## **Appendix A**

## **Background Information**

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# Health & Physical Education Program Description - *Prepared by the Health & Physical Education Office*

## **Program Overview**

The Health and Physical Education Office provides system-wide leadership for curriculum, professional development, and health and physical education instruction to all students in grades pre-K through ten, and physical education electives in grades eleven and twelve. At the elementary level, the classroom teacher has the primary responsibility for delivering the health education curriculum. At the secondary level, health education is delivered by the health and physical education teacher, unless there is a health specialist. Secondary schools utilized both a health specialist and the health/physical education teacher to deliver health education to students. Nearly 24,000 students received these services in grades pre-K through twelve. Driver Education is an elective course only offered at Wakefield High School and it is offered through summer school as well.

The primary mission of the Health, Physical, and Driver Education Program is to ensure that all APS students become lifelong learners of wellness by participating in physical activities that develop behaviors and practices to promote a healthy lifestyle.

## **Goals and Objectives**

The Health and Physical Education Office operates within the Department of Teaching and Learning to meet APS Strategic Plan goals and department process goals. APS develops six-year strategic plans with staff and community involvement to identify focus areas for school system improvement. Each year the School Board and the public receive reports on the progress made within each strategic plan goal area during the preceding year, with the opportunity for modifications to the strategic plan as warranted. At the time of data collection for this evaluation, the 2011-2017 strategic plan was in place and focused on five important goal areas:

Goal 1: Ensure that Every Student is Challenged and Engaged

**Goal 2:** Eliminate Achievement Gaps

Goal 3: Recruit, Retain and Develop High-Quality Staff

**Goal 4: Provide Optimal Learning Environments** 

Goal 5: Meet the Needs of the Whole Child

The Health, Physical, and Driver Education Office also works toward meeting the following Department's core services:

Establishing instructional best practices

Designing the curriculum for implementation

Selecting instructional resources

**Developing the Program and Studies** 

Providing instructional support for schools

Designing and delivering professional learning

Monitoring curriculum and pedagogy implementation

Progress in each of the areas of responsibility is monitored through a cycle of program improvement and evaluation.

At both the elementary and secondary levels, the goals and objectives for Health, Physical Education, and Driver Education instruction in the Arlington Public Schools (APS) reflect the Standards of Learning (SOL) adopted by the state of Virginia and the standards from Society of Health and Physical Education (SHAPE, national health and physical education standards). In addition to the strategic goals set forth by APS, the Health, Physical Education and Driver Education Program aims to:

- prepare each student to succeed in a diverse, changing world through curriculum and instruction that focuses on 21<sup>st</sup> century skills and other school experiences responsive to each student's talents, interests, and challenges;
- provide teachers and students with access to technology and other resources that support high quality health, physical, and driver education instruction;
- engage teachers in professional development that focuses on best practice pedagogy and skills for the 21<sup>st</sup> century and beyond;
- build effective relationships with parents and the community so that they know about and actively support the education of our students; and
- prepare each student's knowledge and skills that promote a healthy lifestyle.

Elementary physical education provides students with opportunities to participate in:

- challenging activities that promote a healthy and active lifestyle
- motor and skill development
- anatomy and physiology knowledge
- fitness knowledge, components of fitness, fitness planning and goals
- nutrition and fitness components of energy balance
- social development and sportsmanship.

Middle school physical education encourages students to:

- refine motor skills and become more proficient when using their motor skills
- learn and apply more complex concepts of human movement
- learn about the components of fitness, fitness planning and goals
- participate cooperatively with others and understand reasons for rules and procedures

extend learning of energy balance to include nutrition guidelines, meal planning, screen time,
 and sleep and explain the connection to personal health and fitness

High school physical education teaches students to:

- demonstrate a level of competence in several physical activities that they are likely to continue beyond graduation
- develop a working knowledge of human anatomy and physiology concepts and principles, enabling them to independently apply concepts in order to acquire new skills or enhance existing skills, to plan, implement, evaluate, and modify a personal, goal-driven fitness plan that enables them to achieve and maintain the level of fitness needed to meet their personal goals for various work-related, sport, and leisure activities
- initiate and exhibit responsible behaviors and positively impact the behaviors of others in physical activity settings inside and outside of school
- explain the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease for the present and into the adult years

