

INVESTMENT IN SCHOOL HEALTH CAPACITY

Payoffs in HEALTH, ACHIEVEMENT and STRONGER COMMUNITIES

EXECUTIVE SUMMARY



Oregon
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PUBLIC HEALTH DIVISION
Center for Prevention and Health Promotion
Adolescent and School Health Program

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A Coordinated School Health Approach

EXECUTIVE SUMMARY

Raising the high school graduation rate is critical to improving the health and prosperity of Oregonians. Higher levels of education are associated with longer life, and an increased likelihood of obtaining and understanding basic health information and services needed to make appropriate health decisions.ⁱ Lower levels of education predict higher levels of health risks, such as obesity, substance abuse, and violence.ⁱⁱ Additionally, better educated Oregonians are more likely to find well-paid employment, less likely to commit crimes, and less likely to rely upon assistance programs such as Medicaid.ⁱⁱⁱ

Graduating from high school requires successful progression in several areas of a young person’s life. Teachers, school administrators and families understand that a student’s emotional, social and physical health impact educational factors such as attendance, test scores,

and the ability to pay attention in class. Health-related barriers to learning — such as hunger, depression, and substance abuse — make it difficult for students to be academically or behaviorally successful in school. Because the health and educational status of populations are deeply entwined, it is desirable to identify interventions that support both educational and health goals.

Coordinated School Health Approach

A consensus exists on how to address the connections between health and educational outcomes: A multi-component, coordinated approach is most effective at improving students’ health and academic success.^{iv} As described by the Center for Disease Control and Prevention’s Coordinated School Health Model, a comprehensive approach to school health includes the elements in figure 1.

FIGURE 1



However, the existence of each of these elements in isolation is not enough. Coordination is necessary to ensure that school health resources are used in a strategic and sustainable manner.^v Basic infrastructure and capacity are foundational in supporting effective school health programs and policies. This capacity is created by critical school health components that are recognized as essential for sustainable, evidence-based school health approaches.^{vi}

Core Capacity Benchmark

In this report we created a benchmark for the capacity and infrastructure needed to support a multi-component, coordinated school health effort. We labeled this benchmark “Core Capacity”. We assessed the prevalence of Core Capacity in Oregon public secondary schools and examined the associations between the presence of Core Capacity and student health and academic outcomes including high school graduation. We then estimated the return on investment (ROI) of implementing Core Capacity in every public secondary school in the state.

To create a benchmark for Core Capacity, we utilized measures from the Center for Disease Control and Prevention’s School Health Profiles Survey. These measures reflect findings from national and state school health research.^{vii} For the purposes of this report we have named the concurrent existence of the following components Core Capacity for

Core Capacity Benchmark

- *School Health Coordinator*
- *Health focused self-assessment*
- *Health goal and objective in School Improvement Plan*
- *School health advisory group*

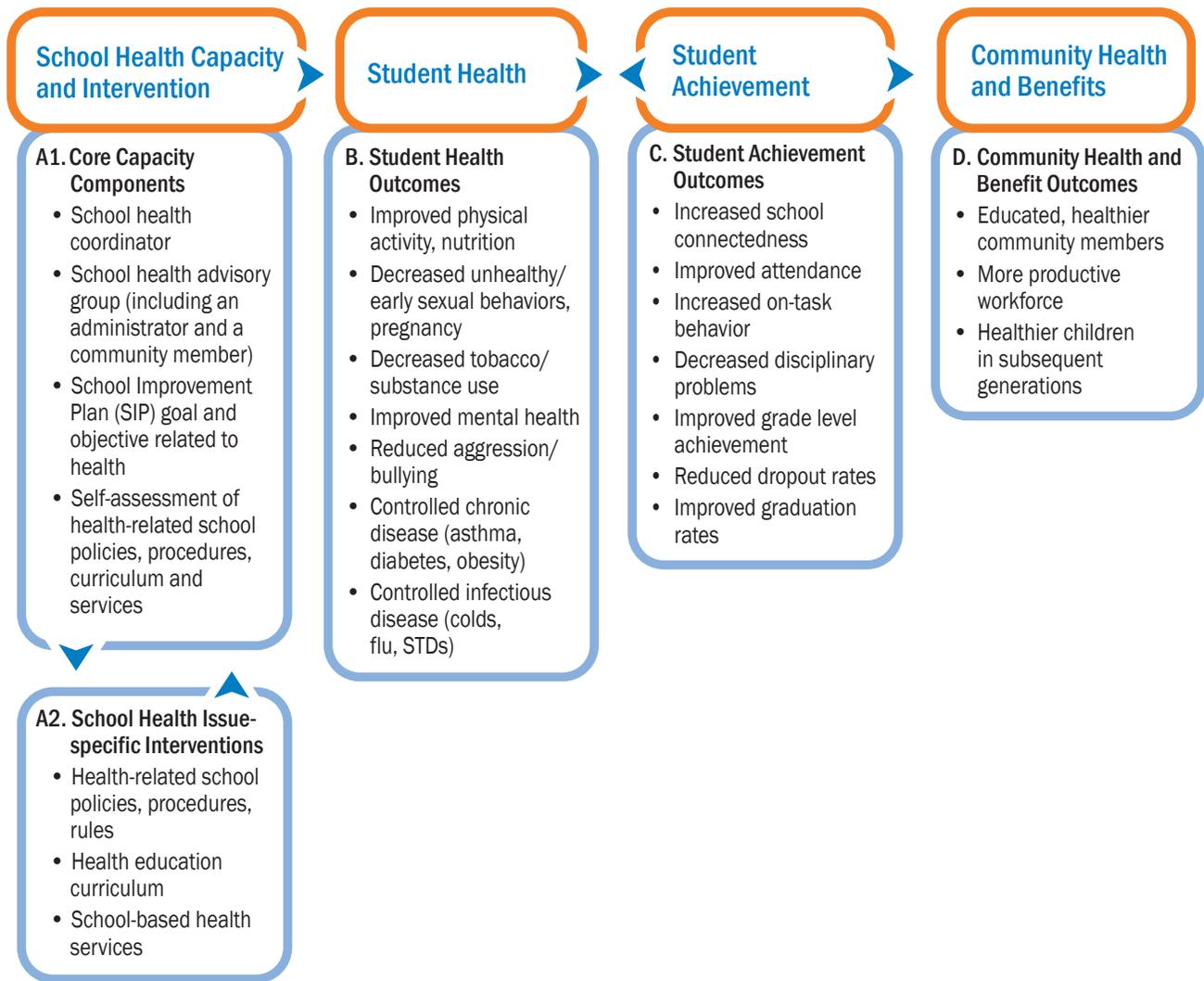
school health: (1) having a school health coordinator; (2) conducting a health focused self-assessment¹; (3) having a health-related School Improvement Plan goal and objective; and (4) having a school health advisory group that includes an administrator and a community member. Together these components represent the staffing, data, leadership, accountability, and broad support that is needed to effectively support health and achievement in school settings.^{viii}

