we have to raise that much less money."<sup>183</sup> Based on what she has observed in the legislature over the last two years, Senator Kelly said that this is a likely possibility: "We could have a legislature say we don't have money so we're not funding education."<sup>184</sup> She has seen a real movement not only less government, but attempts to eliminate government form education. So a constitutional amendment could result in much weaker state commitment to public education funding. This would cause a further strain on local communities to raise the difference in taxes or to make large reductions to the school budgets necessary.<sup>185</sup>

Furthermore, Dr. Cushing believes the adequacy-targeting tradeoff is a real concern, specifically, for middle-tier communities. Although targeting will continue to help, or perhaps will help more, the districts that are struggling most with funding, and wealthy towns will not be effected, middle-tier districts will likely suffer: "I'm worried when the constitutional amendment, if it passes in the form it is now, that some of those schools that are in the middle—they're not the poorest and their not the richest, but they are getting aid now—like a Dover or Rochester will lose millions of dollars."<sup>186</sup> Indeed, Rochester will lose up to \$10 million dollars in aid under the new formula without the stabilization grant. The district of Dover has a tax cap, and, thus, cannot raise any additional money. Dr. Cushing questions: "So who's going to lose in that battle? It's going to be the kids."<sup>187</sup>

#### **Policy Recommendations**

Based on the findings of the present study, below are recommended policy reforms that are envisioned to improve the effectiveness of the public education funding structure in providing the opportunity for a truly adequate education for all children in New Hampshire. The quantitative finding was as follows: low wealth communities spend less on education and have lower rates of achievement. This finding is consistent with existing research that has clearly identified that "money does matter in education." The qualitative analysis exposed underlying issues of the current funding system, including instability, an insufficient definition of adequate cost, and an overreliance on the local property tax. The following policy recommendations address the underlying issues of the system, and consistently aim at equity of educational opportunity for all children:

A. Redefine the cost of adequacy. The state of New Hampshire must increase our standard of adequacy funding. The current amount of \$3,450 per student is simply not enough. Schools need the proper resources, technology, highly trained teachers, and comprehensive programs in order for all students to succeed. Students from low-income and low property wealth communities often face additional challenges and struggles compared to their counterparts of high-income households and high property wealth communities. Each child deserves the opportunity of success. New Hampshire must realistically define the cost of such an opportunity because it is not \$3,450.

<sup>&</sup>lt;sup>182</sup> Ibid.

<sup>&</sup>lt;sup>183</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>184</sup> Senator Kelly, Interview by author.

<sup>&</sup>lt;sup>185</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>186</sup> Dr. Cushing, Interview by author.

<sup>&</sup>lt;sup>187</sup> Ibid.

- B. Support local control. New Hampshire can stay true to its tradition of local control but this must be adapted to a changed and continually changing state, country, and world. No longer is a community simply expected to have a schoolhouse run by the local church. Dr. Joyce points out that the reality may not coincide with the traditional notion of complete local control: "What a lot of people do not understand is that they might argue that education is a local effort. But in reality one need only look at the volume of state laws that prescribe what education should be, and the three-inch book of rules that every school district must follow to implement the state education system as evidence."<sup>188</sup> This evidence was cited by the Courts in the original school funding lawsuits to show that education is clearly "a state interest and a state function, highly regulated by the state."<sup>189</sup> Our notions of local control need to adapt to the reality. Education has become more centralized at the state level, and, thus, funding needs to follow as well. Local control must be seen as every community's right to augment their public education as much as the community desires past a basic adequate education that exists in all communities.
- C. **Commit to adequacy** *and* **targeting.** New Hampshire cannot take the chances of weakening the role of the Courts in education funding. They have historically pushed New Hampshire in a direction of more equity in educational opportunity. More targeting is needed for the poorer communities, but it cannot happen at the expense of adequacy. The adequacy-targeting tradeoff must be recognized in the proposed constitutional amendment. The constitutional amendment cannot be adopted if New Hampshire wants all children to have the opportunity of an adequate education. Furthermore, we need a long term commitment of funding in education to students improve: "It's not about a new dollar this year will guarantee a dollar's value this year. But a dollar's value each year, for 10 year period of time with certainly, spent in appropriate ways, will make a difference."<sup>190</sup>
- D. **Diversify the Tax Revenue.** New Hampshire cannot continue to rely on the local property tax, which naturally perpetuates inequities and does not allow for stability and consistency that are so needed in education. A diverse revenue strain, which has the ability to accommodate and respond to market conditions, is needed across the state.<sup>191</sup> Education funding needs certainty and progressivity;<sup>192</sup> relying primarily on the local property tax does not allow that. The state needs to adopt the uncomfortable policy of a small income or sales tax dedicated long-term to education. A long-term funding commitment in education is what will allow improvements in achievement. In order to be truly committed to adequacy and targeting in education, diverse and committed tax revenue is needed. We must view education "not as just funding but as an opportunity and an investment."<sup>193</sup>

# **A Final Recommendation**

New Hampshire cannot stand motionless as inequities continue to persist. The finding that low wealth districts spend less on their schools and have lower student achievement is not acceptable: "Funding gaps undermine one of our most powerful and core beliefs that we as Americans cling to: that no matter what circumstances children are born into, all have the opportunity to become educated and,

<sup>&</sup>lt;sup>188</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>189</sup> Ibid.

<sup>&</sup>lt;sup>190</sup> Ibid.

<sup>&</sup>lt;sup>191</sup> Dr. Joyce, Interview by author.

<sup>&</sup>lt;sup>192</sup> Ibid.

<sup>&</sup>lt;sup>193</sup> Senator Kelly, Interview by author. Senator Kelly was not referring to tax diversification or adoption of a new tax but simply made a general statement about how she hopes the legislature and people will view education.

if they work hard, to pursue their dreams."<sup>194</sup> New Hampshire needs to be true to its state tradition and recognize that we cannot Live Free if we do not have equal opportunities.

Those who make up the state of New Hampshire—policymakers and residents—need to think more broadly about education. Public education needs to be prioritized. Problems in public education are at the center of many public policy problems. Yet, if education is made a priority, it can become the solution to many public policy problems, as well:

The greatest tool and the greatest resource is education. So if government can provide that tool, a lot of the problems that we see can be taken care of. Today in our prison system, over 50% of the people in prison have learning disabilities and do not have high school diplomas. It costs about \$30,000 a year for them to be taken care of and about \$10,000 a year to go to Keene High School. And, as you know, we are filling up those prisons way too fast. So you can pick any piece of a policy issue, and I think you can go back to education. <sup>195</sup>

Public education is not only a tool and resource for a single child to pursue his dreams, but education is a vital tool and resource for the community and for the state. Thus, the residents and the state must invest into education. If New Hampshire truly commits to equal opportunity, improved student scores will not be the only positive outcomes.

<sup>&</sup>lt;sup>194</sup> Education Trust Fund, "Funding Gap 2005," (2005), 1. Retrieved from http://www.edtrust.org/dc/publication/the-funding-gap-report-2005

<sup>&</sup>lt;sup>195</sup> Senator Kelly, Interview by author.

