



The  
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James M. Jeffords Center's  
***Vermont Legislative Research Service***



**Increasing the Compulsory Age for School Attendance**

In the 2007-2008 School Year, Vermont had the second highest rate of graduation in the nation, at 89.3%, behind only Wisconsin, at 89.6%; some states have graduation rates as low as 51.3%.<sup>1</sup> Graduation rates have significant consequences for society. Individuals who graduate from high school earn on average \$260,000 more over the course of their lifetime than individuals who do not obtain a high school diploma.<sup>2</sup> One of the ways that states have attempted to combat the problem of low graduation rates is by increasing the compulsory age of attendance to 18. As of 2010, 21 states set their compulsory age of attendance at 18.<sup>3</sup> Other states, such as Massachusetts and New Jersey, are currently considering legislation to do so as well.<sup>4</sup> In addition, President Obama has recently called on other states to follow suit and increase their compulsory age to 18.<sup>5</sup> In order to determine the overall effectiveness of increasing the legal age as a means of keeping kids in school, it is necessary to examine case studies of states that have increased the age to 18.

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<sup>1</sup> Sunny Deyé, "A Path to Graduation for Every Child: State Legislative Roles and Responsibilities," National Conference of State Legislatures, January 2011, accessed April 17, 2012, <http://www.ncsl.org/documents/educ/NCSLDropoutTaskForceReport.pdf>, p. 4.

<sup>2</sup> Cecilia E. Rouse, "The Labor Market Consequences of an Inadequate Education," paper Prepared for the Equity Symposium on "The Social Costs of Inadequate Education" at Teachers' College, Columbia University, September 2005, accessed April 26, 2012, [http://devweb.tc.columbia.edu/manager/symposium/Files/77\\_Rouse\\_paper.pdf](http://devweb.tc.columbia.edu/manager/symposium/Files/77_Rouse_paper.pdf), p. 2.

<sup>3</sup> National Center for Education Statistics, "Digest of Education Statistics," Table 174: Age range for compulsory school attendance and special education services, and policies on year-round schools and kindergarten programs, by state: Selected years, 2000 through 2010, accessed April 26, 2012, [http://nces.ed.gov/programs/digest/d10/tables/dt10\\_174.asp](http://nces.ed.gov/programs/digest/d10/tables/dt10_174.asp).

<sup>4</sup> Steve Annear, "Mass. Considers Raising School Dropout Age to 18," *Metro Boston*, March 9, 2012, accessed April 10, 2012, <http://www.metro.us/boston/local/article/1119786--mass-considers-raising-school-dropout-age-to-18>; Matt Friedman, "Bill Raising N. J. Dropout Age to 18 Approved by Senate Education Committee," *NJ.com*, February 6, 2012, accessed April 10, 2012, [http://www.nj.com/news/index.ssf/2012/02/bill\\_raising\\_nj\\_dropout\\_age\\_to.html](http://www.nj.com/news/index.ssf/2012/02/bill_raising_nj_dropout_age_to.html).

<sup>5</sup> Lesli A Maxwell, "Obama Rekindles State Debates on Dropout Age: But experts warn it will take more than new laws to put a real dent in dropout rates," *Education Week*, February 7, 2012, accessed March 15, 2012, [http://www.edweek.org/ew/articles/2012/02/08/20compulsory\\_ep.h31.html](http://www.edweek.org/ew/articles/2012/02/08/20compulsory_ep.h31.html).

## The Effectiveness of a Higher Compulsory Education Age

Statistical research has shown that increasing the compulsory age of attendance will increase an individual's probability to complete high school by roughly sixteen percent.<sup>6</sup> In addition a study published in the *Journal of Public Economics* found a positive correlation between years of educational attainment and school-leaving age, using data from the 1950-2000 censuses.<sup>7</sup> These findings of benefits of higher age levels of compulsory education are supported by other research in the U.S., U.K., Canada, and Norway and include benefits such as lower crime rates and reductions in teen pregnancies.<sup>8</sup> As well as increasing the compulsory age of attendance, many states have had various degrees of success in decreasing the rate at which students drop out by initiating a variety of programs in order to supplement an increased compulsory age of attendance. Below is an overview of some of these efforts.

