



# **Bethel School Wellness Observation Report**

## **A Report from the Communities and Schools Together (CAST) Project<sup>1</sup>**

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### **I. Overview**

In response to national concerns about the rise of obesity among children, the U.S. Congress passed the Child Nutrition and WIC Reauthorization Act of 2004 [Sec. 204 of P.L. 108-205] requiring that all school districts with a federally funded school meals program develop and implement wellness policies that address nutrition and physical activity in schools by the 2006–2007 academic year. In response to these federal requirements, the Bethel School District developed and adopted nutrition and physical activity school wellness policies for district schools in 2007.

To better understand how district practices promote healthy student behavior, a group of Bethel parents decided to conduct observational assessments of schools. As part of a childhood obesity prevention study funded by the National Institutes of Health, called Communities and Schools Together, parents collaborated with researchers to pilot an observation measure of schools during March–April 2012. The purpose of the observational study was to gather information on school health practices related to a) the general school environment for health promotion, b) food service practices at breakfast and lunch, and c) the quality of playground activity environments for student recess.

This report summarizes the methods used in designing and conducting the school wellness observation measure by parents, provides descriptive results of the study, and presents a brief summary of conclusions and recommendations for the district based on key findings from the study.

### **II. Method**

#### **A. Observation Measures**

The pilot observation tool was developed using a) a review of literature about school wellness policies and health promotion, b) PAC parent discussions of differences among schools and their respective environments in encouraging positive student nutrition and physical activity, and c) items drawn from a revised Playground Atmosphere Rating observation tool (Rusby, Taylor, & Johnson-Shelton, 2007) (See Appendix).

<sup>1</sup>Grant 5R01HD057839-04 from the National Institute of Child Health & Human Development, National Institutes of Health. Report published 2013, Oregon Research Institute, Eugene, Oregon.

Observations were conducted during morning and afternoon sessions to ensure that the assessment covered activities occurring throughout the day. The morning observation evaluated pedestrian safety features at the school entrance (e.g., presence or absence of crossing guards, stop lights or crosswalking lights for students, and traffic calming devices), promotion of physical activity and healthful/unhealthful food in the school through visual displays, the type of nutrition information posted in the cafeteria, student–adult staff ratios in the cafeteria, type of food and beverages offered at breakfast, observer ratings of student food/beverage satisfaction and consumption patterns, and selected factors in promoting healthful eating.

The afternoon observation documented child/adult ratios during school lunch and at recess; type of lunch food and beverages offered; observer ratings of student food/beverage satisfaction and consumption patterns; and playground measures of playground quality (e.g., plenty of equipment, variety and condition of play surfaces, quality of play equipment); type of play equipment in use at each school, observer ratings of staff playground adult supervision; and ratings of levels of child physical activity (e.g., sedentary, moderate, vigorous play) for boys and girls.

## **B. Observer Training**

The observation instrument was developed and reviewed by PAC parents over three monthly meetings, and the final survey instrument was produced in both Spanish and English versions. All participating observer parents attended one training session. During the training, researchers reviewed each item on the morning and afternoon observation forms with parents and described the purpose and procedures for completing each item on the form.

Parents signed up to assess schools in pairs (one school had three observers). PAC parents had agreed that it would be beneficial to include a “team” of observers that included one parent with a child enrolled at the observed school and at least one other parent whose child was enrolled at a different school. Parents felt this approach might enhance acceptance of their observer role at their home school while also expanding each parent’s perspective by exposing them to schools with which they were less familiar. The parent teams were asked to conduct their observations at the same date and time, but to complete their observation form independently.

## **C. Observation Procedures**

Table 1 displays the observation schedule followed by parents in the study. Eight PAC parents (5 English speakers, and 3 Spanish speakers) conducted morning and afternoon observations in pairs except at Fairfield, which was assessed in the afternoon by only one parent, and at Prairie Mountain, which was observed with both the morning and afternoon protocols by three parents. Two Spanish speaking parents recorded their schools together for the morning assessment at Danebo and Fairfield. The latter observation was only partially completed, so full results for that school are not available in this report.

**Table 1. Schedule of School Wellness Observations**

School	Parent ID	AM date	Observation times		# Parents	Parent ID	PM date	Observation times		# Parents
			Start	End				Start	End	
Clear Lake	E-1	4/26/2012	8:30 am	9:00 am	2	E-1	4/26/2012	12:05 pm	12:25 pm	2
	E-2					E-2				
Danebo	S-3	5/3/2012	8:20 am	8:45 am	2	S-3	5/3/2012	11:30 pm	12:15 pm	2
	S-4					S-4				
Fairfield	S-4	4/25/2012	9:30 am	12:00 pm	2	S-5	4/25/2012	11:00 am	12:00 pm	1
	S-5									
Irving	E-6	4/2/2012	8:00 am	8:25 am	2	E-6	4/2/2012	11:35 am	12:30 pm	2
	E-1					E-1				
Malabon	E-7	3/16/2012	7:30 am	8:20 am	2	E-7	3/15/2012	11:50 am	12:20 pm	2
	E-8					E-8				
Meadow View	E-8	4/23/2012	8:10 am	8:25 am	1	E-8	4/23/2012	11:10 am	11:45 am	1
Prairie Mountain	E-6	4/27/2012	7:30 am	8:15 am	3	E-6	4/27/2012	11:00 am	12:05 pm	3
	E-1					E-1				
	E-2					E-2				

Note. E = English speaker, S = Spanish speaker.

### III. Results

#### A. Daily School Schedules

The morning observation form included information on the daily operation schedules at the schools. As shown in Table 2, the seven schools varied in their daily schedules in terms of the time doors were opened to students in the morning, start and end times for breakfast and lunch service, start and end times for classroom instruction, and building closure times at the end of the school day.