# Appendix:

 Table 1. Single-Town School Districts Ranked by Equalized Valuation and Median Household Income

| School District   | 2010 Equalized<br>Valuation per pupil<br>(EVPP) | EVPP<br>Ranking | 2010 Median<br>Household<br>Income (MHI) | MHI<br>Ranking |
|-------------------|---|-----------------|--|----------------|
| State Average     | \$831,680                                       | 77              | \$63,033                                 | 71             |
| ALBANY            | \$1,203,447                                     | 104             | \$50,000                                 | 36             |
| ALLENSTOWN        | \$416,573                                       | 7               | \$55,752                                 | 54             |
| ALTON             | \$1,948,389                                     | 125             | \$59,788                                 | 65             |
| AMHERST (K-8) #   | \$826,084                                       | 75              | \$104,745                                | 136            |
| ANDOVER           | \$765,443                                       | 63              | \$58,313                                 | 61             |
| ASHLAND (K-8) #   | \$1,024,298                                     | 94              | \$37,243                                 | 4              |
| AUBURN            | \$724,081                                       | 56              | \$84,750                                 | 119            |
| BARNSTEAD         | \$638,266                                       | 35              | \$67,626                                 | 85             |
| BARRINGTON        | \$641,276                                       | 37              | \$73,449                                 | 98             |
| BARTLETT          | \$2,540,130                                     | 129             | \$46,250                                 | 26             |
| BATH              | \$1,064,802                                     | 96              | \$43,973                                 | 20             |
| BEDFORD           | \$752,304                                       | 61              | \$119,636                                | 142            |
| BENTON            | \$874,895                                       | 85              | \$40,833                                 | 14             |
| BERLIN            | \$309,471                                       | 2               | \$40,199                                 | 10             |
| BETHLEHEM (K-6) # | \$748,720                                       | 60              | \$48,397                                 | 33             |
| BOW               | \$779,901                                       | 69              | \$97,028                                 | 130            |
| BRENTWOOD (K-5) # | \$347,890                                       | 4               | \$112,440                                | 138            |
| BROOKLINE (K-6) # | \$415,948                                       | 6               | \$99,221                                 | 134            |
| CAMPTON (K-8) #   | \$958,146                                       | 92              | \$40,575                                 | 12             |
| CANDIA            | \$635,869                                       | 34              | \$93,929                                 | 127            |
| СНАТНАМ           | \$1,062,023                                     | 95              | \$62,500                                 | 70             |
| CHESTER           | \$513,755                                       | 20              | \$94,953                                 | 128            |
| CHESTERFIELD      | \$1,115,971                                     | 98              | \$65,139                                 | 80             |
| CHICHESTER        | \$706,375                                       | 51              | \$70,214                                 | 91             |
| CLAREMONT         | \$419,170                                       | 8               | \$39,486                                 | 7              |
| CLARKSVILLE       | \$1,289,468                                     | 107             | \$34,464                                 | 3              |
| COLEBROOK         | \$596,545                                       | 28              | \$29,643                                 | 1              |
| COLUMBIA          | \$877,672                                       | 87              | \$56,161                                 | 55             |
| CONCORD           | \$747,057                                       | 59              | \$52,592                                 | 40             |
| CONWAY            | \$1,107,493                                     | 97              | \$48,288                                 | 32             |
| CORNISH           | \$914,407                                       | 89              | \$66,964                                 | 84             |

| CROYDON               | \$1,144,007        | 100 | \$56,172          | 56  |
|-----------------------|--------------------|-----|-------------------|-----|
| DEERFIELD             | \$697,487          | 48  | \$79,866          | 110 |
| DERRY                 | \$441,280          | 11  | \$70,303          | 92  |
| DOVER                 | \$759 <i>,</i> 888 | 62  | \$58,756          | 62  |
| DUMMER                | \$996,956          | 93  | \$53,090          | 44  |
| DUNBARTON             | \$774,283          | 68  | \$92,625          | 126 |
| EAST KINGSTON (K-5) # | \$428,166          | 10  | \$90,000          | 124 |
| EATON                 | \$3,668,421        | 136 | \$56,563          | 58  |
| ELLSWORTH             | \$1,507,516        | 116 | \$65,938          | 81  |
| EPPING                | \$647,797          | 39  | \$70,984          | 94  |
| EPSOM                 | \$645,548          | 38  | \$71,555          | 96  |
| ERROL                 | \$6,489,064        | 140 | \$39,531          | 8   |
| EXETER (K-5) #        | \$1,673,469        | 122 | \$61,089          | 67  |
| FARMINGTON            | \$389,593          | 5   | \$45,811          | 24  |
| FRANKLIN              | \$460,034          | 13  | \$46,644          | 28  |
| FREEDOM               | \$3,606,288        | 135 | \$43,393          | 18  |
| FREMONT               | \$484,641          | 15  | \$81,754          | 115 |
| GILFORD               | \$1,609,890        | 119 | \$54,951          | 52  |
| GILMANTON             | \$851,426          | 81  | \$68,984          | 88  |
| GOFFSTOWN             | \$595,901          | 27  | \$75 <i>,</i> 868 | 102 |
| GRANTHAM              | \$1,166,378        | 101 | \$81,167          | 113 |
| GREENLAND             | \$1,310,584        | 109 | \$82,216          | 116 |
| HAMPSTEAD             | \$718,261          | 54  | \$77,825          | 106 |
| HAMPTON (K-8) #       | \$1,507,659        | 117 | \$63,548          | 72  |
| HAMPTON FALLS (K-8) # | \$1,186,141        | 103 | \$114,107         | 140 |
| HANOVER (K-5) #       | \$1,616,231        | 120 | \$99,053          | 132 |
| HARRISVILLE           | \$2,608,871        | 131 | \$54,904          | 51  |
| HART'S LOCATION       | \$2,893,397        | 133 | \$38,125          | 5   |
| HENNIKER (K-8) #      | \$696,080          | 47  | \$64,207          | 75  |
| HILL                  | \$607,036          | 29  | \$53,958          | 47  |
| HINSDALE              | \$539,762          | 23  | \$46,514          | 27  |
| HOLDERNESS (K-8) #    | \$2,452,114        | 128 | \$54,125          | 49  |
| HOLLIS (K-6) #        | \$858,648          | 83  | \$116,168         | 141 |
| HOOKSETT              | \$797,928          | 72  | \$80,919          | 112 |
| HOPKINTON             | \$725,500          | 57  | \$82,408          | 117 |
| HUDSON                | \$640,307          | 36  | \$80,778          | 111 |
| JACKSON               | \$4,482,578        | 137 | \$69,625          | 89  |
| KEENE                 | \$714,097          | 53  | \$51,375          | 39  |
| KENSINGTON (K-5) #    | \$228,180          | 1   | \$88,971          | 123 |
| LACONIA               | \$935,717          | 90  | \$46,748          | 29  |
| LANDAFF               | \$858,057          | 82  | \$49,375          | 34  |