### State Experiences

#### Wisconsin

Wisconsin is one of the states that utilized additional programs to supplement their higher mandatory attendance age. In 2002, the Milwaukee Public Schools system (MPS) began a program which allowed parents of students considered 'at risk' of dropping out to have a choice in what school they wanted their children to attend. This program also provided vouchers to these families, allowing the students to attend local private high schools. This program is known as the Milwaukee Parental Choice Program, and appears to have been a success for the school district. Participation in this program has been shown to increase the likelihood of graduation by 4-7% in addition to students scoring higher on reading evaluations than traditional public school students in Milwaukee.<sup>9</sup>

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<sup>6</sup> Jennie W. Wenger, "Does The Dropout Age Matter? How Mandatory Schooling Laws Impact High School Completion and School Choice," *Public Finance and Management*, Fall 2002, accessed May 3, 2012, [http://findarticles.com/p/articles/mi\\_qa5334/is\\_4\\_2/ai\\_n28975681/pg\\_10/?tag=content:col1](http://findarticles.com/p/articles/mi_qa5334/is_4_2/ai_n28975681/pg_10/?tag=content:col1), p. 4.

<sup>7</sup> Philip Oreopoulos, "Do Dropouts Drop Out Too Soon? Wealth, Health and Happiness from Compulsory Schooling," *Journal of Public Economics* 91, February 13, 2007, accessed May 4, 2012, [http://homes.chass.utoronto.ca/~oreo/research/compositions/do\\_dropouts\\_drop\\_out\\_too\\_soon.pdf](http://homes.chass.utoronto.ca/~oreo/research/compositions/do_dropouts_drop_out_too_soon.pdf), pp. 6-8.

<sup>8</sup> Philip Oreopoulos, "Estimating average and local average treatment effects of education when compulsory schooling laws really matter," *American Economic Review* 96 (March 2006), 152-175; Lance Lochner and Enrico Moretti, "The effect of education on crime: evidence from prison inmates, arrests, and self-reports," *American Economic Review* 94 (2004), 155-189; Daren Acemoglu and Joshua Angrist, "How large are human capital externalities? Evidence from compulsory schooling laws," *NBER Macroannual* (2001), 9-59.

<sup>9</sup> Patrick J. Wolf, "The Comprehensive Longitudinal Evaluation of the Milwaukee Parental Choice Program: Summary of Final Reports," School Choice Demonstration Project, Department of Education Reform, University of Arkansas, February 2012, accessed May 4, 2012, [http://www.uaedreform.org/SCDP/Milwaukee\\_Eval/Report\\_36.pdf](http://www.uaedreform.org/SCDP/Milwaukee_Eval/Report_36.pdf), p. 4.

## New Mexico

New Mexico has one of the highest dropout rates in the nation<sup>10</sup> and has recognized the importance in bringing this number down and bringing the graduation rate up. To do this, New Mexico not only raised the compulsory attendance age to 18, but initiated a number of support programs aimed at helping students to stay in school. One of these programs requires students to create a “next-step plan” at the end of each successive grade. This entails a plan outlining future coursework needed in order to graduate, which is then signed by the student, principal, and parents. During senior year, students are required to complete a “final next-step plan” in which they must show whether or not they have committed to a college, trade school, apprenticeship, internship, military service, or a job.

## New Hampshire

One state similar in demographics to Vermont, New Hampshire, has been working on increasing statewide graduation rates since 2005. To start their education reform, New Hampshire highlighted the schools throughout the state that proved to have the most problems. After this, staff members at these schools were taught how to pick out students that appeared to be heading towards dropping out of school. By acknowledging that these students were having problems, the teachers and other trained staff members were able to focus on the specific needs of these students and find out how to make attending school a more beneficial and engaging experience for them.<sup>11</sup>

In July 2009, the state increased the compulsory attendance age to 18 from the previous age of 16. Figure 1, below, using data taken from the New Hampshire Department of Education, documents New Hampshire’s dropout rate from 2000-2010. In this graph ‘Annual Dropout Percentage’ represents the percentage of students who will drop out each year, while ‘Estimated Cumulative Rate’ represents the percentage total students currently enrolled who will not graduate. The data here shows that following the implementation of programs aimed at curbing the dropout rate, New Hampshire saw a significant decrease in the number of students dropping out. The New Hampshire Deputy Education Commissioner, Paul Leather, stated that “raising the attendance age itself would have been mostly useless...The most significant factors in driving down the dropout rate have been the creation of multiple pathways to graduation, making the state’s programs in career and technical education and adult education more accessible and setting up personalized learning plans that allow students to earn credits for what Mr. Leather calls ‘anytime,