**Table 2. Daily Schedules for Bethel Elementary Schools: 2011-2012 School Year**

School	Doors Open	Class Start	Class End	Doors Locked
Clear Lake	8:30 AM	8:55 AM	2:55 PM	4:00 PM
Danebo	8:20 AM	8:45 AM	2:45 PM	3:45 PM
Fairfield	8:10 AM	8:45 AM	2:45 PM	3:30 PM
Irving	8:05 AM	8:30 AM	2:30 PM	2:30 PM
Malabon	7:30 AM	8:15 AM	2:15 PM	3:30 PM
Meadow View	8:15 AM	8:25 AM	2:30 PM	4:00 PM
Prairie Mountain	7:30 AM	8:10 AM	2:10 PM	4:00 PM

## B. School Health Promotion

### Student Pedestrian Safety

Observers were asked to score the presence or absence (e.g., “yes” = 1 or “no” = 0) of five pedestrian safety features surrounding the school entrance: 1) crossing guards, 2) stop lights, 3) speed bumps, 4) islands for student pedestrian crossing, and 5) speed monitoring devices. Total possible score for each school was 0–5. Table 3 shows the results of parent observer scoring.

Scores across all items ranged from a low of 0 at Malabon, one of Bethel’s oldest elementary schools, to 5 at Prairie Mountain, one of the district’s two newest schools.

At Prairie Mountain, parents said the crossing light was situated at the corner before arriving directly at the school—but it did exist. Also, there was a crossing guard at this light; parents felt that if the intersection was important enough for a crossing guard the light also should count as an indicator of the school promoting active and safe student transport. Parents noted that this school even had crossing guards in the parking lot to provide clearer traffic flow between walking students and cars. Parents felt that Prairie Mountain provided an exemplary school model for safe, active access to school that other schools could follow in Bethel.

While a speed monitoring device was observed at Fairfield, Meadow View, and Prairie Mountain, this device was actually shared among schools in the district. Also, there were staff at Malabon monitoring student street crossings. Parents reported that the city of Eugene had determined that there was not enough traffic to warrant a device at the school crossing area of this school. Parents felt this was an important item for follow-up since parents had previously expressed concern about student safety related to speeding cars near the school.

**Table 3. School Entrance Safety for Walking and Biking**

School	Crossing Guards	Stop Lights	Traffic Calming Devices			Total Scores per School
			Speed Bumps	Islands for crossing	Speed Monitoring Devices	
Clear Lake	✓	✓	✓			3
Danebo				✓		1
Fairfield			✓	✓	✓	3
Irving		✓ *				1
Malabon						0
Meadow View	✓			✓	✓	3
Prairie Mtn.	✓	✓ **	✓	✓	✓	5
Total score per safety resource	3	3	3	4	4	<b>District Average = 2.3</b>

\*One out of two assessors at Irving identified an existing crossing light near the school entrance, so a score was counted in analysis for the school. \*\*Two out of three assessors at Prairie Mountain identified an existing crossing light near the school entrance, so the score was counted in the analysis for the school.

Promotion of Physical Activity

Parents rated five areas of the school for the presence of posters that displayed pictures encouraging physical activity among students. These school areas included the school entrance, school office, gym, cafeteria, and hallways. Each category was scored 1 point with a total of 5 points possible across all school locations. Table 4 shows the results of these observations at each school.

Clear Lake scored highest in the visual promotion of physical activity (3 points). According to parent observers, three schools (Danebo, Fairfield, and Malabon) did not have any poster displays promoting physical activity. There also were no physical activity posters in any of the elementary school gyms. Parent observers agreed that there was a serious under-promotion of physical activity in all the schools.

**Table 4. Promotion of Physical Activity through Pictures or Posters**

School	School Entrance	School Office	Gym	Cafeteria	Hallways	Total Scores per School
Clear Lake	✓			✓		2
Danebo						0
Fairfield						0
Irving				✓		1
Malabon						0
Meadow View	✓				✓	2
Prairie Mtn.					✓	1
Total score per safety resource	2	0	0	2	2	<b>District Mean = 0.9</b>

Promotion of Healthful Food Consumption in the Cafeteria

The School Wellness Observation also evaluated school promotion of healthy food in the same areas of the schools that were evaluated for physical activity—through posters or pictures in the school’s entrance, office, gym, cafeteria, and hallways. However, parents found posters or pictures of healthy nutrition only in school cafeterias. Parents counted the number of 13 types of visual displays in cafeterias that could encourage a student’s selection and consumption of healthy food options. Table 5 shows the results of parent observations of these cafeteria displays. Scores ranged from a low of 1 at Malabon to 8 at Clear Lake. Schools scored highest in visual displays of whole fruits and vegetables and posters of the MyPlate or Food Pyramid for food groups produced by the U.S. Department of Agriculture.

**Table 5. Promotion of Healthful Food Consumption through Visuals in the Cafeteria**

Possible Type of Display	Clear Lake	Danebo	Fairfield	Irving	Malabon	Meadow View	Prairie Mountain	Total Scores per Category
Low fat dairy products			✓	✓ *		✓	✓	4
Whole fruits and vegetables	✓	✓	✓	✓		✓	✓	6
Whole grains		✓	✓			✓		3
Healthy eating messages on menus	✓					✓	***	2
Healthy eating messages on tray lines	✓ *	✓					***	2
“MyPlate” or Food Pyramid	✓	✓	✓	✓		✓	✓	6
Student developed posters or articles	✓							1
Portion sizes	✓ *		✓			✓	✓ **	4
Serving sizes	✓ *					✓	✓ **	3
Drinking water			✓					1
Rules for cafeteria behavior	✓		✓		✓		✓	4
Total score per school on nutrition messages	8	4	7	3	1	7	6	District Mean = 5.1

\* One out of two assessors identified a nutrition message at the school, so a score was counted in the analysis.

\*\* Two of three assessors identified the nutrition message, so a score was counted in the analysis. \*\*\* Only one of three assessors identified the nutrition message at the school, so **no** score was counted in the analysis.

### C. School Breakfast

The Bethel School District provides free breakfast to all K–5 elementary school students. The cafeterias are typical one-room locations serving all grades simultaneously in each of the elementary school buildings. The two K–8 schools are newer buildings that provide a separate cafeteria for middle school students, with K–5 students served breakfast and lunch in ‘pod’ units located in the elementary areas of the building.

