PASS

(Physical Activity School Score)

Background and Technical Manual

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NOTES: This manual supplements *PASS: Physical Activity School Score*, a free, user-friendly, web-based, 8-item tool that both assesses and increases awareness of evidence-based physical activity practices in elementary schools (Lounsbery & McKenzie, 2014).

Individuals (especially parents, teachers, school administrators, and school board members) interested in learning about and assessing physical activity opportunities at their local elementary school are invited to use PASS. Completing PASS takes about 5 minutes.

To view how the PASS tool works use: https://unlv.co1.qualtrics.com/SE/?SID=SV_b1xrJyPPLYa3I0Z

To assess an elementary school using PASS enter: https://unlv.co1.qualtrics.com/SE/?SID=SV_71ncSsiDtKTPctn

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OPERATION OF THE PASS ON-LINE INSTRUMENT

Respondents access the PASS website and identify a characteristic that best describes them (School Administrator; PE Teacher, Classroom Teacher, Parent, or Other) and the geographic location of the school they are assessing (i.e., by Specific USA state or Other).

They then score each of the eight items (e.g., PE frequency). Upon responding to each item, they receive a score, evidence-based recommendations specific to that item, and suggestions for potentially improving conditions. At the end of the eighth item, a total school score and grade (A-F) is provided. Additionally, respondents receive access to a summary chart of how other schools were scored and links to access information about evidence-based physical activity in schools.

PASS BACKGROUND

Regular engagement in physical activity is important for children's growth, development, and health. The National Physical Activity Guidelines (2008) indicate children should engage in moderate and vigorous physical activity at least 60 minutes each day, but far too many children do not.

Children spend a large part of their waking day at school, and it is important for them to have ample opportunities for physical activity there. Physical education and recess provide opportunities for children to be active, but they are often provided infrequently or in a way that does not fully optimize the accrual of moderate to vigorous physical activity. Thus, it is important to deliberately extend school physical activity opportunities to include classroom activity breaks, before and after school programs, and active transport (walking/biking) to and from school.

Numerous studies of school-based school physical activity have been conducted, and this research has identified evidence-based practices that more fully optimize children's activity. Unfortunately, many people are not aware of these practices or how well their schools are doing in providing physical activity.

Thus, we created PASS to (a) inform adults of the importance of physical activity at schools and (b) enable them to compare physical activity opportunities at their schools to recommended practices and other elementary schools across the nation. PASS (Physical Activity School Score) is a free, user-friendly, easily accessible, web-based tool. PASS allows respondents to assess aspects of the main sources of physical activity at a school. Focusing on individual aspects of programs can provide information on how well a school is doing and where improvements might be possible.

To develop PASS we scoured the research literature; identified evidence-based practices that supported physical activity in schools; created, tested, and revised a paper-based instrument that was reviewed by teachers, school administrators, and parents; and subsequently produced a web-based model. We are grateful for the great support from those identified in the acknowledgement section.

PASS QUESTIONS AND ITEM RESPONSE VALUES

Question 1. The school requires all students to participate in physical education (PE)

- A. at least 150 minutes per week (5 points)
- B. 90 to 149 minutes per week (3 points)
- C. 60 to 89 minutes per week (1point)
- D. fewer than 60 minutes per week (0 points)

Question 2. Physical education is taught by licensed/certificated physical education teachers during:

- A. all the PE lessons (5 points)
- B. most PE lessons (4 points)
- C. some PE lessons (1 point)
- D. no PE lessons (or PE is not taught) (0 points)

Question 3. In addition to a lunch break, recess is provided for all students:

- A. at least 100 minutes per week (5 points)
- B. from 80 to 99 minutes per week (4 points)
- C. from to 60 to 79 minutes a week (1point)
- D. fewer than 60 minutes per week (0 points)

Question 4. Recess is characterized by the provision of: (a) ample loose equipment (e.g., balls, jump ropes), (b) strategic playground or game markings, and (c) the training of playground supervisors to promote PA.