| LEBANON               | \$1,353,275  | 111 | \$57,982  | 60  |
|-----------------------|--------------|-----|-----------|-----|
| LITCHFIELD            | \$516,596    | 21  | \$97,591  | 131 |
| LITTLETON             | \$769,357    | 64  | \$43,069  | 17  |
| LONDONDERRY           | \$655,816    | 41  | \$86,962  | 121 |
| LYME                  | \$1,172,632  | 102 | \$84,821  | 120 |
| MADISON               | \$1,358,112  | 113 | \$53,088  | 43  |
| MANCHESTER            | \$586,637    | 26  | \$52,906  | 42  |
| MARLBORO              | \$702,097    | 50  | \$60,913  | 66  |
| MARLOW                | \$744,964    | 58  | \$53,922  | 46  |
| MASON                 | \$850,696    | 80  | \$78,403  | 109 |
| MERRIMACK             | \$681,272    | 44  | \$88,371  | 122 |
| MIDDLETON             | \$585,679    | 25  | \$54,408  | 50  |
| MILAN                 | \$700,286    | 49  | \$55,433  | 53  |
| MILFORD               | \$512,730    | 19  | \$69,788  | 90  |
| MILTON                | \$629,073    | 32  | \$63,674  | 73  |
| MONROE                | \$1,671,093  | 121 | \$47,823  | 31  |
| MONT VERNON (K-8) #   | \$541,773    | 24  | \$96,932  | 129 |
| MOULTONBOROUGH        | \$4,628,128  | 138 | \$75,813  | 101 |
| NASHUA                | \$719,056    | 55  | \$64,219  | 76  |
| NELSON                | \$1,543,512  | 118 | \$64,375  | 78  |
| NEW BOSTON            | \$624,857    | 31  | \$83,107  | 118 |
| NEW CASTLE            | \$6,352,757  | 139 | \$75,227  | 100 |
| NEWFIELDS (K-5) #     | \$614,961    | 30  | \$107,596 | 137 |
| NEWINGTON             | \$12,404,835 | 142 | \$81,250  | 114 |
| NEWMARKET             | \$771,793    | 66  | \$68,343  | 87  |
| NEWPORT               | \$477,319    | 14  | \$45,565  | 23  |
| NORTH HAMPTON (K-8) # | \$1,682,061  | 123 | \$77,832  | 107 |
| NORTHUMBERLAND        | \$333,649    | 3   | \$39,250  | 6   |
| NORTHWOOD             | \$667,634    | 42  | \$64,325  | 77  |
| NOTTINGHAM            | \$770,465    | 65  | \$99,167  | 133 |
| ORFORD - RIVENDELL    | \$773,676    | 67  | \$63,750  | 74  |
| PELHAM                | \$688,150    | 45  | \$90,949  | 125 |
| PEMBROKE              | \$493,936    | 18  | \$57,837  | 59  |
| PIERMONT              | \$877,316    | 86  | \$68,021  | 86  |
| PITTSBURG             | \$2,905,756  | 134 | \$44,808  | 21  |
| PITTSFIELD            | \$447,524    | 12  | \$56,463  | 57  |
| PLAINFIELD            | \$826,812    | 76  | \$72,330  | 97  |
| PLYMOUTH (K-8) #      | \$708,832    | 52  | \$45,909  | 25  |
| PORTSMOUTH            | \$1,835,354  | 124 | \$62,395  | 69  |
| RAYMOND               | \$629,974    | 33  | \$54,108  | 48  |
| ROCHESTER             | \$491,884    | 16  | \$50,382  | 37  |

| ROLLINSFORD       | \$812,249    | 73  | \$64,583          | 79  |
|-------------------|--------------|-----|-------------------|-----|
| RUMNEY (1-8) #    | \$948,936    | 91  | \$43,964          | 19  |
| RYE               | \$2,549,216  | 130 | \$77,064          | 104 |
| SALEM             | \$889,482    | 88  | \$70,813          | 93  |
| SEABROOK (K-8) #  | \$2,256,699  | 127 | \$50,718          | 38  |
| SOMERSWORTH       | \$537,021    | 22  | \$53 <i>,</i> 430 | 45  |
| SOUTH HAMPTON     | \$1,308,105  | 108 | \$78,375          | 108 |
| STARK             | \$1,357,689  | 112 | \$40,972          | 15  |
| STEWARTSTOWN      | \$797,633    | 71  | \$39,773          | 9   |
| STODDARD          | \$2,204,458  | 126 | \$58,906          | 63  |
| STRAFFORD         | \$649,165    | 40  | \$66,520          | 83  |
| STRATFORD         | \$669,334    | 43  | \$33,472          | 2   |
| STRATHAM (K-5) #  | \$1,409,354  | 114 | \$103,271         | 135 |
| SUNAPEE           | \$2,755,017  | 132 | \$58 <i>,</i> 986 | 64  |
| SURRY             | \$1,228,849  | 105 | \$71,083          | 95  |
| TAMWORTH          | \$1,139,612  | 99  | \$41,164          | 16  |
| THORNTON (K-8) #  | \$1,274,109  | 106 | \$44,914          | 22  |
| UNITY             | \$782,427    | 70  | \$61,786          | 68  |
| WAKEFIELD         | \$1,335,229  | 110 | \$47,686          | 30  |
| WARREN            | \$694,580    | 46  | \$40,268          | 11  |
| WASHINGTON        | \$1,467,762  | 115 | \$52 <i>,</i> 625 | 41  |
| WATERVILLE VALLEY | \$11,975,133 | 141 | \$66,250          | 82  |
| WEARE (K-8) #     | \$492,194    | 17  | \$76,530          | 103 |
| WENTWORTH (1-8) # | \$838,316    | 79  | \$49,464          | 35  |
| WESTMORELAND      | \$815,559    | 74  | \$77,273          | 105 |
| WINCHESTER        | \$424,513    | 9   | \$40,821          | 13  |
| WINDHAM           | \$833,373    | 78  | \$113,867         | 139 |
| WINDSOR           | \$861,111    | 84  | \$75,000          | 99  |

#### Table 2. Per Pupil Education Spending for Low and High Wealth Districts

This is a complete table of the districts used because they have comparable data.

Data is based on school districts used in wealth capacity rankings using elementary school per pupil spending data. Some districts are excluded because <u>only</u> comparable school districts were used, as defined by DOE: "It is appropriate to compare two districts only when they have the same grade range. Even when the grade ranges are identical, only the total figures should be considered comparable because different formulas may have been used to allocate district-wide cost." (http://www.education.nh.gov/data/financial.htm).

| School District           | Education<br>Spending per<br>pupil (2005) | Education<br>Spending<br>per pupil<br>(2008) | Education<br>Spending per<br>pupil (2011) |
|---------------------------|---|--|---|
| ALLENSTOWN                | \$9 <i>,</i> 458                          | \$11,370                                     | \$14,944                                  |
| ANDOVER                   | \$8,557                                   | \$11,245                                     | \$13,138                                  |
| BETHLEHEM (K-6) #         | \$11,065                                  | \$12,266                                     | \$15,322                                  |
| HILL                      | \$7,412                                   | \$10,068                                     | \$9,873                                   |
| MARLBORO                  | \$10,437                                  | \$13,658                                     | \$14,932                                  |
| MARLOW                    | \$10,487                                  | \$19,849                                     | \$18,298                                  |
| MILAN                     | \$9,346                                   | \$10,646                                     | \$12,448                                  |
| PLYMOUTH (K-8) #          | \$11,903                                  | \$15,019                                     | \$16,842                                  |
| STEWARTSTOWN              | \$9,301                                   | \$11,873                                     | \$13,851                                  |
| UNITY                     | \$7,694                                   | \$9,668                                      | \$13,568                                  |
| WARREN                    | \$11,153                                  | \$13,871                                     | \$16,811                                  |
| WINCHESTER                | \$11,096                                  | \$11,724                                     | \$14,111                                  |
| CHESTERFIELD              | \$10,788                                  | \$12,180                                     | \$14,623                                  |
| CORNISH                   | \$13,173                                  | \$14,038                                     | \$16,963                                  |
| GILMANTON                 | \$8,787                                   | \$10,219                                     | \$13,061                                  |
| GRANTHAM                  | \$9,928                                   | \$12,222                                     | \$13,151                                  |
| GREENLAND                 | \$9,148                                   | \$11,770                                     | \$12,390                                  |
| HAMPTON FALLS (K-<br>8) # | \$13,228                                  | \$15,554                                     | \$16,438                                  |
| HANOVER (K-5) #           | \$12,981                                  | \$15,223                                     | \$16,238                                  |
| HOLLIS (K-6) #            | \$9,492                                   | \$12,388                                     | \$14,790                                  |
| JACKSON                   | \$10,451                                  | \$15,584                                     | \$19,619                                  |
| LYME                      | \$12,495                                  | \$14,102                                     | \$14,758                                  |
| MASON                     |   |  | \$11,861                                  |
| NELSON                    | \$10,091                                  | \$15,413                                     | \$27,487                                  |
| NEW CASTLE                | \$11,844                                  | \$16,470                                     | \$23,195                                  |

| NEWINGTON                | \$20,604 | \$23,293 | \$31,548 |
|--------------------------|----------|----------|----------|
| NORTH HAMPTON<br>(K-8) # | \$12,088 | \$14,309 | \$15,858 |
| RYE                      | \$11,923 | \$14,500 | \$15,212 |
| SOUTH HAMPTON            | \$11,976 | \$14,908 | \$17,026 |
| STRATHAM (K-5) #         | \$9,982  | \$13,032 | \$13,545 |
| WATERVILLE VALLEY        | \$21,870 | \$23,936 | \$31,472 |