Elementary school health education provides age-appropriate concepts and skills to assist students in making healthy decisions to reduce health risks and enhance the health of self and others. Students also learn about the basic structures and functions of the human body, disease prevention, healthy food and beverage choices, safety, and ways to access reliable health information. Students practice behaviors that promote active, healthy lifestyles and help promote health at school and in the community. They learn about hygiene, safety concepts, physical activity, and sleep.

Middle school health education provides opportunities for students to exhibit a healthy lifestyle, interpret health information, and promote good health. Students apply physical, emotional, social, and environmental health skills and strategies to improve or maintain personal, family and community health. They understand how to be a positive role model, they understand the impact of positive and negative peer pressure, and they use refusal skills to resist peer pressure to not use alcohol, tobacco, and other drugs. Students also learn about the benefits of stress management and stress reduction techniques, depression and suicide, disease prevention, the benefits of healthy interpersonal relationships, and how violence, bullying, and harassment affect health and safety. They learn about internet safety, violence prevention, nutrition, physical activity, and sleep.

High school health education encourages students to integrate a variety of health concepts, skills, and behaviors to plan for their personal, lifelong health goals. These include awareness and consequences of risky behaviors, disease prevention, overall wellness, and identification of community health resources. Students identify guidelines for sleep, rest, nutrition, and physical activity and analyze personal risk factors for diabetes, heart disease, and stroke. They learn about substance abuse prevention which includes the consequences of binge drinking, the positive and negative effects of social networking, violence prevention, the characteristics of healthy peer, family, and dating relationships and abusive relationships. Students learn to identify signs and symptoms of depression, risk factors for suicide, and risk factors for other self-destructive behaviors and the relationship between body image and eating disorders. They see themselves as having an active role in creating a healthy lifestyle for themselves, for

their families, and for the community and they serve the community through the practice of healthenhancing behaviors that promote wellness throughout life.

Secondary health education increases students' health literacy and helps students understand how to achieve and maintain a healthy lifestyle, and fosters the motivation, skills, and self-efficacy necessary to make informed and healthy choices, avoid high-risk behaviors, and build healthy families, relationships, schools, and communities.

Driver education provides students with a detailed understanding of the fundamentals of driving and guided practice behind the wheel. Student outcomes are based on successful completion of a Virginia driver's license. As a result of driver education instruction, students can:

- demonstrate a working knowledge of the rules and procedures of operating a motor vehicle;
- identify and analyze the physical and psychological conditions that affect driver performance;
- apply knowledge, processes, and skills to become safe, competent users of the highway transportation system; and
- display responsible driving behaviors when alone and with peers.

#### **Attributes of Success**

Through successful implementation of the APS Health, Physical Education, and Driver Education Program, all students will:

- Experience success in physical education as well as participate in regular out-of-school physical
  activities, such as recreational sports programs, joining a health club, or working out on their
  own. Such participation demonstrates that students are continuing physical activity beyond the
  curricular areas and indicates that students feel confident in their ability and knowledge of sport
  and fitness activities and are committed to maintaining their personal fitness.
- Make informed decisions about their life choices and avoid risky behaviors that may lead to unhealthy consequences.
- Display responsible driving skills and behaviors; have parents take an active role in the driver licensing process; pass the written and road skills test for a Virginia License; and maintain safe driving practices, with no traffic violations or crashes.

## **Best and Current Practices**

The HPE program created strategies to align with the department's best instructional practices.