Most schools had a fairly low staff-to-student ratio during breakfast (Table 6). Clear Lake and Malabon had larger student counts at breakfast and had the highest ratio of children to adults in terms of supervision during the breakfast period.

**Table 6. Child–Adult Ratio in Cafeteria at Breakfast Time**

School*	# Children	# Adults			Child–Adult Ratio
		Food Service Staff	Other Adults	Total Adults	
Clear Lake	110	3	2	5	22
Danebo	85	6	6	12	7
Fairfield*	--	--	--	--	--
Irving	30	3	2	5	6
Malabon**	150	2	3	5	30
Meadow View	80	4	3	7	11
Prairie Mountain	53	2	3	8	8
					<b>District Mean = 14 children per adult in cafeteria/lunch area</b>

\*Fairfield data missing. \*\*Two observers at Malabon indicated the number of children present ranged from 0–300 during their observed breakfast period, we used the mean of 150 children to calculate the child–adult ratio.

The morning observation survey asked parents to record their impressions on two questions related to student food consumption: 1) overall, did students seem to enjoy the food they selected, and 2) overall, did students consume most of the food they selected? Observers in all schools indicated that students seemed to enjoy their breakfast choices and consumed the meals. The parent observers at Danebo were the only exception, indicating that the students there neither enjoyed nor consumed most of the meal they selected for breakfast, which was cereal during that day of the cafeteria breakfast observation. According to the parents, “The kids would come and taste the cereal and then would just throw it away.”

Observers assessed several questions regarding promotion of healthy eating and the cafeteria atmosphere during breakfast: 1) whether water could easily be accessed by students, 2) if students had enough time to eat, 3) if staff encouraged students to select healthy foods, 4) if students were allowed to talk and socialize together while they ate, and 5) if the cafeteria was welcoming for students. Observers scored each category on a 4-point scale of 0–3. Observers felt there was limited emphasis on the food children selected for breakfast; access to water also was inadequate and although juice was available, fresh fruit was not available at breakfast.

**Table 7. Promotion of Healthy Eating during School Breakfast**

School	Water easily accessible	Students had enough time to eat	Staff encourage students to select healthy food	Students allowed to talk and socialize	Cafeteria was welcoming to students	Total Score per School
Clear Lake						9
Danebo						7
Fairfield*	--	--	--	--	--	--
Irving						7
Malabon						8
Meadow View						5
Prairie Mt.						11
Average score per health promotion practice	5	12	1	15	14	District Mean for 6 Schools = 7.8
Never = 0               Sometimes = 1               A lot of the time = 2               Almost Always = 3						

\* Fairfield observations were not completed on this question.

#### D. School Lunch

Parents also observed lunch at each school (Table 8). Child–adult ratios were computed for each school to determine the level of supervision in each cafeteria or lunch area. Danebo had the lowest number of children at lunch (similar to the school’s breakfast count) and the greatest number of adults present in the cafeteria. The mean child–adult ratio in the district was 11 children per one adult. Malabon, which had an 18:1 ratio, had twice the average district student-to-adult ratio during lunch. Malabon was also one of the two schools with the highest ratio of children per adult during breakfast (see Table 6 above).



**Table 8. Child–Adult Ratio at Lunch**

School	# Children	# Adults			Child–Adult Ratio
		Food Service Staff	Other Adults	Total Adults	
Clear Lake	70	4	4	8	<b>9</b>
Danebo	11	1	10	11	<b>1</b>
Fairfield	34	4	0	4	<b>9</b>
Irving	73	4	4	8	<b>9</b>
Malabon	110	1	5	6	<b>18</b>
Meadow View*	--	3	2	5	--
Prairie Mountain	51	3	2	5	<b>10</b>
					<b>District Mean = 9 children per adult in cafeteria/lunch area</b>

\* No count for children present at lunch was obtained at Meadow View.

In the Bethel School District each elementary school provides a salad bar with vegetables and fruit to augment student lunches. Observers rated each school’s salad bar on the percentage of fruit served that was whole or unsweetened canned. At least 50% of the fruit offerings at all schools were rated as whole or unsweetened. Meadow View was the only school scored as serving 100% whole or unsweetened fruit at its salad bar.

Just as with breakfast, observers were asked to rate school lunch programs on easily accessible water for students, enough time to eat lunch, encouragement by staff for students to select healthy foods, the opportunity for students to talk and socialize at lunch, and a welcoming environment in the cafeteria of food service area at lunch time. As Table 9 shows, some items were not scored at Fairfield or Meadow View. Generally the parents gave high scores for the social environment and welcoming nature of the lunch. Staff encouragement to students for selecting healthy food at lunch consistently received the lowest score. Malabon was the only school to fall below the district mean of 2 (“a lot of the time”) on its average score for the five items assessed on the promotion of healthful eating during lunch.





























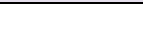


Observers at Prairie Mountain indicated that the salad meal they observed was very popular and not wasted. The school offered a baked potato on the lunch menu as a side offering to which salad bar items could be added. This seemed very well received and increased student selection of vegetables from the salad bar. Water was more available at lunch than at breakfast. On the whole, the majority of parent observers indicated that students enjoyed their lunch meal items “a lot”.





**Table 9. Food Selected and Consumed at Lunch**

School	Lunch Food Options	Percent Fruit served was whole or unsweetened	How much did students seem to enjoy meal	How much of meal was consumed
Clear Lake	Lasagna, tuna sandwich, or cheese & bean burrito	50%	A lot	A lot
Danebo	Pizza	75%	Somewhat	Somewhat
Fairfield	Sloppy Joes, cheese burrito, orange chicken w/rice	50%	A lot	Very Little
Irving	Mac & cheese, chicken nuggets, cheese sandwich	50%	A lot	Somewhat
Malabon	Pizza, cheese sandwich, or meat sandwich	75%	Somewhat	Somewhat
Meadow View	Pizza, cheese sandwich, or meat sandwich	100%	--*	--*
Prairie Mt.	Pizza, cheese sandwich, or salad meal	50%	A lot	A lot

\* Data was missing on this question at Meadow View.