Table 3. Per Pupil State Aid Grant Calculations for 2005

| School District   | 2005 Total<br>Grant Money | 2001-2002<br>ADM | 2005 Per<br>Pupil State<br>Grant |
|-------------------|---------------------------|------------------|----------------------------------|
| State Total       | \$454,432,433             | 204,811          | \$2,219                          |
| ALLENSTOWN        | \$3,615,484               | 838              | \$4,313                          |
| ANDOVER           | \$694,301                 | 327              | \$2,122                          |
| BERLIN            | \$7,042,647               | 1,442            | \$4,885                          |
| BETHLEHEM (K-6) # | \$1,101,480               | 191              | \$5,773                          |
| CLAREMONT         | \$7,784,866               | 1,967            | \$3,958                          |
| COLEBROOK         | \$1,574,132               | 375              | \$4,194                          |
| CONCORD           | \$12,217,909              | 5,517            | \$2,215                          |
| DOVER             | \$5,665,335               | 3,305            | \$1,714                          |
| FARMINGTON        | \$4,518,575               | 1,122            | \$4,028                          |
| FRANKLIN          | \$5,590,139               | 1,353            | \$4,133                          |
| HILL              | \$488,774                 | 171              | \$2,855                          |
| HINSDALE          | \$3,356,627               | 777              | \$4,322                          |
| KEENE             | \$8,878,833               | 3,198            | \$2,776                          |
| LITTLETON         | \$2,556,038               | 966              | \$2,645                          |
| MANCHESTER        | \$45,051,653              | 15,201           | \$2,964                          |
| MARLBORO          | \$916,241                 | 309              | \$2,968                          |
| MARLOW            | \$372,600                 | 126              | \$2,967                          |
| MIDDLETON         | \$1,057,351               | 300              | \$3,530                          |

| MILAN                 | \$980,110    | 250   | \$3,919 |
|-----------------------|--------------|-------|---------|
| MILTON                | \$2,404,616  | 687   | \$3,499 |
| NEWPORT               | \$5,007,003  | 1,133 | \$4,419 |
| NORTHUMBERLAND        | \$1,891,299  | 429   | \$4,407 |
| PEMBROKE              | \$3,913,995  | 1,258 | \$3,111 |
| PITTSFIELD            | \$3,672,028  | 813   | \$4,519 |
| PLYMOUTH (K-8) #      | \$2,733,570  | 474   | \$5,773 |
| RAYMOND               | \$5,391,547  | 1,758 | \$3,068 |
| ROCHESTER             | \$14,593,696 | 4,526 | \$3,225 |
| SOMERSWORTH           | \$5,556,510  | 1,708 | \$3,252 |
| STEWARTSTOWN          | \$417,793    | 141   | \$2,961 |
| STRATFORD             | \$592,767    | 133   | \$4,447 |
| UNITY                 | \$593,339    | 191   | \$3,102 |
| WARREN                | \$605,698    | 134   | \$4,507 |
| WINCHESTER            | \$3,175,606  | 710   | \$4,475 |
| AVERAGE:              |              |       | \$3,668 |
| CHESTERFIELD          | \$1,113,680  | 644   | \$1,729 |
| CORNISH               | \$805,218    | 276   | \$2,915 |
| ELLSWORTH             | \$14,810     | 13    | \$1,157 |
| GILMANTON             | \$1,044,849  | 558   | \$1,874 |
| GRANTHAM              | \$0          | 317   | \$0     |
| GREENLAND             | \$689,194    | 498   | \$1,383 |
| HAMPTON (K-8) #       | \$0          | 1,403 | \$0     |
| HAMPTON FALLS (K-8) # | \$140,603    | 254   | \$553   |
| HANOVER (K-5) #       | \$0          | 586   | \$0     |
| HOLLIS (K-6) #        | \$1,988,651  | 818   | \$2,433 |
| JACKSON               | \$0          | 88    | \$0     |
| LYME                  | \$176,247    | 262   | \$672   |
| MASON                 | \$267,055    | соор  |         |
| MOULTONBOROUGH        | \$0          | 676   | \$0     |
| NELSON                | \$203,324    | 116   | \$1,757 |
| NEW CASTLE            | \$0          | 112   | \$0     |
| NEWINGTON             | \$0          | 112   | \$0     |
| NORTH HAMPTON (K-8) # | \$0          | 502   | \$0     |
| RYE                   | \$0          | 711   | \$0     |
| SALEM                 | \$4,425,584  | 4,544 | \$974   |
| SOUTH HAMPTON         | \$104,203    | 135   | \$772   |
| STRATHAM (K-5) #      | \$1,432,214  | 624   | \$2,297 |

| SURRY             | \$259,024   | соор  |         |
|-------------------|-------------|-------|---------|
| WATERVILLE VALLEY | \$0         | 27    | \$0     |
| WINDHAM           | \$2,332,075 | 2,139 | \$1,090 |
| WINDSOR           | \$50,682    | 28    | \$1,823 |
| AVERAGE:          |             |       | \$893   |

Table 4. Per Pupil State Aid Grant Calculations for 2008

| School District   | 2008 Total<br>Grant Money | 2004-2005<br>ADM | 2008 Per<br>Pupil State<br>Grant |
|-------------------|---------------------------|------------------|----------------------------------|
| State Total       | \$527,360,567             | 201,242          | \$2,621                          |
| ALLENSTOWN        | \$4,012,756               | 746              | \$5,381                          |
| ANDOVER           | \$715,467                 | 315              | \$2,270                          |
| BERLIN            | \$9,466,578               | 1,410            | \$6,714                          |
| BETHLEHEM (K-6) # | \$1,259,486               | 174              | \$7,238                          |
| CLAREMONT         | \$10,863,620              | 1,933            | \$5,620                          |
| COLEBROOK         | \$1,797,568               | 349              | \$5,151                          |
| CONCORD           | \$11,438,276              | 5,033            | \$2,273                          |
| DOVER             | \$5,262,210               | 3,314            | \$1,588                          |
| FARMINGTON        | \$5,946,309               | 1,068            | \$5,568                          |
| FRANKLIN          | \$7,397,102               | 1,335            | \$5,541                          |
| HILL              | \$437,599                 | 164              | \$2,668                          |
| HINSDALE          | \$4,198,912               | 725              | \$5,792                          |
| KEENE             | \$10,538,576              | 2,981            | \$3,535                          |
| LITTLETON         | \$3,368,181               | 964              | \$3,494                          |
| MANCHESTER        | \$49,357,620              | 15,254           | \$3,236                          |
| MARLBORO          | \$1,176,587               | 310              | \$3,795                          |
| MARLOW            | \$590,016                 | 119              | \$4,958                          |
| MIDDLETON         | \$1,249,270               | 294              | \$4,249                          |
| MILAN             | \$1,005,002               | 223              | \$4,507                          |
| MILTON            | \$2,793,828               | 649              | \$4,305                          |
| NEWPORT           | \$1,963,438               | 447              | \$4,392                          |
| NORTHUMBERLAND    | \$2,366,872               | 744              | \$3,181                          |
| PEMBROKE          | \$4,805,559               | 1,232            | \$3,901                          |
| PITTSFIELD        | \$4,222,570               | 703              | \$6,007                          |
| PLYMOUTH (K-8) #  | \$3,308,494               | 430              | \$7,694                          |
| RAYMOND           | \$5,641,539               | 1,553            | \$3,633                          |