- A. all three of the above (3 points)
- B. two of the three above (2 points)
- C. one of the three above (1 point)
- D. none of the above (0 points)

Question 5. The school provides opportunities for students to participate in daily physical activity during the school day through: (a) classroom activity breaks; (b) before school programs; (c) after school programs.

- A. all three of the above (3 points)
- B. two of the three above (2 points)
- C. one of the three above (1 point)
- D. none of the three above (0 points)

Question 6. The school supports active transport (e.g., walking, bicycling) to and from school by: (a) providing bike racks or storage, (b) facilitating active travel plans (e.g., "walking school bus," and "safe routes to school"), and (c) implementing traffic calming measures (e.g., crossing guards; speed bumps).

- A. all three of the above (3 points)
- B. two of the three above (2 points)
- C. one of the three above (1 point)
- D. none of the above (0 points)

Question 7. Children's access to physical activity during PE and recess is compromised by: (a) disciplinary reasons, (b) academic reasons, and (c) physical activity space not being available.

- A. none of the three above (3 points)
- B. one of the three above (2 points)
- C. two of the three above (1 point)
- D. all three of the above (0 points)

Question 8. The school has adequate facilities/space to support children's physical activity throughout the school day.

- A. both indoor and outdoor physical activity facilities are available (3 points)
- B. only indoor physical activity facilities are available (2 points)
- C. only outdoor physical activity facilities are available (1 point)
- D. playspace/facilities are not available to support children being physically active (0 points)

AUTOMATIC FEEDBACK GENERATED FOR INDIVIDUAL QUESTIONS AND RESPONSE ITEMS

Question 1. The school requires all students to participate in physical education

A. at least 150 minutes per week

Response: 5 points; Excellent! Physical education (PE) is part of the school curriculum and the only place where some children engage in high intensity physical activity. PE provides health-related physical activity and helps develop physical skills and physical fitness. Numerous authorities recommend that children receive PE daily and for a total of at least 150 minutes per week. Your school meets the recommendation for number of minutes.

B. 90 to 149 minutes per week

Response: 3 points; Good. Physical education (PE) is part of the school curriculum and the only place where some children engage in high intensity physical activity. PE provides health-related physical activity and helps develop physical skills and physical fitness. Numerous authorities recommend that children receive PE daily and for a total of at least 150 minutes per week.

Strategies for Improvement

Your school provides substantial PE time, but falls short of the 150-minute weekly recommendation. Increasing PE time may be difficult without additional resources. Some schools, however, have been able to increase the number PE minutes through creative delivery or scheduling.

C. 60 to 89 minutes per week

Response: 1 point; Needs improvement. Physical education (PE) is part of the school curriculum and the only place where some children engage in high intensity physical activity. PE provides health-related physical activity and helps develop physical skills and physical fitness. Numerous authorities recommend that children receive PE daily and for a total of at least 150 minutes per week.

Strategies for Improvement

Your school is close to providing only half the recommended PE time. Consider hiring additional PE specialists and/or providing staff development for classroom teachers so they can implement evidence-based PE programs under the supervision of a specialist.

D. fewer than 60 minutes per week

Response: 0 points; Needs improvement. Physical education (PE) is part of the school curriculum and the only place where some children engage in high intensity physical activity. PE provides health-related physical activity and helps develop physical skills and physical fitness. Numerous authorities recommend that children receive PE daily and for a total of at least 150 minutes per week.

Strategies for Improvement

Your school may be providing less than one-third of the recommended PE minutes. Consider hiring additional PE specialists and/or providing staff development for classroom teachers so they can implement evidence-based PE programs under the supervision of a specialist.

Question 2. Licensed or certified physical educators teach physical education to:

A. all the PE lessons

Response: 5 points; Excellent! National physical education and health authorities recommend PE be taught by certified specialists. Compared to classroom teachers, specialists conduct longer lessons and cancel them less. As well, their students have more higher intensity physical activity, resulting in increased physical fitness and skills. Certified specialists are also essential for leading the promotion of physical activity in other school programs.