Instruction delivered is challenging, relevant and engaging

- Guides students in connecting learning to the world beyond school
  - Cites current events involving activity (local, collegiate, professional sports)
  - ▶ Directs students to activity within community- PRCR and other Arlington groups

#### Appendix A1

- Creates an interactive learning environment that emphasizes problem-solving, critical thinking and collaboration
- Creates an environment that maximizes the participation of all students (no student elimination activities; no waiting for 'turns')
- Make interdisciplinary connections

#### Student learning is assessed

- Includes assessment as a daily part of instruction
  - Observations accompanied with specific feedback
  - ► Use of technology (Pedometers, Heart Rate Monitors)
  - ► Tools: checklists; peer and self-assessment, exit slips
- Promotes student self-assessment and peer assessment
  - ► Goal Setting: Student portfolio, student fitness plan, and nutrition logs
- Uses assessment results to inform instruction (activity change)
- Uses a variety of assessment tools to measure student learning and performance

#### **Curriculum and Instruction**

The Health, Physical, and Driver Education curriculum is based on the Virginia Standards of Learning (SOLs). The period covered by this report utilized standards adopted in 2015.

The Physical Education Standards of Learning for Virginia Public Schools identify the academic content for the essential concepts, processes, and skills for physical education in kindergarten through grade twelve. These standards provide school divisions and teachers with a guide for creating aligned curricula and learning experiences in physical education to help students understand the benefits of achieving and maintaining a physically active lifestyle and learn the skills necessary for performing a variety of physical activities.

Physical education is unique in that it focuses on learning about and learning through physical activity. It offers many opportunities for students to build positive interpersonal relationships, improve self-esteem, communicate effectively, set goals, apply strategies to enhance performance, exercise self-management skills, collaborate, and develop a sense of social responsibility. It also provides a meaningful foundation for further study in preparation for careers related to the health sciences, sport and exercise science, education, recreation and leisure industries, physical performance, coaching, and fitness and community health management.

#### **Physical Education**

#### **Elementary Level**

Elementary physical education provides students with opportunities to participate in challenging activities that promote a healthy lifestyle, motor and skill development, a knowledge of the structures and functions of the human body, an understanding of the nutritional needs of the body, fitness knowledge and planning, and sportsmanship.

### Secondary Level

Middle school physical education encourages the development of physical, social, and emotional skills, an understanding of the nutritional needs of the body, a knowledge of the structures and functions of the human body, fitness knowledge and planning, and cognitive knowledge necessary for participation in sports and lifetime activities.

High school physical education teaches students to develop and implement a lifelong personal wellness/fitness plan using acquired physical fitness skills, and positive lifelong fitness behaviors.

Health education increases health literacy, helps students understand how to achieve and maintain a healthy lifestyle, and fosters the motivation, skills, and self-efficacy necessary to make informed and healthy choices, avoid high-risk behaviors, and build healthy families, relationships, schools, and communities.

As a result of health education instruction, students can:

- Access, evaluate, and synthesize information to protect, enhance, and advocate for their own and others' health, well-being, and safety across their lifespan;
- Critically analyze health information from a variety of sources (scientific information, health brochures, media messages, and Web sites) to make appropriate health decisions and access services needed to prevent or treat illness; and
- Develop and use personal, behavioral, social and cognitive skills and strategies to promote a sense of personal identity and well-being and to build and manage respectful relationships.

According to a Harvard study on driver education, driver education promotes motor safety and mobility. Driver education provides students with a detailed understanding of the fundamentals of driving and it fosters responsible driving attitudes and behaviors. As a result of driver education instruction, students can:

- demonstrate a working knowledge of the laws governing the operation of a motor vehicle;
- identify and analyze responsible habits and behaviors and understand how physical and psychological conditions affect driver performance;
- apply knowledge, processes, and skills to become safe, competent users of the highway transportation system;
- use visual search skills and a systematic decision-making process to make risk-reducing decisions by adjusting speed and/or position;

- demonstrate balanced vehicle movement through precise and timely steering, braking, and accelerating under a variety of conditions;
- display responsible driving behaviors when alone and with peers;
- interact safely with other roadway users by predicting vehicle performance, avoiding conflicts, and minimizing and managing risks;
- identify how advancements in intelligent handling and stability technology systems affect driving practices;
- engage in meaningful, extensive supervised practice to progress from simple to more complex driving skills in low, moderate, and higher risk driving environments; and
- master precision movements for maintaining optimal vehicle balance and control in expected as well as unexpected circumstance