| SOMERSWORTH         \$6,338,043         1,621         \$           STEWARTSTOWN         \$556,924         140         \$           STRATFORD         \$818,082         130         \$           UNITY         \$853,672         186         \$ | 4,492<br>3,910<br>3,978<br>6,293<br>4,590 |
|--|---|
| STEWARTSTOWN         \$556,924         140         \$           STRATFORD         \$818,082         130         \$           UNITY         \$853,672         186         \$  | 3,978<br>6,293                            |
| STRATFORD         \$818,082         130         \$           UNITY         \$853,672         186         \$  | 6,293                                     |
| UNITY \$853,672 186 \$   |   |
|  | 4,590                                     |
| WARREN         \$758,937         149         \$  |   |
|  | 5,094                                     |
| WINCHESTER         \$3,529,631         643         \$  | 5,489                                     |
| AVERAGE: \$4,5   | 61.70                                     |
| CHESTERFIELD         \$993,959         585         \$  | 1,699                                     |
| CORNISH \$718,657 225 \$   | 3,194                                     |
| ELLSWORTH         \$13,218         11         \$   | 1,202                                     |
| GILMANTON \$932,528 552 \$   | 1,689                                     |
| <b>GRANTHAM</b> \$890,442 364 \$   | 2,446                                     |
| <b>GREENLAND</b> \$426,080 533   | \$799                                     |
| HAMPTON (K-8) #         \$0         1,365  | \$0                                       |
| HAMPTON FALLS (K-8) #         \$125,489         245  | \$512                                     |
| HANOVER (K-5) # \$0 583  | \$0                                       |
| HOLLIS (K-6) # \$1,774,871 798 \$  | 2,224                                     |
| <b>JACKSON</b> \$0 91  | \$0                                       |
| LYME \$203,734 254   | \$802                                     |
| MASON \$250,690  |   |
| MOULTONBOROUGH \$0 645   | \$0                                       |
| NELSON \$181,466 117 \$  | 1,551                                     |
| <b>NEW CASTLE</b> \$0 102  | \$0                                       |
| <b>NEWINGTON</b> \$0 93  | \$0                                       |
| NORTH HAMPTON (K-8) #         \$0         447  | \$0                                       |
| <b>RYE</b> \$0 683   | \$0                                       |
| <b>SALEM</b> \$4,623,759 4,637   | \$997                                     |
| <b>SOUTH HAMPTON</b> \$99,092 128  | \$774                                     |
| <b>STRATHAM (K-5) #</b> \$1,278,251 630 <b>\$</b>  | 2,029                                     |
| SURRY \$109,551  |   |
| WATERVILLE VALLEY\$034   | \$0                                       |
| WINDHAM         \$2,081,377         2,213  | \$941                                     |
| WINDSOR         \$94,059         31         \$   | 3,034                                     |
| AVERAGE:   | \$996                                     |

| School District   | 2011 Total<br>Grant Money | 2006-2007<br>ADM | 2011 Per<br>pupil State<br>Grant |
|-------------------|---------------------------|------------------|----------------------------------|
| State Total       | \$578,236,605             | 198,004          | \$2,920                          |
| ALLENSTOWN        | \$4,397,035               | 702              | \$6,264                          |
| ANDOVER           | \$822,697                 | 315              | \$2,612                          |
| BERLIN            | \$10,756,851              | 1,383            | \$7,778                          |
| BETHLEHEM (K-6) # | \$1,398,908               | 200              | \$6,995                          |
| CLAREMONT         | \$12,493,163              | 1,874            | \$6,667                          |
| COLEBROOK         | \$2,067,203               | 332              | \$6,227                          |
| CONCORD           | \$13,154,017              | 4,906            | \$2,681                          |
| DOVER             | \$6,051,542               | 3,386            | \$1,787                          |
| FARMINGTON        | \$6,838,255               | 1,122            | \$6,095                          |
| FRANKLIN          | \$8,506,667               | 1,311            | \$6,489                          |
| HILL              | \$503,239                 | 170              | \$2,960                          |
| HINSDALE          | \$4,645,701               | 692              | \$6,713                          |
| KEENE             | \$10,552,770              | 2,798            | \$3,772                          |
| LITTLETON         | \$3,863,011               | 904              | \$4,273                          |
| MANCHESTER        | \$56,761,263              | 14,776           | \$3,841                          |
| MARLBORO          | \$1,182,556               | 301              | \$3,929                          |
| MARLOW            | \$580,710                 | 101              | \$5,750                          |
| MIDDLETON         | \$1,281,233               | 283              | \$4,527                          |
| MILAN             | \$1,139,704               | 209              | \$5,453                          |
| MILTON            | \$3,007,805               | 662              | \$4,544                          |
| NEWPORT           | \$6,931,339               | 995              | \$6,966                          |
| NORTHUMBERLAND    | \$2,666,064               | 387              | \$6,889                          |
| PEMBROKE          | \$5,526,393               | 1,230            | \$4,493                          |
| PITTSFIELD        | \$4,202,053               | 668              | \$6,290                          |
| PLYMOUTH (K-8) #  | \$3,312,975               | 392              | \$8,451                          |
| RAYMOND           | \$5,675,141               | 1,475            | \$3,848                          |
| ROCHESTER         | \$22,458,109              | 4,346            | \$5,168                          |
| SOMERSWORTH       | \$7,288,749               | 1,590            | \$4,584                          |
| STEWARTSTOWN      | \$550,121                 | 130              | \$4,232                          |
| STRATFORD         | \$805,454                 | 114              | \$7,065                          |
| UNITY             | \$840,904                 | 187              | \$4,497                          |

 Table 5. Per Pupil State Aid Grant Calculations for 2011

| WARREN  | \$844,870   | 149                              | \$5,670                                   |
|---|---|----------------------------------|---|
| WINCHESTER  | \$4,059,076   | 677                              | \$5,996                                   |
| AVERAGE:  |   |                                  | \$5,258                                   |
| CHESTERFIELD  | \$1,143,053   | 599                              | \$1,908                                   |
| CORNISH   | \$742 <i>,</i> 953                                    | 218                              | \$3,408                                   |
| ELLSWORTH   | \$13,548  | 9                                | \$1,505                                   |
| GILMANTON   | \$1,072,407   | 594                              | \$1,805                                   |
| GRANTHAM  | \$11,775  | 399                              | \$30                                      |
| GREENLAND   | \$1,024,008   | 506                              | \$2,024                                   |
| HAMPTON (K-8) #   | \$124,436   | 1,205                            | \$103                                     |
| HAMPTON FALLS (K-8) #   | \$144,312   | 249                              | \$580                                     |
| HANOVER (K-5) #   | \$0   | 553                              | \$0                                       |
| HOLLIS (K-6) #  | \$2,041,102   | 759                              | \$2,689                                   |
| JACKSON   | \$78,127  | 83                               | \$941                                     |
| LYME  | \$227,916   | 266                              | \$857                                     |
| MASON   |   |                                  |   |
| MOULTONBOROUGH  | \$0   | 647                              | \$0                                       |
| NELSON  | \$208 <i>,</i> 686                                    | 110                              | \$1,897                                   |
| NEW CASTLE  | \$0   | 94                               | \$0                                       |
| NEWINGTON   | \$0   | 91                               | \$0                                       |
| NORTH HAMPTON (K-8) #   | \$234,921   | 434                              | \$541                                     |
|   | 7254,521  | 434                              | 3 <b>3</b> 41                             |
| RYE   | \$234,521   | 434<br>693                       | \$541<br>\$0                              |
|   |   |                                  |   |
| RYE   | \$0   | 693                              | \$0                                       |
| RYE<br>SALEM  | \$0<br>\$5,317,323                                    | 693<br>4,578                     | \$0<br>\$1,161                            |
| RYE<br>SALEM<br>SOUTH HAMPTON   | \$0<br>\$5,317,323<br>\$113,956                       | 693<br>4,578<br>133              | \$0<br>\$1,161<br>\$857                   |
| RYE<br>SALEM<br>SOUTH HAMPTON<br>STRATHAM (K-5) #                               | \$0<br>\$5,317,323<br>\$113,956                       | 693<br>4,578<br>133              | \$0<br>\$1,161<br>\$857                   |
| RYE<br>SALEM<br>SOUTH HAMPTON<br>STRATHAM (K-5) #<br>SURRY                      | \$0<br>\$5,317,323<br>\$113,956<br>\$1,469,989        | 693<br>4,578<br>133<br>622       | \$0<br>\$1,161<br>\$857<br>\$2,363        |
| RYE<br>SALEM<br>SOUTH HAMPTON<br>STRATHAM (K-5) #<br>SURRY<br>WATERVILLE VALLEY | \$0<br>\$5,317,323<br>\$113,956<br>\$1,469,989<br>\$0 | 693<br>4,578<br>133<br>622<br>35 | \$0<br>\$1,161<br>\$857<br>\$2,363<br>\$0 |