**Table 10. Promotion of Healthy Eating during School Lunch**

School	Water easily accessible	Students had enough time to eat	Staff encourage students to select healthy food	Students allowed to talk and socialize	Cafeteria was welcoming to students	Total Score per School
Clear Lake						12
Danebo						13
Fairfield				--		7
Irving						15
Malabon						5
Meadow View			--	--	--	1
Prairie Mt.						12
Average score per health promotion practice	14	15	1	15	3	District Mean for 6 Schools = 10.8

 Never = 0    
  Sometimes = 1    
  A lot of the time = 2    
  Almost Always = 3

## E. Playground and Recess Activity

Playground environments and student recess activity patterns were observed at each school. All observations were conducted at outside play areas. Weather conditions ranged from sunny to overcast except at Danebo, where the single observer indicated it was rainy (See Table 11). Fairfield and Meadow View observations were completed during morning recess periods while the remainder of observations were conducted at lunch recess.

All schools had at least two adults present during recess and the schools with the highest number of children had an additional adult present. The configuration of grades at both morning and lunch recesses varied across the schools. Fairfield had one grade at the observed morning recess period while three grades were combined for the Meadow View recess. The same was true for lunch recess—Clear Lake and Irving had combined grades and Danebo, Fairfield, Malabon, and Prairie Mountain had only one grade on the playground during the observation period.

**Table 11. Child–Adult Ratio at Recess**

School	Recess Time	Grades Observed	# Children	# Adults	Child–Adult Ratio
Clear Lake	Lunch	2 <sup>nd</sup> /3 <sup>rd</sup>	48	2	<b>24</b>
Danebo	Lunch	3 <sup>rd</sup>	35	2	<b>18</b>
Fairfield	Morning	4 <sup>th</sup>	20	2	<b>10</b>
Irving*	Lunch	1 <sup>st</sup> /2 <sup>nd</sup>	113	3	<b>38</b>
Malabon	Lunch	5 <sup>th</sup>	50	2	<b>25</b>
Meadow View	Morning	1 <sup>st</sup> /2 <sup>nd</sup> /3 <sup>rd</sup>	90	3	<b>30</b>
Prairie Mt.	Lunch	5 <sup>th</sup>	64	3	<b>21</b>
					<b>District Mean = 23.7 children per adult</b>

\*Only one of two observers indicated the number of adults/children present on the playground and the number of children recorded present ranged 75–150 during their observed recess period, so we used the mean of 113 children to calculate the child-to-adult ratio at this school.

Parents rated the quality of the play area and equipment used by children for outdoor recess at each school (Table 12). Scores ranged on a 5-point scale from 0 (“Definitely not true”) to 5 (“Absolutely true”). The mean score for district schools was 3 meaning it was “very true” that equipment and play surfaces were appropriate, plentiful, and in good repair, except at Clear Lake and Malabon where some of the equipment was rated as old and needed to be replaced.

**Table 12. *Quality of Playground: Enrichment Environment to Promote Activity by Children***

School	There was plenty of equipment and toys	There was appropriate surface for a variety of play (e.g., asphalt, grass)	Equipment was outdated, in poor condition, or disrepair*	Average score per school
Clear Lake	4	4	-2	<b>2</b>
Danebo	2	4	0	<b>2</b>
Fairfield	4	4	0	<b>2.7</b>
Irving*	3	3	0	<b>2</b>
Malabon	2	3	-3	<b>.7</b>
Meadow View	4	4	-1	<b>2.3</b>
Prairie Mt.	4	4	-1	<b>2.3</b>
				<b>District Mean = 2</b>

\* We reverse coded scores on this item for any score > 0.

Parents also recorded the specific type of equipment available during their observation period (Table 13). This was done to evaluate the variation in terms of the type of play equipment available to students. All schools had a diverse supply of equipment. The only sports equipment that seemed in short supply were footballs and soccer balls, indicating that field-type activities may not have been encouraged during recess.

Observers did comment that tire swings were a popular activity at the schools where they were present and could be added to the three schools that did not have them. Observers also thought additional swings could be added to schools where they already existed.

Although the observation instrument did not query observers on the availability of basketballs, parents reported that they were in common use at some schools. At one school soccer balls and basketballs were available but did not have enough air; observers saw some children request air for the balls but it wasn't available. Some students volunteered to bring balls from home but they were told that wasn't allowed.

**Table 13. Play Equipment Provided for Children during Recess**

Possible Type of Display	Clear Lake	Danebo	Fairfield	Irving	Malabon	Meadow View	Prairie Mountain	Total Scores per Category
Hula hoops	✓		✓	✓	✓	✓	✓	6
Jump ropes	✓	✓	✓	✓	✓	✓	✓	7
Tether ball	✓	✓	✓	✓	✓		✓	6
Footballs			✓					1
Soccer balls	✓	✓	✓		✓	✓		5
Playground balls	✓	✓	✓	✓	✓	✓	✓	7
Tire swings	✓	✓				✓	✓	4
Four square	✓	✓		✓	✓	✓	✓	6
Jungle gyms	✓		✓	✓	✓	✓	✓	6
Swings	✓	✓	✓	✓	✓	✓	✓	7
Total score per school equipment items	9	7	8	7	8	8	8	District Mean = 8

Evaluating the amount and quality of staff supervision at recess was an important part of the observation tool. Table 14 displays the 6-item scale used in the study. Observer impressions were recorded on a 5-point scale—0 being “Never” to 4 being “Most of the time.” Overall, the district scored low across all schools on this staff supervision item with a mean of 1 or “seldom” in promoting active play by children. Danebo scored the highest with a mean score of 3 across all observed staff intervention items.

Enhancing positive support from staff on playgrounds to encourage and teach children skills in activities was one area that could be explored further in the school district. Parents indicated during a review of observation results that the quality of playground supervision could also vary depending on the skills and attention provided by the individual staff present.