Core Capacity and Health

Associations among data that were analyzed, coupled with published research, support the concept of progressive links between Core Capacity, student health, achievement and community-level benefits. Figure 2 illustrates this logical path.

¹ Common school health assessments include tools such as the CDC’s School Health Index, the Alliance for a Healthier Generation’s Healthy Schools Program Inventory, and ASCD’s Healthy School Report Card. These tools assess health-related school policies, procedures, curriculum, and services.

FIGURE 2: SCHOOL HEALTH LOGIC MODEL



Core Capacity in Oregon

We comprehensively explored associations between school-level Core Capacity and outcomes from a variety of data sources including:

- District-level disciplinary and attendance data;
- School-level health-related policies and procedures;
- School-level graduation rates; and
- Student-level health factors and achievement.

Only about one in nine (11.1%) Oregon secondary schools had achieved Core Capacity in 2010. Among schools with Core Capacity, we saw greater implementation of evidence-based policies and practices to support healthy school environments (e.g., implementing a bullying prevention program). We explored differences in Core Capacity status by school size, socio-economic status of the student population, and urban/rural community location of the school. We did not find that any of these factors were associated with having Core Capacity.

Core Capacity and Health Indicators

We linked student-level information from the Oregon Healthy Teens Survey and school-level information from the Oregon School Health Profiles Survey to examine associations between school-level Core Capacity and student health experiences. Across health indicators, there were generally consistent associations between having Core Capacity and more students with healthy behaviors. Nine of 11 student-level health measures among eighth-graders, and 10 of 11 student-level health measures among 11th-graders, were higher among students in schools with Core Capacity as compared to students in schools without Core Capacity.²

Core Capacity and Education Indicators

Identifying potential connections between school health capacity and educational indicators was a critical goal for this research. While findings varied in their statistical significance, the following relationships were observed:

- For both middle schools and high schools, the percentage of students getting good grades was higher in schools that reported having all four components of Core Capacity than in schools without Core Capacity; in high schools, the difference was statistically significant.

- Over the period of a school year, high schools³ with Core Capacity were in districts that had an average of three fewer attendance policy violations per 100 students per year than schools without Core Capacity.⁴
- For disciplinary actions, high schools with Core Capacity were in districts that had an average of four fewer actions per 100 students per year than high schools⁵ without that capacity.⁶

A major finding in this research was the relationship between Core Capacity and high school graduation.⁷ The graduation rates for students in schools with Core Capacity were higher for all groups of students than for students in schools without Core Capacity. However, the magnitude of the difference varied by sub-group: all students (7% higher), males and females (6%–8% higher), minority youth (4% higher), and economically disadvantaged students (2% higher). All differences were statistically significant except for economically disadvantaged students.

Return on Investment

Building on the differences in graduation rates, a return on investment (ROI) analysis was conducted as part of this study to examine the potential economic impact

² Significant associations present for 8th grade are “eating breakfast” and “drinking 3 or fewer sodas”; significant associations for 11th grade are “eating 5+ fruits and vegetables,” “eating breakfast,” “drinking 3 or fewer sodas” and “not feeling harassed.”