B. most PE lessons

Response: 4 points; Good. National physical education and health authorities recommend PE be taught by certified specialists. Compared to classroom teachers, specialists conduct longer lessons and cancel them less. As well, their students have more higher intensity physical activity, resulting in increased physical fitness and skills. Certified specialists are also essential for leading the promotion of physical activity in other school programs.

C. some PE lessons

Response: 1 point; Needs improvement. National physical education and health authorities recommend PE be taught by certified specialists. Compared to classroom teachers, specialists conduct longer lessons and cancel them less. As well, their students have more higher intensity physical activity, resulting in increased physical fitness and skills. Certified specialists are also essential for leading the promotion of physical activity in other school programs.

Strategies for Improvement

While employing one or more PE specialists may not be economically feasible, interim strategies might include staff development for classroom teachers or part-time instructors who implement an evidence-based PE program under the direction of a PE specialist.

D. no PE lessons (or PE is not taught)

Response: 0 points; Needs improvement. National physical education and health authorities recommend PE be taught by certified specialists. Compared to classroom teachers, specialists conduct longer lessons and cancel them less. As well, their students have more higher intensity physical activity, resulting in increased physical fitness and skills. Certified specialists are also essential for leading the promotion of physical activity in other school programs.

Strategies for Improvement

Employing more PE specialists may not be economically feasible now. In the interim, consider staff development for classroom teachers or part-time teachers who implement an evidence-based PE program under the direction of a PE specialist.

Question 3. In addition to a lunch break, recess is provided to all students:

A. at least 100 minutes per week

Response: 5 points; Excellent! National physical education and health authorities recommend that elementary schools provide all students with at least 20 minutes of recess each day. Besides providing physical activity, recess may increase academic attentiveness and on-task classroom behavior. Students don't always receive recess when it is scheduled because teachers withhold it for disciplinary or academic reasons.

B. from 80 to 99 minutes per week

Response: 4 points; Good. National physical education and health authorities recommend that elementary schools provide all students with at least 20 minutes of recess each day. Besides providing physical activity, recess may increase academic attentiveness and on-task classroom behavior. Students don't always receive recess when it is scheduled because teachers withhold it for disciplinary or academic reasons.

C. from to 60 to 79 minutes a week

Response: 1 point; Needs improvement. National physical education and health authorities recommend that elementary schools provide all students with at least 20 minutes of recess each day. Besides providing physical activity, recess may increase academic attentiveness and on-task classroom behavior. Students don't always receive recess when it is scheduled because teachers withhold it for disciplinary or academic reasons.

Strategies for Improvement

Provide staff development for classroom teachers, supervisors, and recess volunteers and implement policies that ensure students have access to recess time.

D. fewer than 60 minutes per week

Response: 0 points; Needs improvement. National physical education and health authorities recommend that elementary schools provide all students with at least 20 minutes of recess each day. Besides providing physical activity, recess may increase academic attentiveness and on-task classroom behavior. Students don't always receive recess when it is scheduled because teachers withhold it for disciplinary or academic reasons.

Strategies for Improvement

Provide staff development for classroom teachers, supervisors, and recess volunteers and implement policies that ensure students have access to recess time.

Question 4. Recess is characterized by the provision of: (a) ample loose equipment (e.g., balls, jump ropes), (b) strategic playground or game markings, and (c) the training of playground supervisors to promote physical activity.

A. all three of the above

Response: 3 points; Excellent. The amount of time children engage in physical activity during recess ranges widely. Providing loose equipment and modifying play spaces (e.g., painting colorful lines and patterns) can increase physical activity. Poorly trained staff may suppress physical activity; therefore, providing professional development to facilitate activity during recess is an important strategy.

B. two of the three above

Response: 2 points; Good. The amount of time children engage in physical activity during recess ranges widely. Providing loose equipment and modifying play spaces (e.g., painting colorful lines and patterns) can increase physical activity. Poorly trained staff may suppress physical activity; therefore, providing professional development to facilitate activity during recess is an important strategy.