Table 6. Per Pupil State Aid Grant Calculations for 2013

| School District | 2013 Total<br>Grant Money | 2008-2009<br>ADM | 2013 Per<br>pupil State<br>Grant |
|-----------------|---------------------------|------------------|----------------------------------|
| State Total     | \$578,236,605             | 192,900          | \$2,998                          |
| ALLENSTOWN      | \$4,397,035               | 669              | \$6,573                          |
| ANDOVER         | \$822,697                 | 300              | \$2,742                          |

| BERLIN            | \$10,756,851       | 1,298  | \$8,287 |
|-------------------|--------------------|--------|---------|
| BETHLEHEM (K-6) # | \$1,398,908        | 191    | \$7,324 |
| CLAREMONT         | \$12,493,163       | 1,840  | \$6,790 |
| COLEBROOK         | \$2,067,203        | 305    | \$6,778 |
| CONCORD           | \$13,154,017       | 4,756  | \$2,766 |
| DOVER             | \$6,051,542        | 3,538  | \$1,710 |
| FARMINGTON        | \$6,838,255        | 1,129  | \$6,057 |
| FRANKLIN          | \$8,506,667        | 1,305  | \$6,519 |
| HILL              | \$503 <i>,</i> 239 | 170    | \$2,960 |
| HINSDALE          | \$4,645,701        | 654    | \$7,104 |
| KEENE             | \$10,552,770       | 2,782  | \$3,793 |
| LITTLETON         | \$3,863,011        | 861    | \$4,487 |
| MANCHESTER        | \$56,761,263       | 14,438 | \$3,931 |
| MARLBORO          | \$1,182,556        | 256    | \$4,619 |
| MARLOW            | \$580,710          | 89     | \$6,525 |
| MIDDLETON         | \$1,281,233        | 266    | \$4,817 |
| MILAN             | \$1,139,704        | 187    | \$6,095 |
| MILTON            | \$3,007,805        | 635    | \$4,737 |
| NEWPORT           | \$6,931,339        | 964    | \$7,190 |
| NORTHUMBERLAND    | \$2,666,064        | 351    | \$7,596 |
| PEMBROKE          | \$5,526,393        | 1,169  | \$4,727 |
| PITTSFIELD        | \$4,202,053        | 595    | \$7,062 |
| PLYMOUTH (K-8) #  | \$3,312,975        | 395    | \$8,387 |
| RAYMOND           | \$5,675,141        | 1,398  | \$4,059 |
| ROCHESTER         | \$22,458,109       | 4,340  | \$5,175 |
| SOMERSWORTH       | \$7,288,749        | 1,587  | \$4,593 |
| STEWARTSTOWN      | \$550,121          | 127    | \$4,332 |
| STRATFORD         | \$805,454          | 104    | \$7,745 |
| UNITY             | \$840,904          | 174    | \$4,833 |
| WARREN            | \$844,870          | 141    | \$5,992 |
| WINCHESTER        | \$4,059,076        | 638    | \$6,362 |
| AVERAGE:          |                    |        | \$5,535 |
| CHESTERFIELD      | \$1,143,053        | 576    | \$1,984 |
| CORNISH           | \$742,953          | 190    | \$3,910 |
| ELLSWORTH         | \$13,548           | 11     | \$1,232 |
| GILMANTON         | \$1,072,407        | 592    | \$1,811 |
| GRANTHAM          | \$11,775           | 399    | \$30    |
| GREENLAND         | \$1,024,008        | 510    | \$2,008 |

| HAMPTON (K-8) #       | \$124,436   | 1,234 | \$101   |
|-----------------------|-------------|-------|---------|
| HAMPTON FALLS (K-8) # | \$144,312   | 265   | \$545   |
| HANOVER (K-5) #       | \$0         | 566   | \$0     |
| HOLLIS (K-6) #        | \$2,041,102 | 671   | \$3,042 |
| JACKSON               | \$78,127    | 81    | \$965   |
| LYME                  | \$227,916   | 262   | \$870   |
| MASON                 |             |       |         |
| MOULTONBOROUGH        | \$0         | 642   | \$0     |
| NELSON                | \$208,686   | 93    | \$2,244 |
| NEW CASTLE            | \$0         | 93    | \$0     |
| NEWINGTON             | \$0         | 91    | \$0     |
| NORTH HAMPTON (K-8) # | \$234,921   | 438   | \$536   |
| RYE                   | \$0         | 676   | \$0     |
| SALEM                 | \$5,317,323 | 4,373 | \$1,216 |
| SOUTH HAMPTON         | \$113,956   | 118   | \$966   |
| STRATHAM (K-5) #      | \$1,469,989 | 618   | \$2,379 |
| SURRY                 |             | 72    |         |
| WATERVILLE VALLEY     | \$0         | 33    | \$0     |
| WINDHAM               | \$2,393,584 | 2,343 | \$1,022 |
| WINDSOR               | \$108,168   | 33    | \$3,278 |
| AVERAGE:              |             |       | \$1,172 |

## Table 7. NECAP 3<sup>rd</sup> Grade Reading Proficiency for 2005, 2008, 2011

P4= percentage students that scored at level 4, "Proficient with Distinction" P3= percentage students that scored at level 3, "Proficient"

|                 | 2011 |    |       | 2008 |    |       | 2005 |    |       |
|-----------------|------|----|-------|------|----|-------|------|----|-------|
| School District | p4   | р3 | р4+р3 | p4   | р3 | p4+p3 | p4   | р3 | p4+p3 |
| STATE AVERAGE   | 24   | 57 | 81    | 23   | 55 | 78    | 18   | 53 | 71    |
| Allenstown      | 8    | 54 | 62    | 13   | 50 | 63    | 6    | 54 | 60    |
| Andover         | 32   | 37 | 69    | 23   | 64 | 87    | 17   | 57 | 74    |
| Berlin          | 33   | 44 | 77    | 13   | 57 | 70    | 12   | 49 | 61    |
| Bethlehem       | 20   | 60 | 80    | 13   | 63 | 76    | 21   | 50 | 71    |
| Claremont       | 14   | 57 | 71    | 16   | 49 | 65    | 7    | 38 | 45    |
| Colebrook       | 23   | 70 | 93    | 18   | 61 | 79    | 10   | 58 | 68    |
| Concord         | 17   | 58 | 75    | 18   | 53 | 71    | 19   | 51 | 70    |
| Dover           | 20   | 57 | 77    | 19   | 58 | 77    | 21   | 56 | 77    |
| Farmington      | 28   | 48 | 76    | 21   | 60 | 81    | 9    | 54 | 63    |
| Franklin        | 22   | 68 | 90    | 10   | 71 | 81    | 9    | 47 | 56    |