## **Professional Development**

The Health, Physical, and Driver Education Program provides support and professional development to all elementary, middle, and high school health, physical, and driver education teachers. APS health, physical, and driver education teachers have varied opportunities to participate in professional development through monthly afterschool meetings, scheduled workshops, and attendance at state and national conferences. At the middle and high school levels, health and physical education teachers benefit from monthly health and physical education in-services presented at their schools. These inservices include topics such as instructional best practices, formative and summative assessments in health and physical education, interactive activities for the health classroom, substance abuse prevention, nutrition, obesity prevention, lifetime physical activity, curriculum development, identifying power standards, and mental health. All of these professional development opportunities are aligned with the APS Strategic Plan.

A health, physical, and driver education Blackboard site facilitates communication among health, physical, and driver education teachers as well as the Health and Physical Education Office. The Blackboard site includes strategies to support instruction, announcements, the 2015 APS health, physical, and driver's education curriculum unit plans, the 2015 health, physical, and driver's education SOLs, professional development resources, aquatic program resources, grant information, health and physical education monitoring reports, weather guidelines and air quality alerts.

#### Resources

The Health, Physical, and Driver Education Program consists of 112 designated teachers plus elementary classroom teachers, a half time administrative assistant, one Safe Routes to School Coordinator, one teacher specialist, and one curriculum supervisor.

#### Additional resources include:

- physical education equipment, both centrally allocated via planning factors and school-based funds (i.e. PTA, fundraising, etc.);
- facilities (both indoor and outdoor), pools;
- curriculum materials, such as textbooks, software, videos, heart rate monitors, pedometers, geo fitness equipment, and support materials;
- 3 driver education cars;
- professional development;
- administration;
- the collaboration of local and state agencies (Arlington's Police Department, Arlington's Partnership for Children, Youth and Families, Arlington's Department of Health Services, Arlington's Parks, Recreation, and Cultural Resources, Virginia's Department of Education).

Implementation of the Health, Physical, and Driver Education Program is the responsibility of the Health, Physical, and Driver Education Supervisor, Health & Physical Education Teacher Specialist, Safe Routes to School Coordinator and half time administrative assistant, within the Department of Teaching and Learning.

The primary responsibilities of the one half time/shared and two fulltime program employees are outlined in **Table 1**.

Table 1: Health & Physical Education Office Staff and Responsibilities

Employee	Primary Responsibilities
Health, Physical and Driver Education & Athletics Supervisor (full time)	<ul> <li>Plans and implements staff professional learning and development</li> <li>Develops curriculum</li> <li>Reviews, supports, and selects supplementary materials</li> <li>Observes and evaluates new and experienced teachers for improvement and support</li> <li>Supervises HPE Teacher Specialist, Safe Routes to School Coordinator and HPE Administrative Assistant</li> <li>Organizes and coordinates county-wide activities</li> <li>Organizes county-wide informational meetings for parents and families</li> <li>Prepares items for school board responses and public information</li> <li>Facilitates and guides new program initiatives</li> <li>Initiates and participates in system-wide studies</li> </ul>

	Manages program budgets
	Applies for and manages grants
	Completes state and federal reports
	Designs and maintains the Blackboard Health, Physical, and Driver Education online site
	Acts as a liaison between administration and teachers
	Serves as a liaison on school division, county and local committees
	Interviews and screens staff for hire
	Assists principals in scheduling itinerant staff
	Coordinates driver education parent awareness meetings
	Writes and manages secondary athletic officials contracts
	Creates middle school athletic schedules
	Plans and coordinates design of new facilities
	Writes MOUs with the Department of Parks and Recreation for facility use
	Supports secondary athletic programs to include scheduling, policy writing, contracting officials and staffing
Health &	Plans and implements professional development
Physical Education	Assists in curriculum development and revisions
Specialist (full	Provides instructional assistance to health and physical education teachers
time)	Collaborates with other APS staff and departments and local groups to enhance instruction
	Designs and maintains the Blackboard Health, Physical, and Driver Education online site
	Assists with interviews at district job fairs
Administrative	Supports program operations to schedule professional development
Assistant (half time/shared)	Facilitates communications with staff and public
ame, snareu,	Manages financial accounts

Though the Health & Physical Education Program Office does not directly supervise teachers, staff works closely with department chairs, and elementary and secondary classroom health and physical education teachers to ensure that instruction aligns with state and school division policy and that best instructional

practices are being utilized to deliver the curriculum. The health and physical education program office staff participates in walkthroughs with school administrators periodically throughout the school year.