**Table 14. Staff Supervision of Child Recess Activity**

School	Grades observed	Provide children ideas for physically active play	Help organize physically active games	Provide positive attention to physically active children	Encourage children to include others in active play	Encourage inactive children to be active	Teach children a physical skill or game	Average Score per School
Clear Lake	2 <sup>nd</sup> /3 <sup>rd</sup>	2	2	3	3	4	0	2
Danebo	3 <sup>rd</sup>	0	0	4	4	4	4	2.7
Fairfield	4 <sup>th</sup>	2	0	2	2	2	2	1.3
Irving	1 <sup>st</sup> /2 <sup>nd</sup>	2	2	0	0	2	0	1
Malabon	5 <sup>th</sup>	2	2	2	2	2	2	2
Meadow View	1 <sup>st</sup> /2 <sup>nd</sup> /3 <sup>rd</sup>	2	2	2	2	2	2	1
Prairie Mt.	5 <sup>th</sup>	0	0	2	2	0	0	.3
Average score per health promotion practice		1	1	2	2	2	1	District Mean = 1.5

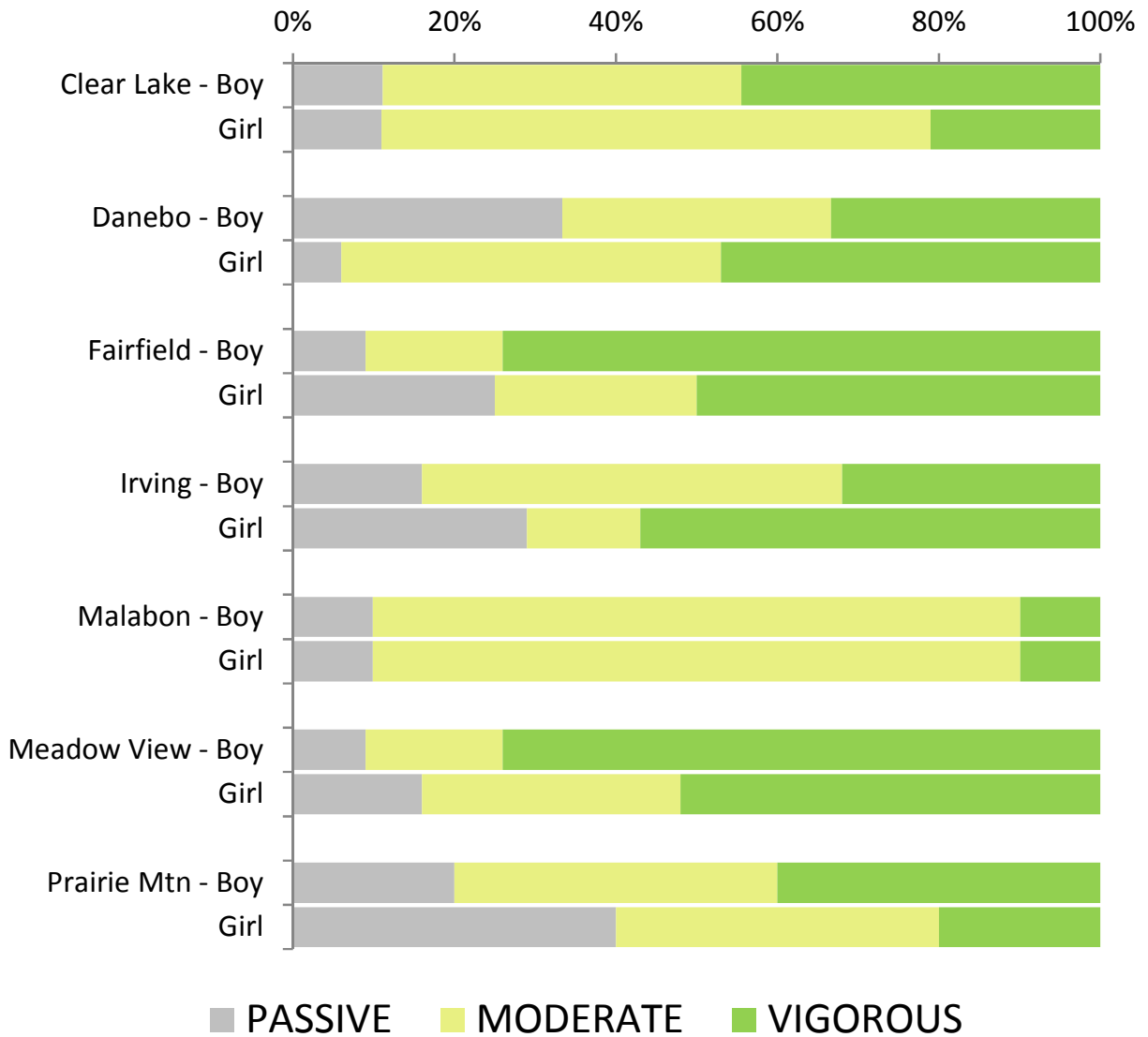
Never = 0    
  Seldom = 1    
  Sometimes = 2    
  A lot = 3    
  Most of the time = 4

The final item in the Bethel School Wellness Observation focused on evaluating the level of physical activity observed for boys and girls during recess (Figure 1). Observers conducted a scan of all of the children at play at one time point. They counted the number of boys and girls (evaluated separately) that were engaged in passive activity (e.g., sitting, standing, reading), moderate physical activity (walking, swinging, bouncing a ball), and vigorous activity (e.g., running, jumping, playing sports).

Percentages were calculated based on the total number of boys and girls observed during the scan. Observations were conducted on boys and girls separately in order to determine similarities or differences between boy and girl physical activity levels at each of the schools. Response categories for the percentage of children playing at each activity level were on a 6-point scale: < 10% (“hardly any”), 10–25% (“a few”), 25–49% (“some”), 50–75% (“many”), 75–90% (“very many”), and > 90% (“almost all”). We calculated the percentage of passive, moderate, and vigorous activity for boys and girls at each school.

