# Wilder Research

## SHIP School Physical Activity Intervention Final evaluation report

Prepared for Blue Earth County Public Health as part of their SHIP grant evaluation

Blue Earth County is working with schools in their service area to increase physical activity among students by creating opportunities for physical activity in the classroom and promoting non-motorized transportation to and from school. The project is part of a larger effort by Blue Earth County Public Health, which is funded by the Minnesota Department of Health's Statewide Health Improvement Program (SHIP).

This report provides a snapshot of the overall impact of this initiative, with emphasis on the most recent evaluation period (January 2011 through June 2011). It was prepared by Wilder Research. Blue Earth SHIP compiled existing data and collected original data as a part of this evaluation, using tools developed by Wilder Research as well as existing assessment tools.

#### Reach

There are a total of approximately 9,938 school-age children who live in Blue Earth County. Blue Earth SHIP is working with nine schools in the area on implementing the Stimulating Maturity through Accelerated Readiness Training (S.M.A.R.T.) curriculum in their classrooms. SHIP staff are also working with Rosa Parks Elementary and Roosevelt Elementary on a Safe Routes to School/Walking School Bus initiative. The following table shows the total number of students who attend these schools, and the number of students who have been directly impacted by this initiative. The initiative has impacted a total of 1,697 students, which is 17 percent of the total school-age population in Blue Earth County.

	Students directly affected	Total student population
Maple River East Elementary School	180	366
Maple River West Elementary School	100	200
Kennedy Elementary	170	399
St. Clair Elementary	92	266
Loyola Elementary	22	44
Franklin Elementary	217	375
Washington Elementary	200	411
Eagle Lake Elementary	300	536
Hoover Elementary	200	509
Rosa Parks Elementary	54	317
Roosevelt Elementary	162	367
Totals	1,697	3,790

#### Activities

Schools are implementing two strategies as part of this initiative: Safe Routes to School and Active Classrooms.

#### Safe Routes to School

The City of Mankato and the Mankato School District are working to develop safe walking routes to school for Rosa Parks Elementary students through the use of a Walking School Bus. Fifty-one parents/guardians at Rosa Parks Elementary were surveyed in August 2010 about their thoughts on their children walking and biking to/from school each day to gauge interest in the initiative. Busy roads, traffic, and safety concerns were identified as barriers that might prevent them from allowing their children to walk or bike to/from school. More adult supervision, however, would encourage their families to walk or bike to/from school more often.

The Walking School Bus was implemented in September 2010 with 25 students and six adult volunteers. Walking School Bus passes were created and issued to students when they signed up for the program. Six different routes were created and an adult volunteer was recruited to monitor each. To address safety concerns, volunteers were issued high visibility vests and walkie-talkies to allow for communication with the school and other adult volunteers. Through the SHIP grant, the City of Mankato also painted crosswalks and installed additional stop signs at intersections for the Walking School Bus, permanent Walking School Bus signs along walking routes, and pedestrian crossing signs. Over 300 Rosa Parks Elementary students also participated in "Stop, Look, and Listen," an interactive lesson by CLIMB Theatre that teaches children how to cross a street safely by practicing on an imitation street. The Walking School Bus was promoted throughout the elementary school building, and the program was discussed with parents at an Open House event.

Rosa Parks Elementary School also assisted in the creation of a Walking School Bus at Roosevelt Elementary. The program began in early May 2011 with 162 students participating. Blue Earth SHIP staff provided the schools with start-up information including brochures, posters, and fliers. Teachers at Roosevelt Elementary completed the Safe Routes to School (SRTS) Students Arrival and Departure Tally Sheet in their classrooms during May 2011 to assess student travel patterns at baseline. The SRTS Tally Sheet helps track the number of children walking and biking to and from school. This information, when gathered before and after a SRTS activity or project, can help schools measure changes in walking, biking, and other forms of travel to and from school. The most common mode of transportation to and from school for students was in a family vehicle, although students reported walking to school 158 times and biking to school 58 times at baseline. These results, when compared with follow-up tallies in the future, can be used to assess how students travel to school, and how to tailor the SRTS intervention for Roosevelt Elementary.

A workshop on how to develop a comprehensive Safe Routes to School plan was also held by Blue Cross and Blue Shield of Minnesota and the Minnesota Department of Health in late January 2011. Thirteen people representing six schools in Blue Earth County attended the workshop. Blue Cross and Blue Shield of Minnesota offered information on developing expertise in SRTS planning, identifying action steps for the next 12 months, and positioning the community to be competitive for funding to support SRTS. The Minnesota Department of Health also provided participants with a SRTS handbook.

#### Active classrooms

Progress reports received from four of the participating schools indicate that the following active classroom activities occurred:

Maple River East Elementary. Maple River East Elementary continued to implement S.M.A.R.T. curriculum in its Kindergarten and Early Childhood Special Education (ECSE) classrooms. Two teachers use the curriculum. Maple River East uses S.M.A.R.T. three days per week with their ECSE students and five days per week with their Kindergarten students. A DVD and manual about S.M.A.R.T. was made available to school staff, and they were invited to watch the Kindergarten and ECSE teachers implement the curriculum in their classrooms. The school hopes to expand the program to other grades and programs, and school administration has been consulted about setting up an area for S.M.A.R.T.