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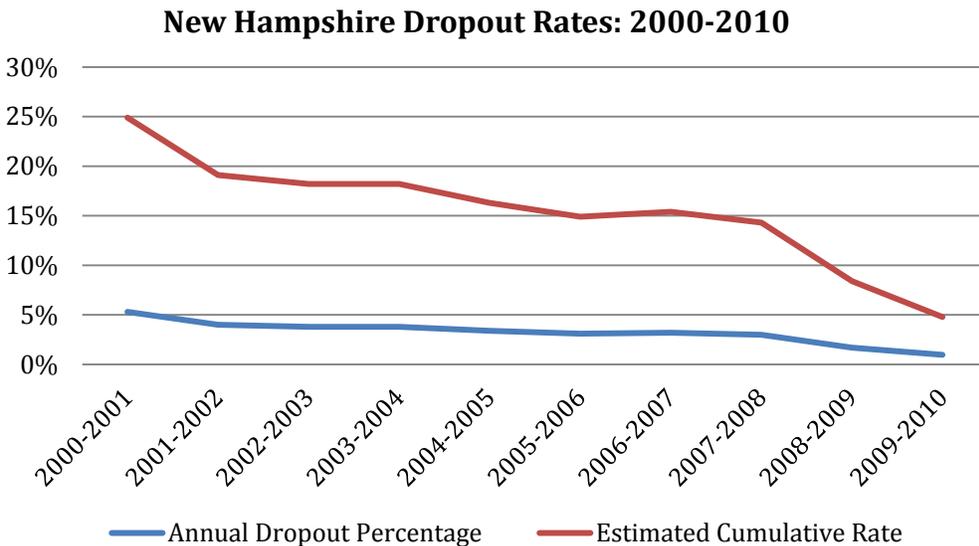
<sup>10</sup> Ronald Jay Werner-Wilson, “Briefing Report: The New Mexico Dropout Rate: Contributing Factors and Implications for Policy,” The New Mexico Family Impact Seminar a service project for the New Mexico Legislature

provided by: The Department of Extension Home Economics, The Department of Family and Consumer Sciences

in the College of Agricultural, Consumer and Environmental Sciences at New Mexico State University, December 2009, accessed April 12, 2012, [http://www.familyimpactseminars.org/s\\_nmfis05report.pdf](http://www.familyimpactseminars.org/s_nmfis05report.pdf), p. 9.

<sup>11</sup> Lesli A Maxwell, “Obama Rekindles State Debates on Dropout Age: But experts warn it will take more than new laws to put a real dent in dropout rates,” *Education Week*, February 7, 2012, accessed March 15, 2012, [http://www.edweek.org/ew/articles/2012/02/08/20compulsory\\_ep.h31.html](http://www.edweek.org/ew/articles/2012/02/08/20compulsory_ep.h31.html).

everywhere learning,' or extended learning opportunities."<sup>12</sup> This is a common theme among states that have raised the compulsory drop out age: that it is not enough when implemented alone. A strong system of programs, staff, and utilities is needed in order to support students in addition to raising the age.



**Figure 1: New Hampshire Dropout Rate: 2000-2010.**<sup>13</sup>

### Financial Effects

In 2010 Vermont spent 32.9% of its state budget on K-12 education.<sup>14</sup> Research has shown that increasing the age of compulsory education can effectively lower the dropout rate if it is accompanied by supplementary programs. At first glance the upfront cost of programs to support increasing the legal age for dropping out can be staggering. A study done by the Maryland State Department of Education estimated that, had no students dropped out in the 2007-2008 school year, it would have cost the state an additional \$245 million to accommodate classrooms, supplies, and staff for these students.<sup>15</sup> However this is an upfront cost, while the benefits of a high school diploma are an investment for the state,

<sup>12</sup> Lesli A Maxwell, "Obama Rekindles State Debates on Dropout Age: But experts warn it will take more than new laws to put a real dent in dropout rates," *Education Week*, February 7, 2012, accessed March 15, 2012, [http://www.edweek.org/ew/articles/2012/02/08/20compulsory\\_ep.h31.html](http://www.edweek.org/ew/articles/2012/02/08/20compulsory_ep.h31.html).