There was a great deal of variability between schools in the activity levels of children. Boys and girls were both similar and different at respective schools on the intensity levels they presented in physical activity during. Ages of children observed during play periods or the ages of school facilities (as shown in Table 1) did not seem to be associated with particular physical activity patterns observed for students.

**Figure 1. Proportion of Boys and Girls doing Passive, Moderate & Vigorous Activity during Recess**



## IV. Summary

The following list represents a summary of key points derived from the Bethel School Wellness Observations. A few specific recommendations were provided by parents in a group discussion of the final report and are included with the summary statements.

### *Key findings from morning observations:*

- Lack of water at breakfast should be addressed at all schools; water availability was better at lunch.
- The promotion of physical activity through posters or visuals in the school is an area that should be increased.
- Malabon had a very high student–staff ratio at breakfast and in the morning, generally; an early morning physical activity program is strongly recommended for this school.
- At Fairfield, the speed of cars in front of school requires more monitoring, and introduction of traffic reduction efforts would provide a better environment for safe walking.
- At Malabon, car speed and child pedestrian crossing safety at the front of school needs attention.
- A manual pump should be made available at all ball carts in the schools to make sure balls can be properly inflated for play.
- The high safety level of the pedestrian environment at Prairie Mountain was “amazing” and is recommended as a model for all schools in the district.

### *Key findings from afternoon observations:*

- School staff at Prairie Mountain did not encourage active play by students; the impression of parent observers was that students were not allowed to run on the blacktop, but could run on the grass if it wasn't rainy.
- Parents did not observe access to water during recess. Doors were locked at some schools so students couldn't go in or out.
- Parents were impressed with the Prairie Mountain breakfast and lunch in the “creek” areas; students seemed to have sufficient time to eat and weren't rushed. The pods worked well and should be included in the construction of the new school buildings the district will be planning.



**APPENDIX**

*School Wellness Observation Form (Morning)*

*School Wellness Observation Form (Afternoon)*

**PAC School Wellness Observation Form**  
**January 2012**

<u>Office Use:</u>  Parent ID: _____ School ID: _____
--

Parent Initials (First name initial + Last name first two letters):  
 School Name:  
 Grade of parent's child:

The goal of the Bethel School Wellness Observation is to provide consistent and systematically gathered information on school health practices in the seven Bethel elementary schools relating to a) food service practices in the cafeterias, and b) playground activity during recess. The observations are conducted by parents serving on the CAST Parent Advisory Council with support from researchers and project partners.

The Bethel School Wellness Observation is conducted in two parts: 1) a morning observation of the school environment and the cafeteria serving of breakfast, and 2) a noon or afternoon observation of the cafeteria serving of lunch and playground recess activities.

**MORNING OBSERVATION FORM**

**I. Date and time of entire morning observation**

- A. Observation date: \_\_\_\_\_
- B. Observation start time: \_\_\_\_\_
- C. Observation end time: \_\_\_\_\_

**II. General daily school schedule**

- A. School doors open to students \_\_\_\_\_ am
- B. Daily class time begins \_\_\_\_\_ am
- C. Daily class time ends \_\_\_\_\_ pm
- D. School doors locked to public \_\_\_\_\_ pm
- E. Breakfast
  - 1. Breakfast start time \_\_\_\_\_ am
  - 2. Breakfast end time \_\_\_\_\_ am

**III. School entrance and hallways**

- A. Are there crossing guards for students walking/biking to school? Yes    No
- B. Are there stop lights or crossing walk lights for students walking/biking to school? Yes    No
- C. Are there other traffic safety devices around the school entrance?
  - 1. Speed bumps Yes    No
  - 2. Islands for pedestrian crossings Yes    No
  - 3. Speed monitoring devices Yes    No
- D. Are there pictures/posters or notices promoting physical activity in the school?
  - 1. At the school entrance Yes    No
  - 2. In the school office Yes    No
  - 3. In the gym Yes    No
  - 4. In the cafeteria Yes    No

- |   |     |    |
|---|-----|----|
| 5. In hallways  | Yes | No |
|   |     |    |
| E. Are there pictures of healthy nutrition posted in the school?  |     |    |
| 1. At the school entrance   | Yes | No |
| 2. In the school office   | Yes | No |
| 3. In the gym   | Yes | No |
| 4. In hallways  | Yes | No |
| 5. Cafeteria  | Yes | No |
|   |     |    |
| F. Are there pictures or notices promoting unhealthy foods or snacks in the school?<br>(Example: fund raisers with food, candy, or other snacks for awards) |     |    |
| 1. At the school entrance   | Yes | No |
| 2. In the School Office   | Yes | No |
| 3. In the gym   | Yes | No |
| 4. In hallways  | Yes | No |
| 5. Cafeteria  | Yes | No |

**IV. School cafeteria physical environment**

- A. Information displayed in cafeteria:
- |  |     |    |
|--|-----|----|
| 1. Display posters on low fat dairy products               | Yes | No |
| 2. Display posters on whole fruits and vegetables          | Yes | No |
| 3. Display posters on whole grains                         | Yes | No |
| 4. Display signs with healthy eating messages on menus     | Yes | No |
| 5. Display signs with healthy eating messages on tray line | Yes | No |
| 6. Display Food Plate or food guide pyramid                | Yes | No |
| 7. Display student-developed posters or articles           | Yes | No |
| 8. Display information on reading menu labels              | Yes | No |
| 9. Display information on healthy eating out/fast foods    | Yes | No |
| 10. Display information on portion sizes for children      | Yes | No |
| 11. Display information on serving sizes for children      | Yes | No |
| 12. Display information promoting water drinking           | Yes | No |
| 13. Rules are posted on student behavioral expectations.   | Yes | No |

**V. School breakfast**

- A. Breakfast observation date: \_\_\_\_\_
- B. Breakfast observation start time: \_\_\_\_\_
- C. Breakfast observation end time: \_\_\_\_\_
- D. Grades eligible for breakfast (circle all that apply)
1. Kindergarten
  2. 1<sup>st</sup> grade
  3. 2<sup>nd</sup> grade
  4. 3<sup>rd</sup> grade
  5. 4<sup>th</sup> grade
  6. 5<sup>th</sup> grade