C. one of the three above

Response: 1 point; Needs improvement. The amount of time children engage in physical activity during recess ranges widely. Providing loose equipment and modifying play spaces (e.g., painting colorful lines and patterns) can increase physical activity. Poorly trained staff may suppress physical activity; therefore, providing professional development to facilitate activity during recess is an important strategy.

Strategies for Improvement

Make play equipment readily available, such as having classrooms store their own supplies and having a central overall checkout system. Install playground markings; consider having volunteers use templates available from commercial vendors (e.g., "Peaceful Playgrounds").

D. None of the above

Response: 0 points; Needs improvement. The amount of time children engage in physical activity during recess ranges widely. Providing loose equipment and modifying play spaces (e.g., painting colorful lines and patterns) can increase physical activity. Poorly trained staff may suppress physical activity; therefore, providing professional development to facilitate activity during recess is an important strategy.

Strategies for Improvement

Make play equipment readily available, such as having classrooms store their own supplies and having a central overall checkout system. Install playground markings; consider having volunteers use templates available from commercial vendors (e.g., "Peaceful Playgrounds").

Question 5. The school provides opportunities for students to participate in daily physical activity during the school day through: (a) classroom activity breaks; (b) before school programs; (c) after school programs.

A. all three of the above

Response: 3 points; Excellent! Classroom activity breaks help increase physical activity, attentiveness, and academic performance. Before- and after-school activity programs provide additional opportunities for children to be active on campus and may contribute as much as one-third of their daily physical activity recommendation.

B. two of the three above

Response: 2 points; Good. Classroom activity breaks help increase physical activity, attentiveness, and academic performance. Before- and after-school activity programs provide additional opportunities for children to be active on campus and may contribute as much as one-third of their daily physical activity recommendation.

C. one of the three above

Response: 1 point; Needs improvement. Classroom activity breaks help increase physical activity, attentiveness, and academic performance. Before- and after-school activity programs provide additional opportunities for children to be active on campus and may contribute as much as one-third of their daily physical activity recommendation.

Strategies for Improvement

Promote activity breaks using total school strategies such as playing videos over the school media system and by individual teachers adopting commercial programs such as "Take 10." Train volunteers to implement before- and after-school programs under the supervision of licensed professionals.

D. none of the three above

Response: 0 points; Needs improvement. Classroom activity breaks help increase physical activity, attentiveness, and academic performance. Before- and after-school activity programs provide additional opportunities for children to be physically active on campus and may contribute as much as one-third of their daily physical activity recommendation.

Strategies for Improvement

Promote activity breaks using total school strategies such as playing videos over the school media system and by individual teachers adopting commercial programs such as "Take 10." Train volunteers to implement before- and after-school programs under the supervision of licensed professionals.

Question 6. The school supports active transport (e.g., walking, bicycling) to and from school by: (a) providing bike racks or storage, (b) facilitating active travel plans (e.g., "walking school bus," and "safe routes to school"), and (c) implementing traffic calming measures (e.g., crossing guards; speed bumps).

A. all three of the above

Response: 3 points; Excellent! Walking or biking to school can provide children with about 16 minutes of moderate to vigorous physical activity per day. Schools can increase walking or biking to school by implementing programs such as *Safe Routes to School* and *Walking School Bus*. They can also help students use active transport by supporting the building and maintenance of sidewalks and crosswalks and implementing traffic-control strategies around schools.

B. two of the three above

Response: 2 points; Good. Walking or biking to school can provide children with about 16 minutes per day of moderate to vigorous physical activity per day. Schools can increase walking or biking to school by implementing programs such as *Safe Routes to School* and *Walking School Bus*. They can also help students use active transport by supporting the building and maintenance of sidewalks and crosswalks and implementing traffic-control strategies around schools.

C. one of the three above

Response: 1 point; Needs improvement. Walking or biking to school can provide children with about 16 minutes per day of moderate to vigorous physical activity per day.

Strategies for Improvement

Work with local planning and transportation authorities to ensure children can travel safely to and from school using ways that promote physical activity. Provide structures for storing bicycles safely. Implement programs such as *Safe Routes to School* and *Walking School Bus*.