³ This was not evaluated at the middle school level.

⁴ An attendance policy violation means that a student had eight unexcused absences over a four-week period.

⁵ This was not evaluated at the middle school level.

⁶ Disciplinary actions include: expulsion, in-school suspension, out of school suspension, truancy, and removal to an alternate educational setting.

⁷ The sample for this piece of the analysis consisted of 104 high schools. Fourteen of these schools had Core Capacity.

of implementing Core Capacity in all Oregon public secondary schools. Benefits estimated include effects on personal income, tax revenue, Medicaid costs, and crime-related costs.

The ROI analysis was based on the increased high school graduation rate found in schools that had Core Capacity as compared to schools that did not have Core Capacity. There are a wide array of factors that impact graduation rates, and we do not attribute the difference to come solely from the presence of Core Capacity. While we observed a 7% higher on-time graduation rate among high schools with Core Capacity, we chose a more conservative 1% difference to estimate possible returns on investment. This approach avoids overestimation but illustrates the potential benefits of increasing Core Capacity in schools. We defined the costs of supporting Core Capacity in a school as that of supporting a half-time school health coordinator.

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We selected this as a proxy because of the consistent research that cites the importance of having a school health coordinator and the ability to quantify the costs of this position.^{ix,x}

TABLE 1

COST/BENEFIT (Lifetime unless otherwise noted)	OREGON	TOTAL (Oregon + U.S.)
Taxpayer Cost of Implementing School Health Core Capacity (for one year)	(\$18,861,795)	(\$18,861,795)
Benefit from Reduced Medicaid Enrollment	\$6,131,177	\$16,379,982
Benefit from Increased Tax Revenue	\$8,012,997	\$23,717,117
Benefit from Increased Household Earnings (Post-tax)	\$80,926,190	\$80,926,190
Benefit from Reductions in Crime	\$3,814,812	\$3,814,812
TOTAL Lifetime Benefit (2010 Dollars)	\$98,885,176	\$124,838,100
Projected Return on Investment from Implementing School Health Core Capacity	\$5.24:\$1	\$6.62:\$1

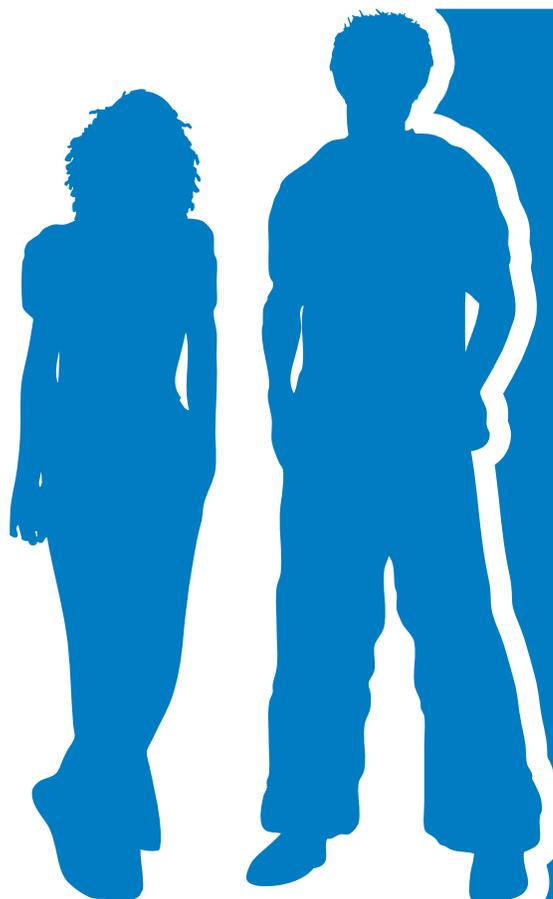
Comparing this cost to our expected *lifetime benefits* in health, crime, income and tax revenue, **we expect between \$5.24 and \$6.62 to be saved for every dollar spent to achieve Core Capacity in all Oregon public secondary schools.**

Improving school health capacity and student health is logical and feasible, but it requires a meaningful, sustained commitment. This is especially true in a context where health-promoting efforts are competing against well-funded marketing influences that promote unhealthy choices among youth (e.g., unhealthy foods, alcohol and tobacco).

The impact of high school graduation can be seen beyond the life span of just one generation. The children of high school graduates are more likely to be graduates themselves and reap the benefits of better health, longer life and increased prosperity.^{xi} High school graduation is transformative for a population. The evidence for this is so strong that graduation from high school in four years is now a leading public health indicator for the nation.^{xii}

The *Investing in School Health Capacity* report provides a comprehensive analysis of the connections between school capacity to address student health and a range of health, educational and community benefits. These results suggest that an investment to support the development of Core Capacity within schools is a logical and potentially cost-effective strategy to support good health, educational achievement and economic benefits critical to the well-being of Oregonians.

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