**VI. Staff and students present**

- A. Most of the time, how many food service staff were present in the kitchen or cafeteria?      \_\_\_ \_\_\_
- B. Most of the time, how many other adults were present in the cafeteria?                   \_\_\_ \_\_\_
- C. Most of the time, how many children were present?                                   \_\_\_ \_\_\_ \_\_\_

**VII. School breakfast options for the day**

A. What were the food choices for the day:				
1. Pancakes	Yes	No		
2. Cereal	Yes	No		
3. Yogurt	Yes	No		
4. Breakfast bar	Yes	No		
5. Breakfast sandwich/taco	Yes	No		
6. Bagels	Yes	No		
7. French toast	Yes	No		
8. Oatmeal	Yes	No		
9. Muffins	Yes	No		
10. Sunflower seed butter sandwiches	Yes	No		
11. Other (please describe) _____	Yes	No		
B. Overall, did students seem to enjoy the food they selected?	Yes	No		
C. Overall, did students consume most of the food they selected?	Yes	No		
D. What were the drink choices for the day:				
1. Water				
a. Available from a drinking fountain in cafeteria	Yes	No		
b. Available from pitchers in cafeteria	Yes	No		
c. Available from portable water containers in cafeteria	Yes	No		
2. 100% fruit juice	Yes	No		
3. Fruit drinks	Yes	No		
4. Low fat plain milk	Yes	No		
5. Regular fat plain milk	Yes	No		
6. Low fat flavored milk	Yes	No		
7. Regular fat flavored milk	Yes	No		
E. Overall, did students seem to enjoy the drinks they selected?	Yes	No		
F. Overall, did students drink the beverages they selected?	Yes	No		
G. What do students do if they don't have time to finish breakfast?				
1. They are asked to dispose of their remaining food and go to their classroom.	Yes	No		
2. They are allowed to bring their food to their classroom.	Yes	No		
3. They are allowed to finish their breakfast in the cafeteria and given a late slip to join their class.	Yes	No		
H. Among all food taken, about how much did all students eat?	25%	half	75%	100%
I. Among drink choices, about how much were students typically drinking?	25%	half	75%	100%
J. Of bread-type foods served, about how much were whole grain?	25%	half	75%	100%

K. Of fruit served how much was whole and unsweetened (not including fruit juice)?	25%	half	75%	100%
L. About how much of uneaten food was composted by students?	25%	half	75%	100%

**VIII. Promoting healthy eating**

	Never	Some- times	A lot of the time	Almost always
A. Water could easily be accessed by students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Students had enough time to eat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Staff encouraged students to select healthy foods?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Students were allowed to talk and socialize together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. The cafeteria was welcoming for students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Comments (summary of strengths, weaknesses, areas for improvement):**

**PAC School Wellness Observation Form**  
**January 2012**

Parent Initials (First name initial + Last name first two letters):  
School Name:  
Grade of parent's child:

<u>Office Use:</u>  Parent ID: _____ School ID: _____
--

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The Bethel School Wellness Observation is conducted in two parts: 1) a morning observation of the school environment and the cafeteria serving of breakfast, and 2) a noon or afternoon observation of the cafeteria serving of lunch and playground recess activities.

**AFTERNOON OBSERVATION FORM**

**I. Date and time of entire afternoon observation**

- A. Observation date: \_\_\_\_\_
- B. Observation start time: \_\_\_\_\_
- C. Observation end time: \_\_\_\_\_

**II. School lunch schedule**

- A. School lunch begins: \_\_\_\_\_ am pm
- B. School lunch ends: \_\_\_\_\_ am pm
- C. How many minutes were students allowed for lunch? \_\_\_\_\_ Minutes
- D. Were students eating lunch before or after recess? (circle one)
  - 1. Students ate lunch before recess
  - 2. Students ate lunch after recess

**III. Staff and students present**

- A. What grades did you observe during your lunch observation? (circle all that apply)
  - 1. Kindergarten
  - 2. 1<sup>st</sup> grade
  - 3. 2<sup>nd</sup> grade
  - 4. 3<sup>rd</sup> grade
  - 5. 4<sup>th</sup> grade
  - 6. 5<sup>th</sup> grade
- B. Most of the time, how many food service staff were present in the kitchen or cafeteria? \_\_\_\_
- C. Most of the time, how many other adults were present in the cafeteria? \_\_\_\_
- D. Most of the time, how many children were present? \_\_\_\_

<b><u>Office use only:</u></b> <i>Child-staff ratio</i> ____
--

**IV. Salad bar**

- A. What food items were available in the salad bar?
  - 1. Salad greens Yes    No

2. Broccoli	Yes	No	
3. Cauliflower	Yes	No	
4. Carrots		Yes	No
5. Celery		Yes	No
6. Beans/legumes	Yes	No	
7. Cucumbers	Yes	No	
8. Salsa		Yes	No
9. Fresh fruit (describe) _____	Yes	No	
10. Canned fruit (describe) _____		Yes	No
11. Dried fruit (describe) _____	Yes	No	
12. Low fat salad dressing		Yes	No
13. Regular fat salad dressing	Yes	No	
14. Condiments (Examples: pickles, olives)	Yes	No	

B. What salad bar items were students selecting?

	Never	Seldom	Sometimes	A lot	Most of the time
1. Green leafy vegetables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Fresh vegetables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Beans/legumes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Fresh fruit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Canned fruit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Dried fruit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Low fat dressing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Regular fat dressing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Condiments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Salsa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

V. Main lunch meal

A.

What were the meal choices for the day?