- Kennedy Elementary School. Kennedy Elementary also continued to implement S.M.A.R.T. in their Kindergarten and physical education curriculum. Twelve teachers use the curriculum four days a week on average. The school plans to keep the program as it is now, and they have a S.M.A.R.T. room equipped with scheduled times for classes. The school hopes to focus on their S.M.A.R.T. curriculum during the 2011-2012 school year. Kennedy Elementary also plans to add the SPARK curriculum to their Kindergarten through 2<sup>nd</sup> grade classrooms next year.
- Washington Elementary School. Eight teachers at Washington Elementary are implementing the S.M.A.R.T. curriculum in their classrooms for 15 to 20 minutes every day. Teachers have been informed about the program through staff meetings. Many of the curriculum's materials have already been purchased by the school, but they are hoping to expand their activities.
- Franklin Elementary School. Franklin Elementary has implemented the S.M.A.R.T. curriculum in 12 classrooms. All Kindergarten through 2<sup>nd</sup> grade teachers have been trained in the curriculum, and students in K-2 participate in S.M.A.R.T. activities for at least 5 minutes every school day. Franklin Elementary noted that the program is sustainable, as they have all of the supplies they need.

Several staff members at each of the participating schools have been trained on S.M.A.R.T. curriculum. Parents and community members have been made aware of the curriculum though parent nights and handouts, and educational sessions have been held with students.

#### Policy, systems, and environments

One of the goals of SHIP is to change policies, systems, and environments to make the healthy choice the easy choice and to ensure sustainability beyond the end of any one particular program or funding stream. In the case of this School Physical Activity Initiative, it means specifically changing policies, systems, and environments to create opportunities for physical activity in school and for non-motorized transportation to and from school. Changes that have occurred as a result of this initiative include:

Creating Walking School Bus policies. The Walking School Bus program has been written into the school wellness policy at Rosa Parks Elementary School. <u>Therefore</u>, practices have changed with a formal policy being adopted. In addition, practices have changed without a formal policy being adopted at Roosevelt Elementary. The Walking School Bus programs at Rosa Parks Elementary and Roosevelt Elementary are somewhat sustainable – some work may be sustained, but additional efforts are

<u>needed to ensure implementation</u>. These additional efforts may include recruiting adult volunteers, obtaining funding for high visibility vests and walkie-talkies, and continuing to promote the program to parents and the community. Sustainability will also increase if the Walking School Bus programs are integrated into school policies.

- Including S.M.A.R.T. in school wellness policies. S.M.A.R.T. has been written into Washington Elementary School's wellness policy, which indicates that <u>practices have changed with a formal policy being adopted</u>. Although not S.M.A.R.T.-specific, 6 of the 10 participating schools had an existing physical activity policy at baseline. At these schools, <u>practices have changed without a formal policy being adopted</u>. The work of each school participating in S.M.A.R.T. is <u>mostly sustainable a</u> sustainability plan is in place, or is likely to be sustained even without a plan. Each of the schools noted that the curriculum has increased students' physical activity levels.
- Equipping classrooms with supplies needed for S.M.A.R.T. curriculum. A S.M.A.R.T. room has been equipped with scheduled times for classes at Kennedy, St. Clair, Loyola, Franklin, Washington, Eagle Lake, and Hoover.

The policy, systems, and environmental changes that have been made within the participating schools meet Blue Earth SHIP's goal of encouraging and promoting more physical activity among students during school hours.

#### Impact

The *Physical Activity Guidelines for Americans* recommends that children and adolescents engage in one hour or more of physical activity each day. Results from the 2010 Minnesota Student Survey found that less than one-quarter of school-age children get the recommended amount of physical activity. Physical activity levels decrease as children get older. The large proportion of youth who do not meet the recommended amount of daily physical activity contributes to the increasing rates of overweight and obesity among children. Initiatives related to school physical activity are one way to address the issue of childhood obesity.

Students are enjoying the S.M.A.R.T. curriculum, and teachers report that the children appear to be more coordinated and are more advanced in developing body awareness. Teachers have also noted anecdotally that students are more focused during instructional time and have increased body strength.

The Walking School Bus also provides students with the opportunity to engage in physical activity before and after school. Teachers at Rosa Parks Elementary were asked to complete the SRTS Tally Sheet in their classrooms. Fourteen baseline tally sheets were collected at Rosa Parks Elementary in December 2010, and 13 follow-up tally sheets were

collected in May 2011. The number of students walking and biking to school greatly increased at follow-up: students reported walking to school 257 times at follow-up compared to 183 times at baseline, and students reported biking to school 136 times at follow-up compared with zero times at baseline. These results show an increase in the number of students engaging in physical activity before and after school.

As a result of this initiative, many of the participating schools have met their projected short-term outcomes, including:

- Participating schools implemented or improved policies and/or environmental supports to encourage and promote more physical activity among students during school hours
- Participating schools implemented or improved policies and/or environmental supports to facilitate access to non-motorized transportation to and from school
- Participating schools have communicated opportunities for physical activity to school staff, parents, students, and other key stakeholders
- Students in participating schools have increased opportunities to be physically active before, during, and after school
- An increased percentage of students in participating schools walk or bike to school

These outcomes will increase the percentage of students in Blue Earth County who get the recommended amount of physical activity, which will ultimately increase the percentage of residents who are a healthy weight. This will result in a decreased percentage of Blue Earth County residents with chronic diseases associated with obesity.



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### For more information

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