| Hill                |          |          |          | 20       | 60       | 80       | 25 | 58 | 83       |
|---------------------|----------|----------|----------|----------|----------|----------|----|----|----------|
| Hinsdale            | 10       | 72       | 82       | 11       | 45       | 56       | 10 | 52 | 62       |
| Keene               | 34       | 46       | 80       | 29       | 55       | 84       | 26 | 51 | 77       |
| Littleton           | 21       | 63       | 84       | 29       | 63       | 91       | 20 | 53 | 62       |
| Manchester          | 15       | 50       | 65       | 12       | 47       | 59       | 6  | 44 | 50       |
|                     |          |          |          |          |          |          |    |    |          |
| Marlborough         | 24       | 62       | 86       | 59       | 35       | 94       | 17 | 67 | 84<br>63 |
| Marlow<br>Middleton |          |          |          |          |          |          | 18 | 45 | 63       |
|                     |          |          |          | 10       | 20       |          | 12 | 50 | 62       |
| Milan               | 47       |          |          | 19       | 38       | 57       | 13 | 50 | 63       |
| Milton              | 17<br>17 | 52<br>64 | 69<br>81 | 19<br>15 | 53<br>61 | 72<br>76 | 14 | 56 | 70<br>64 |
| Newport             |          |          |          |          |          |          | 16 | 48 |          |
| Northumberland      | 12       | 58       | 70       | 17       | 70       | 87       | 8  | 67 | 75       |
| Pembroke            | 20       | 62       | 82       | 22       | 59       | 81       | 28 | 45 | 73       |
| Pittsfield          | 15       | 62       | 77       | 10       | 46       | 56       | 11 | 56 | 67       |
| Plymouth            | 35       | 56       | 91       | 18       | 46       | 64       | 32 | 43 | 75       |
| Raymond             | 20       | 54       | 74       | 21       | 60       | 81       | 10 | 54 | 64       |
| Rochester           | 23       | 56       | 79       | 17       | 43       | 60       | 13 | 55 | 68       |
| Somersworth         | 11       | 59       | 70       | 28       | 52       | 80       | 11 | 53 | 64       |
| Stewartstown        |          |          |          | 6        | 29       | 35       |    |    |          |
| Stratford           |          |          |          |          |          |          | 25 | 25 | 50       |
| Unity               | 20       | 40       | 60       | 10       | 50       | 60       |    |    |          |
| Warren              |          |          |          |          |          |          |    |    |          |
| Winchester          | 13       | 56       | 69       | 14       | 56       | 70       | 3  | 29 | 32       |
| AVERAGE             |          |          | 77       |          |          | 72       |    |    | 65       |
| Chesterfield        | 22       | 59       | 81       | 21       | 52       | 73       | 15 | 53 | 68       |
| Cornish             | 14       | 64       | 78       | 35       | 59       | 94       | 11 | 22 | 33       |
| Ellsworth           |          |          |          |          |          |          |    |    |          |
| Gilmanton           | 37       | 58       | 95       | 15       | 60       | 75       | 7  | 66 | 73       |
| Grantham            | 42       | 46       | 88       | 38       | 51       | 89       | 31 | 56 | 87       |
| Greenland           | 51       | 46       | 97       | 43       | 41       | 84       | 28 | 61 | 89       |
| Hampton             | 19       | 64       | 83       | 22       | 61       | 83       | 22 | 53 | 75       |
| Hampton Falls       | 17       | 72       | 89       | 23       | 59       | 82       | 8  | 65 | 73       |
| Hanover             | 67       | 32       | 99       | 41       | 53       | 94       | 42 | 43 | 85       |
| Hollis              | 37       | 56       | 93       | 30       | 66       | 96       | 30 | 48 | 78       |
| Jackson             |          |          |          |          |          |          |    |    |          |
| Lyme                | 39       | 48       | 87       | 27       | 68       | 95       | 50 | 43 | 93       |
| Mason               | 31       | 56       | 87       |          |          |          |    |    |          |
| Moultonborough      | 21       | 71       | 92       | 21       | 70       | 91       | 30 | 66 | 96       |
| Nelson              |          |          |          |          |          |          | 17 | 75 | 92       |
| New Castle          |          |          |          | 55       | 36       | 91       |    |    |          |
| Newington           |          |          |          |          |          |          |    |    |          |

| North Hampton     | 21 | 63 | 84  | 21 | 54 | 75 | 32 | 39 | 71 |
|-------------------|----|----|-----|----|----|----|----|----|----|
| Rye               | 30 | 60 | 90  | 40 | 47 | 87 | 30 | 48 | 78 |
| Salem             | 28 | 53 | 81  | 20 | 63 | 83 | 20 | 61 | 81 |
| South Hampton     | 20 | 80 | 100 |    |    |    |    |    |    |
|                   |    |    |     |    |    |    |    |    |    |
| Stratham          | 30 | 57 | 87  | 20 | 62 | 82 | 25 | 66 | 91 |
| Surry             |    |    |     |    |    |    |    |    |    |
| Waterville valley |    |    |     |    |    |    |    |    |    |
| Windham           | 18 | 70 | 88  | 22 | 64 | 86 | 18 | 60 | 78 |
| Windsor           |    |    |     |    |    |    |    |    |    |
| AVERAGE           |    |    | 89  |    |    | 87 |    |    | 79 |

### Table 8. NECAP 6th Grade Mathematics Proficiency for 2005, 2008, 2011

P4= percentage students that scored at level 4, "Proficient with Distinction" P3= percentage students that scored at level 3, "Proficient"

|                 | 2011 |    |       |    | 200 | 8     |    | 20 | 05    |
|-----------------|------|----|-------|----|-----|-------|----|----|-------|
| School District | p4   | р3 | p4+p3 | p4 | р3  | p4+p3 | p4 | р3 | p4+p3 |
| State Average   | 29   | 43 | 72    | 23 | 46  | 69    | 15 | 46 | 61    |
| Allenstown      | 10   | 33 | 43    | 12 | 33  | 45    | 2  | 44 | 46    |
| Andover         | 25   | 60 | 85    | 6  | 64  | 70    | 14 | 53 | 67    |
| Berlin          | 22   | 37 | 59    | 15 | 50  | 65    | 14 | 45 | 59    |
| Bethlehem       | 13   | 58 | 71    | 38 | 41  | 79    | 27 | 45 | 72    |
| Claremont       | 24   | 42 | 66    | 11 | 40  | 51    | 4  | 34 | 38    |
| Colebrook       | 11   | 57 | 68    | 6  | 41  | 47    | 10 | 38 | 48    |
| Concord         | 31   | 46 | 77    | 33 | 41  | 74    | 30 | 44 | 74    |
| Dover           | 33   | 40 | 73    | 23 | 48  | 71    | 17 | 47 | 64    |
| Farmington      | 12   | 45 | 57    | 5  | 42  | 47    | 5  | 27 | 32    |
| Franklin        | 19   | 37 | 56    | 7  | 44  | 51    | 10 | 29 | 39    |
| Hill            | 36   | 36 | 72    | 0  | 15  | 15    | 0  | 29 | 29    |
| Hinsdale        | 28   | 50 | 78    | 12 | 39  | 51    | 7  | 34 | 41    |
| Keene           | 22   | 55 | 77    | 22 | 43  | 65    | 15 | 47 | 62    |
| Littleton       | 24   | 48 | 72    | 16 | 44  | 60    | 20 | 45 | 65    |
| Manchester      | 14   | 39 | 53    | 9  | 37  | 46    | 5  | 35 | 40    |
| Marlborough     | 23   | 59 | 82    | 9  | 59  | 68    | 14 | 48 | 62    |
| Marlow          | 17   | 33 | 50    |    |     |       |    |    |       |
| Middleton       |      |    |       |    |     |       |    |    |       |
| Milan           | 29   | 47 | 76    | 43 | 50  | 93    | 5  | 30 | 35    |
| Milton          | 17   | 37 | 54    | 14 | 40  | 54    | 4  | 30 | 34    |
| Newport         | 18   | 60 | 78    | 12 | 49  | 61    | 10 | 40 | 50    |
| Northumberland  | 19   | 36 | 55    | 6  | 59  | 65    | 0  | 31 | 31    |
| Pembroke        | 11   | 47 | 58    | 19 | 54  | 73    | 11 | 44 | 55    |
| Pittsfield      | 31   | 37 | 68    | 21 | 40  | 61    | 9  | 37 | 46    |
| Plymouth        | 11   | 49 | 60    | 18 | 36  | 54    | 6  | 53 | 59    |
| Raymond         | 17   | 53 | 70    | 10 | 46  | 56    | 5  | 39 | 44    |
| Rochester       | 26   | 36 | 62    | 25 | 44  | 69    | 12 | 39 | 51    |
| Somersworth     | 16   | 39 | 55    | 11 | 35  | 46    | 9  | 42 | 51    |
| Stewartstown    | 0    | 50 | 50    |    |     |       |    |    |       |
| Stratford       |      |    |       | 0  | 31  | 31    | 0  | 44 | 44    |
| Unity           | 18   | 45 | 63    | 20 | 40  | 60    |    |    |       |
| Warren          |      |    |       | 25 | 33  | 58    |    |    |       |
| Winchester      | 36   | 36 | 72    | 12 | 53  | 65    | 20 | 39 | 59    |