<sup>13</sup> New Hampshire Department of Education, "Dropouts and Completers," accessed April 26, 2012, <http://www.education.nh.gov/data/dropouts.htm>.

<sup>14</sup> Vermont Legislative Joint Fiscal Office, "2010 Fiscal Fact\$", Joint Fiscal Committee, 2011, accessed December 13, 2011, <http://www.leg.state.vt.us/jfo/publications/2010%20Fiscal%20Facts.pdf>, p. 14.

<sup>15</sup> Task Force to Study Raising the Compulsory Public School Attendance Age to 18, "Attending to Learn: The Implications of Raising the Compulsory Age for School Attendance," Maryland State Department of Education, December 1, 2007, accessed May 4 2012, <http://www.marylandpublicschools.org/NR/rdoonlyres/0700B064-C2B3-41FC-A6CF-D3DAE4969707/15419/FINALCOMPULSORYATTENDANCETASKFORCEREPORT.pdf>, p. 7.

society, and student. Research has also shown a positive correlation between increased graduation rates and reduction in crime, adding that increasing the graduation rate of all males 20-60 by 1% would save the U.S. \$1.4 billion per year in crime related costs.<sup>16</sup>

### **Apprenticeship programs**

As President Obama mentioned in his 2012 State of the Union address, vocational training, apprenticeships, and tech schools are a good alternative to formal education, both during high school and after.<sup>17</sup> Compared to many other advanced nations, the US places little emphasis on vocational education.<sup>18</sup> Countries in northern Europe such as Switzerland, Sweden, and Poland place far more emphasis on vocational training: “after grade 9 or 10 between 40 and 70 percent of young people opt for an educational program that typically combines classroom and workplace learning over the next three years.”<sup>19</sup>

One reason these kinds of programs could be particularly successful is that much of the funding comes from employer organizations. For example, in countries such as Germany and Sweden the government subsidizes about half of these programs; the rest of the funding comes from the employers based on the assumption that the best way to ensure a qualified work force is to invest directly in the development of young workers. Additionally, these kinds of programs can be beneficial to the industries because these apprentices, if paid at all, can earn less than minimum wage. These programs are beneficial to the trainee because if they work hard they are likely to receive a full paying job soon after.<sup>20</sup>

Corporate grants for these types of programs do exist in the U.S. The MetLife Foundation annually offers grants to The After-School Corporation, a national non-profit organization that works to alter public policy and get funding for educational opportunities for children. The MetLife Foundation specifically gave these grants in order to fund apprenticeship programs in underserved communities in Chicago. These programs offer high school students paid internships during the summer in which they receive real life experience and

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<sup>16</sup> Lance Lochner, Enrico Moretti, “The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports,” *The American Economic Review*, Vol. 94, No. 1, March, 2004, accessed May 4, 2012, <http://emlab.berkeley.edu/~moretti/lm46.pdf>, p. 27.

<sup>17</sup> Tamar Lewin, “Obama Wades Into Issue of Increasing Dropout,” *The New York Times*, January 25, 2012, accessed March 22, 2012, <http://www.nytimes.com/2012/01/26/education/obama-wades-into-issue-of-raising-dropout-age.html? r=1>.

<sup>18</sup> Ronald Fergusson, Robert B. Schwartz, and William C. Symonds, “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century,” Harvard University, February 2011, accessed March 29, 2012, [http://www.gse.harvard.edu/news\\_events/features/2011/Pathways\\_to\\_Prosperty\\_Feb2011.pdf](http://www.gse.harvard.edu/news_events/features/2011/Pathways_to_Prosperty_Feb2011.pdf), pp. 14-16.

<sup>19</sup> Ronald Fergusson, Robert B. Schwartz, and William C. Symonds, “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century,” pp. 14-16.