D. None of the three above

Response 0 points; Needs improvement. Walking or biking to school has been shown to provide children with about 16 minutes per day of moderate to vigorous intensity physical activity.

Strategies for Improvement

Work with local planning and transportation authorities to ensure children can travel safely to and from school using ways that promote physical activity. Provide structures for storing bicycles safely. Implement programs such as *Safe Routes to School* and *Walking School Bus*.

Question 7. Children's access to physical activity during PE and recess is compromised by: (a) disciplinary reasons, (b) academic reasons, and (c) physical activity space not being available.

A. none of the three above

Response: 3 points; Excellent! Prolonged sitting may lead to metabolic diseases and after bouts of physical activity children are able to better focus on academic tasks. Daily PE and recess are recommended, and the children that are withheld from these programs are often those most in need of physical activity.

B. one of the three above

Response: 2 points; Good. Prolonged sitting may lead to metabolic diseases and after bouts of physical activity children are able to better focus on academic tasks. Daily PE and recess are recommended, and the children that are withheld from these programs are often those most in need of physical activity.

C. two of the three above

Response: 1 point; Needs improvement. Prolonged sitting may lead to metabolic diseases and after bouts of physical activity children are able to better focus on academic tasks. Daily PE and recess are recommended, and the children that are withheld from these programs are often those most in need of physical activity.

Strategies for Improvement

Work toward having district and school physical activity policies available in writing and made publicly. Help establish accountability measures (e.g., supervision by administrators; PE and recess schedules posted publicly).

D. all three of the above

Response 0 points; Needs improvement. Prolonged sitting may lead to metabolic diseases and after bouts of physical activity children are able to better focus on academic tasks. Daily PE and recess are recommended, and the children that are withheld from these programs are often those most in need of physical activity.

Strategies for Improvement

Work toward having district and school physical activity policies available in writing and made publicly. Help establish accountability measures (e.g., supervision by administrators; PE and recess schedules posted publicly).

Question 8. The school has adequate facilities/space to support children's physical activity throughout the school day.

A. Both indoor and outdoor physical activity facilities are available

Response: 3 points; Excellent! Facilities/space affect physical activity opportunities in all program areas. Having different types of facilities promote more physical activity as well as different movement types. PE and recess often compete for the same facilities/space. During inclement conditions (e.g., rain, snow, excessive heat), PE is often canceled and recess is held in classrooms when adequate indoor facilities are not available.

B. Only indoor physical activity facilities are available

Response: 2 points; Needs improvement. Facilities/space affect physical activity opportunities in all program areas. Having different types of facilities promote more physical activity as well as different movement types. PE and recess often compete for the same facilities/space. During inclement conditions (e.g., rain, snow, excessive heat), PE is often canceled and recess is held in classrooms when adequate indoor facilities are not available.

Strategies for Improvement

Building facilities/space may not be immediately economically feasible. Thus, use strategic planning (e.g., spread PE classes throughout the day, but not during recess time), convert large classroom space, and consider shared use of facilities with neighboring park and recreation authorities.

C. Only outdoor physical activity facilities are available

Response: 1 point; Needs improvement. Facilities/space affect physical activity opportunities in all program areas. Having different types of facilities promote more physical activity as well as different movement types. PE and recess often compete for the same facilities/space. During inclement conditions (e.g., rain, snow, excessive heat), PE is often canceled and recess is held in classrooms when adequate indoor facilities are not available.

Strategies for Improvement

Building facilities/space may not be immediately economically feasible. Thus, use strategic planning (e.g., spread PE classes throughout the day, but not during recess time), convert large classroom space, and consider shared use of facilities with neighboring park and recreation authorities.

D. Playspace/facilities are not available to support children being physically active

Response: 0 points; Needs improvement. Facilities/space affect physical activity opportunities in all program areas. Having different types of facilities promote more physical activity as well as different movement types. PE and recess often compete for the same facilities/space. During inclement conditions (e.g., rain, snow, excessive heat), PE is often canceled and recess is held in classrooms when adequate indoor facilities are not available.