| AVERAGE           |    |    | 65 |    |    | 58  |    |    | 50 |
|-------------------|----|----|----|----|----|-----|----|----|----|
| Chesterfield      | 26 | 49 | 75 | 22 | 49 | 71  | 7  | 35 | 42 |
| Cornish           | 25 | 45 | 70 | 6  | 31 | 37  | 4  | 70 | 74 |
| Ellsworth         |    |    |    |    |    |     |    |    |    |
| Gilmanton         | 29 | 60 | 89 | 16 | 43 | 59  | 2  | 42 | 44 |
| Grantham          | 53 | 33 | 86 | 34 | 53 | 87  | 20 | 60 | 80 |
| Greenland         | 53 | 44 | 97 | 29 | 59 | 88  | 27 | 55 | 82 |
| Hampton           | 39 | 33 | 72 | 38 | 45 | 83  | 30 | 52 | 82 |
| Hampton Falls     | 47 | 42 | 89 | 39 | 61 | 100 | 27 | 59 | 86 |
| Hanover           |    |    |    |    |    |     |    |    |    |
| Hollis            | 59 | 38 | 97 | 50 | 38 | 88  | 40 | 50 | 90 |
| Jackson           |    |    |    |    |    |     |    |    |    |
| Lyme              | 50 | 29 | 79 | 50 | 44 | 94  | 8  | 54 | 62 |
| Mason             |    |    |    |    |    |     |    |    |    |
| Moultonborough    | 27 | 56 | 83 | 34 | 51 | 85  | 16 | 55 | 71 |
| Nelson            |    |    |    |    |    |     |    |    |    |
| New Castle        | 75 | 17 | 92 |    |    |     |    |    |    |
| Newington         |    |    |    |    |    |     | 0  | 62 | 62 |
| North Hampton     | 29 | 50 | 79 | 32 | 43 | 75  | 17 | 55 | 72 |
| Rye               | 48 | 40 | 88 | 40 | 38 | 78  | 40 | 49 | 89 |
| Salem             | 23 | 52 | 75 | 21 | 52 | 73  | 10 | 54 | 64 |
| South Hampton     |    |    |    |    |    |     | 30 | 50 | 80 |
| Stratham          |    |    |    |    |    |     |    |    |    |
| Surry             |    |    |    |    |    |     |    |    |    |
| Waterville Valley |    |    |    |    |    |     |    |    |    |
| Windham           | 43 | 43 | 86 | 36 | 48 | 84  | 17 | 54 | 71 |
| Windsor           |    |    |    |    |    |     |    |    |    |
| AVERAGE           |    |    | 84 |    |    | 79  |    |    | 72 |

### Table 9. Percentage of High School Graduates Going on to a 4-year College

| School District   | % Entering 4-year college 2005 | % Entering 4-year<br>college 2008 | % Entering 4-year<br>college 2011 |
|-------------------|--------------------------------|-----------------------------------|-----------------------------------|
| State Average     | 51.40%                         | 51.20%                            | 49.70%                            |
| ALLENSTOWN        |                                |                                   |                                   |
| ANDOVER           |                                |                                   |                                   |
| BERLIN            | 36.90%                         | 40.96%                            | 25.60%                            |
| BETHLEHEM (K-6) # |                                |                                   |                                   |
| CLAREMONT         | 35.50%                         | 28.50%                            | 30.50%                            |
| COLEBROOK         | 36.40%                         | 29.80%                            | 32.30%                            |
| CONCORD           | 49.40%                         | 45.40%                            | 47.60%                            |
| DOVER             | 41.80%                         | 43.20%                            | 43.60%                            |
| FARMINGTON        | 29.30%                         | 21.10%                            | 30.40%                            |
| FRANKLIN          | 18.10%                         | 23.20%                            | 20.40%                            |
| HILL              |                                |                                   |                                   |
| HINSDALE          | 37.10%                         | 48.20%                            | 23.40%                            |
| KEENE             | 59.20%                         | 56.80%                            | 44.50%                            |
| LITTLETON         | 53.50%                         | 52.20%                            | 35.10%                            |
| MANCHESTER        | 49.00%                         | 46.90%                            | 36.60%                            |
| MARLBORO          |                                |                                   |                                   |
| MARLOW            |                                |                                   |                                   |
| MIDDLETON         |                                |                                   |                                   |
| MILAN             |                                |                                   |                                   |
| MILTON            | 27.30%                         | 20.60%                            | 32.60%                            |
| NEWPORT           | 34.90%                         | 33.60%                            | 37.90%                            |
| NORTHUMBERLAND    | 32.40%                         | 29.30%                            | 30.00%                            |
| PEMBROKE          | 36.10%                         | 34.90%                            | 29.00%                            |
| PITTSFIELD        | 25.80%                         | 30.20%                            | 30.60%                            |
| PLYMOUTH (K-8) #  |                                |                                   |                                   |
| RAYMOND           | 31.20%                         | 34.20%                            | 40.90%                            |
| ROCHESTER         | 39.10%                         | 32.40%                            | 34.60%                            |
| SOMERSWORTH       | 40.00%                         | 46.90%                            | 37.50%                            |
| STEWARTSTOWN      |                                |                                   |                                   |
| STRATFORD         |                                |                                   |                                   |
| UNITY             |                                |                                   |                                   |
| WARREN            |                                |                                   |                                   |
| WINCHESTER        |                                |                                   |                                   |

| Average             | 37.53% | 36.76% | 33.85% |
|---------------------|--------|--------|--------|
| CHESTERFIELD        |        |        |        |
| CORNISH             |        |        |        |
| ELLSWORTH           |        |        |        |
| GILMANTON           |        |        |        |
| GRANTHAM            |        |        |        |
| GREENLAND           |        |        |        |
| HAMPTON (K-8) #     |        |        |        |
| HAMPTON FALLS (K-8) |        |        |        |
| #                   |        |        |        |
| HANOVER (K-5) #     |        |        |        |
| HOLLIS (K-6) #      |        |        |        |
| JACKSON             |        |        |        |
| LYME                |        |        |        |
| MASON               |        |        |        |
| MOULTONBOROUGH      | 55.30% | 61.70% | 64.30% |
| NELSON              |        |        |        |
| NEW CASTLE          |        |        |        |
| NEWINGTON           |        |        |        |
| NORTH HAMPTON (K-   |        |        |        |
| 8) #                |        |        |        |
| RYE                 |        |        |        |
| SALEM               | 61.90% | 59.60% | 63.30% |
| SOUTH HAMPTON       |        |        |        |
| STRATHAM (K-5) #    |        |        |        |
| SURRY               |        |        |        |
| WATERVILLE VALLEY   |        |        |        |
| WINDHAM             |        |        |        |
| WINDSOR             |        |        |        |
| Average             | 58.60% | 60.65% | 63.80% |

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