<sup>20</sup> Ronald Fergusson, Robert B. Schwartz, and William C. Symonds, “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century,” pp. 14-16.

work-force training. The success of this program has prompted MetLife to expand its funding in order to extend the program to other large U.S. cities, including New York.<sup>21</sup>

The Organization for Economic Co-Operation and Development (OECD), “an international economic research and discussion organisation, based in Paris,”<sup>22</sup> produced two reports; ‘Learning for Jobs’ and ‘Jobs for Youth,” that examined American and foreign vocational training and apprenticeship programs. These two thorough studies, which consisted of 33 countries including the US, involved country self-assessments, site visits by experts, and extensive quantitative data collection.<sup>23</sup> In conclusion, these studies deemed that individuals in countries with stronger vocational training programs find it easier to transition into the workforce than Americans. “In Germany, for example, over 80 percent of young adults found jobs within six months of completing their education in 2007, versus just 48 percent in the U.S. Similarly, countries with strong apprenticeship systems had fewer “poorly integrated new entrants”—those who are still struggling to settle into a career path five years after leaving school—than the U.S.”<sup>24</sup>

Although other countries might have more extensive apprenticeship programs and vocational training than the US, there are still some success stories that further demonstrate the potential of such programs. Project Lead the Way (PLTW), an engineering program launched in New York high schools in 1997, has now expanded to 3,500 schools in all 50 states. After completion of the program, “Some 80 percent of those who complete the program say they will study engineering, technology or computer science in college, and their retention rate in these courses is higher than that of students who did not complete PLTW.”<sup>25</sup>

A longitudinal MDRC study found that this kind of program improved high school grades of at-risk students. The Wisconsin Youth Apprenticeship Program, for example, is the largest apprenticeship program for youth offered nationally. This program has had a high level of success, with over 75% of graduates enrolled in college, over 60% (significantly larger than the national average) completing their degrees, and 85% of graduates getting jobs out of college. Additionally, 98% of employers involved in this program would recommend it to other employers.<sup>26</sup> Other employee based programs such as Year Up have also been very successful, with over 100 employers contributing upwards of \$20,000 for each intern, each of which plans on taking on more interns and recommending the program to more

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<sup>21</sup> Susan Brenna, “Successful High School Apprenticeship Program Goes National,” The After-School Corporation, June 20, 2008, accessed April 3, 2012, <http://www.tascorp.org/content/blog/detail/2122>.

<sup>22</sup> BBC News: World Edition, “OECD: What is it and what Does it Do?” *British Broadcasting Channel*, February 12, 2003, accessed April, 5, 2012, <http://news.bbc.co.uk/2/hi/business/92719.stm>.

<sup>23</sup> Ronald Fergusson, Robert B. Schwartz, and William C. Symonds, “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century,” pp.19-20.

<sup>24</sup> Ronald Fergusson, Robert B. Schwartz, William C. Symonds, “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century,” pp. 19-21.

<sup>25</sup> Ronald Fergusson, Robert B. Schwartz, and William C. Symonds, “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century,” p. 27.

<sup>26</sup> Ronald Fergusson, Robert B. Schwartz, and William C. Symonds, “Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21<sup>st</sup> Century,” p. 32.

employers.<sup>27</sup>

## Conclusion

Many states across the nation have taken initiatives to increase the compulsory dropout age to 18 years old. Research has shown that in order to have the intended effect, supplementary programs are necessary in order to support the setting of a higher dropout age. While the upfront costs of these programs can be off-putting, research indicates that in the long run there is an overall benefit for society, the economy, and the students themselves.

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Prepared by Jordan White, Ali Van Baars, and Adam Elias in response to a request from the Senate Education Committee, under the supervision of graduate student Kate Fournier and Professor Anthony Gierzynski on May 17, 2012.

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Disclaimer: This report has been compiled by undergraduate students at the University of Vermont under the supervision of Professor Anthony Gierzynski. The material contained in the report does not reflect the official policy of the University of Vermont.

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<sup>27</sup> Terry Grobe, Elyse Rosenblum, and Todd Weissman, "Dollars and Sense: How "Career First" Programs Like Year Up Benefit Youth and Employers," Jobs for the Future, May 2010, accessed March 29, 2012, [http://www.jff.org/sites/default/files/DollarsSense\\_052510v3.pdf](http://www.jff.org/sites/default/files/DollarsSense_052510v3.pdf), p. 4.