1. Mac and cheese	Yes	No
2. Chicken nuggets	Yes	No
3. Vegetable soup	Yes	No
4. Bean/legume soup (including chili)	Yes	No
5. Meat-based soup	Yes	No
6. Pizza	Yes	No
7. Cheese sandwiches (including wraps)	Yes	No
8. Meat sandwiches (including wraps)	Yes	No
9. Vegetable sandwiches (including wraps)	Yes	No
10. Cheeseburgers	Yes	No
11. Hamburgers	Yes	No
12. Meat tacos/burritos	Yes	No
13. Cheese taco/burritos	Yes	No
14. Vegetable taco/burritos	Yes	No
15. Hot dogs	Yes	No
16. Meat with gravy	Yes	No
17. Vegetable pot pies	Yes	No
18. Meat pot pies	Yes	No
19. Rice dishes with vegetable protein	Yes	No
20. Rice dishes with meat protein	Yes	No
21. Pasta dishes with meat protein	Yes	No

22. Vegetable protein dishes (such as tofu stir fries)	Yes	No
23. Salad meal (Examples: taco, cobb)	Yes	No
24. Fish	Yes	No
25. Side vegetables (describe)_____	Yes	No
26. Side potatoes	Yes	No
27. Side rice	Yes	No
28. Other (describe)_____	Yes	No

	Not at all	Very little	Some-what	A lot
B. Overall, did students seem to enjoy the meal they selected?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Overall, did students consume most of the meal they selected?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. What were the drink choices for the day?				
1. Water	Yes	No		
2. 100% fruit juice	Yes	No		
3. Fruit drinks	Yes	No		
4. Fat free plain milk	Yes	No		
5. Low fat plain milk	Yes	No		
6. Regular fat plain milk	Yes	No		
7. Fat free flavored milk	Yes	No		
8. Low fat flavored milk	Yes	No		
9. Regular fat flavored milk	Yes	No		

	Not at all	Very little	Some-what	A lot
E. Overall, did students seem to enjoy the drinks they selected?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Overall, did students drink the beverages they selected?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Among all food taken, about how much did all students eat?	25%	half	75%	100%
H. Among drink choices, about how much were students typically drinking?	25%	half	75%	100%
I. Of bread-type foods served, about how much were whole grain?	25%	half	75%	100%
J. Of fruit served, how much was whole and unsweetened (not including fruit juice)?	25%	half	75%	100%
K. About how much of uneaten food was composted by students?	25%	half	75%	100%

**VI. Promoting healthy eating**

	Never	Some-times	A lot of the time	Almost always
A. Water could easily be accessed by students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Students had enough time to eat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Staff encouraged students to select healthy foods?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Students were allowed to talk and socialize together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. The cafeteria was welcoming for students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



- F. Students were allowed to select options without undue pressure from adults?

**VII. Playground activity**

- A. Date: \_\_\_\_\_  
 B. Start time: \_\_\_\_\_  
 C. End time: \_\_\_\_\_  
 D. Type of recess  
     1. Morning classroom      
     2. Lunch time              
     3. Afternoon classroom     
 E. Grades observed on the playground (circle all that apply)  
     1. Kindergarten  
     2. 1<sup>st</sup> grade  
     3. 2<sup>nd</sup> grade  
     4. 3<sup>rd</sup> grade  
     5. 4<sup>th</sup> grade  
     6. 5<sup>th</sup> grade

**VIII. Staff and students present**

- A. Most of the time, how many school staff were present on the playground?    \_\_\_ \_\_\_  
 B. Most of the time, how many children were present?    \_\_\_ \_\_\_ \_\_\_

**Office use only:**      *Child-staff ratio*    \_\_\_ \_\_\_

**IX. Play conditions**

- A. Where were children playing?  
     1. Outside playground/field      
     2. Gym                                  
     3. Cafeteria                           
 B. What was the weather like during the play time?  
     1. Sunny                              
     2. Overcast                           
     3. Rainy                               
     4. Icy/snowy                         
 C. Was there a water fountain that was easy to access?                                Yes    No  
 D. Were rules visibly posted for student play expectations                            Yes    No

**X. Quality of playground: Enrichment (promotes active engagement)**

	Definitely not true	Not very true	Somewhat true	Very true	Absolutely true
A. There was plenty of equipment and toys offering a variety of play opportunities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. There was appropriate surfacing for play variety (asphalt, grass, bark under playground equipment).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Equipment is outdated, in poor condition, or disrepair.                             

D. What play equipment was provided for children?

- |  |     |    |
|--|-----|----|
| 1. Hula hoops                            | Yes | No |
| 2. Jump ropes                            | Yes | No |
| 3. Tether ball                           | Yes | No |
| a. Ball was attached                     | Yes | No |
| 4. Footballs                             | Yes | No |
| 5. Soccer balls                          | Yes | No |
| 6. Playground balls (soft, larger balls) | Yes | No |
| 7. Tire swings                           | Yes | No |
| 8. Four square areas                     | Yes | No |
| 9. Jungle gyms                           | Yes | No |
| 10. Swings                               | Yes | No |
| 11. Other (please describe)              |     |    |
| a. _____                                 | Yes | No |
| b. _____                                 | Yes | No |
| c. _____                                 | Yes | No |

**XI. Staff Supervision (PAR items)**

	Never	Seldom	Sometimes	A lot	Most of the time
1. Playground supervisors provide children with ideas for physically active play.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Playground supervisors help organize physically active games.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Playground supervisors provide positive attention (praise, cheering) to children engaged in physically active play.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Playground supervisors encourage children to include other children in their physically active play.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Playground supervisors encourage inactive children to engage in physically active play.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Playground supervisors teach children a physical skill of a game.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**XII. Child Activity (PAR items)**

	< 10% (hardly any)	10-25% (a few)	25-49% (some)	50-75% (many)	75-90% (very many)	> 90% (almost all)
1. How many boys are engaged in passive activities (sitting, standing, reading?)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. How many boys are engaged in moderate activities (walking, swing, bouncing ball)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. How many boys are engaged in vigorous activities (running, jumping, playing sports)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How many girls are engaged in passive activities (sitting, standing, reading?)
5. How many girls are engaged in moderate activities (walking, swing, bouncing ball)?
6. How many girls are engaged in vigorous activities (running, jumping, playing sports)?
7. How many children are engaged in games that involve waiting in line ("wall ball", 4-square, hopscotch)?

**Summary of strengths, weaknesses and areas for improvement for school wellness promotion:**