Strategies for Improvement

Building facilities/space may not be immediately economically feasible. Thus, use strategic planning (e.g., spread PE classes throughout the day, but not during recess time), convert large classroom space, and consider shared use of facilities with neighboring park and recreation authorities.

OVERALL SCHOOL SCORE, GRADE, AND AUTOMATICALLLY GENERATED FEEDBACK

Based on 30 Total Possible Points

30 points –school grade = A+. Relative to evidence-based research, your school's physical activity programs are well positioned to fully support children's physical activity accrual during the school day.

29-27 points –school grade = A. Relative to evidence-based research many aspects of your school's physical activity programs are being implemented and strongly support student physical activity accrual.

26-24 points –school grade = B. Many aspects of your school's physical activity programs are being implemented but there are opportunities to improve. Examine what aspects of evidence-based practice may be feasible and incorporate them into practices that optimize children's physical activity in your school.

23-21 points –school grade = C. Several aspects of your school's physical activity programs could be improved. Examine what aspects of evidence-based practice may be feasible and incorporate them into practices that optimize children's physical activity in your school.

20-18 points –school grade = D. Many aspects of your school's physical activity programs fall short of recommendations. Examine the individual components/characteristics with low scores and work toward making feasible changes to optimize children's physical activity in your school.

17 points and below –school grade = F. Numerous aspects of your school's physical activity programs fall short of recommendations. Examine the individual components/characteristics with low scores and work toward making feasible changes to optimize children's physical activity in your school.

LEARN MORE

(Links to summaries of evidence-based research on physical activity in schools)

- Beighle A. (2012). *Increasing physical activity through recess. A research brief.* San Diego, CA: Active Living Research. Available from: http://activelivingresearch.org/increasing-physical-activity-through-recess
- IOM (Institute of Medicine). (2013). *Educating the student body: Taking physical activity and physical education to school*. Washington, DC: The National Academies Press. Available at: www.iom.edu/studentbody
- McMillan, T. E. (2009). *Walking and biking to school, physical activity, and health outcomes. A research brief.* San Diego, CA: Active Living Research. Available at www.activelivingresearch.org.
- Spengler, J. O. (2012). *Promoting physical activity through shared use of school and community recreational resources*. San Diego, CA: Active Living Research. Available at: www.activelivingresearch.org
- The California Endowment (2007). *Physical education matters. Policy brief.* Available at http://www.childrennow.org/uploads/documents/bwlw2011_resource3.pdf
- U.S. Department of Health and Human Services [USDHHS]. (2012). *Physical activity guidelines for Americans midcourse report: Strategies to increase physical activity among youth.* Washington DC, U.S. Department of Health and Human Services. Available at: http://www.health.gov/paguidelines/midcourse/pag-mid-course-report-final.pdf
- Whitt-Glover, M., Porter. A. T., Yancey, T. K. (2013). *Do short physical activity breaks in classrooms work? A research brief*. San Diego, CA: Active Living Research. Available at: http://activelivingresearch.org/files/ALR_Brief_ActivityBreaks_Feb2013.pdf

OCCASIONALLY ASKED QUESTIONS

1. Are responses anonymous?

Yes, the only identifiers are a respondent-provided characteristic (i.e. School administrator, PE teacher, Classroom Teacher, Parent, or Other) and geographic location of the school (e.g., specific US state).

2. Is PASS a research tool?

No, the question items are based on evidence-based findings, but the tool (e.g., item and school scoring) has not been validated.

REFERENCE

Lounsbery, M. A. F., & McKenzie, T. L. (2014). *PASS: Physical Activity School Score*. An on-line, evidence-based, elementary school physical activity assessment tool.

To review the tool: https://unlv.co1.qualtrics.com/SE/?SID=SV_b1xrJyPPLYa3I0Z

To use the tool: https://unlv.co1.qualtrics.com/SE/?SID=SV_71ncSsiDtKTPctn