The teaching staff for FY2018 is funded through school planning factors and includes the following positions that support Health & Physical Education instruction:

#### **Elementary Level**

• 64 health & physical education teachers

#### **Secondary Level**

- 63 health & physical education teachers (37 middle & 26 high)
- 9 health & physical education department chairs

In addition, the Department of Teaching and Learning provides funds for purchase of health and physical education and support materials in an adoption year. In FY2018, \$12,500 was used to purchase health and physical education support materials. In addition to materials provided by the Department of Teaching and Learning, all school budgets provide resources to replace and supplement instructional materials and supplies each year.

#### **School-Based Instructional Costs**

The budget for APS defines planning factors for school based health and physical education staffing and other resources based on the number of students at the school. The following details the full-time equivalent (FTE) positions by school level (Please note that planning factors are followed inconsistently at schools).

For elementary schools, physical education and health teachers are allocated using the following formula

- 1.0 FTE per schools with up to 350 students;
- 1.4 FTE per schools with 351 450 students;
- 1.6 FTE per schools with 451 500 students;
- 2.0 FTE per schools with 501 600 students;
- 2.4 FTE per schools with 601 700 students;
- 2.6 FTE per schools with 701 750 students;
- 3.0 FTE per schools with 751 850 students;
- 3.4 FTE per schools with 851 950 students;
- 3.6 FTE per schools with 951 1000 students; and
- An additional 0.2 FTE per school w/pre-k special education program.

In addition, each elementary school receives a budget of \$159 a year for physical education equipment, with 35% to be used for additional equipment and 65% to be used for replacement equipment; and \$1.35 per elementary student.

For middle schools, physical education and health teachers are allocated using the following formula:

- 0.4 FTE for a health education specialist;
- 0.2 FTE for the health education specialist at HB Woodlawn Program; and
- 1.0 FTE for the regular classroom teacher per 22.4 general education students, with an adjustment to extrapolate 5 teacher periods to 7 student periods, and an added factor for mainstreaming special education students.

In addition, each middle school receives a budget of \$322 a year for physical education equipment, with 35% to be used for additional equipment and 65% to be used for replacement equipment; and \$1.80 per middle school student.

For high schools, physical education and health teachers are allocated using the following formula:

- 0.6 FTE for a health education specialist;
- 0.2 FTE for the health education specialist at H-B Woodlawn Program;
- 1.0 FTE for the regular classroom teacher per 23.4 general education students, with an adjustment to extrapolate 5 teacher periods to 7 student periods, and an added factor for mainstreaming special education students

In addition, each high school receives a budget of \$479 a year for physical education equipment, with 35% to be used for additional equipment and 65% to be used for replacement equipment, and \$1.80 per high school student.

## **Status of Recommendations Made in Previous Evaluations**

The Health & Physical Education Program was last evaluated in 2009 and included the following recommendations:

**Table 2: Status of Recommendations Made in Previous Evaluation** 

Recommendation	Status	
Recommendations to be Implemented by the Health, Driver and Physical Education Programs:		
Monitor the Alignment and Implementation of Curriculum		

•	Develop a plan with middle school teachers to facilitate best instructional practices for H&PE in middle schools.	Middle school teachers facilitate best instructional practices for middle school students through activity based learning.
•	Conduct follow-up focus groups with students and with teachers to better understand their responses to issues raised in surveys.	The YRBS (Youth Risk Behavior Survey) data is presented annually.
•	To ensure that the instruction delivered is relevant to students, expand on health and physical education professional development that enables students to improve beyond school.	The Health and Physical Education Office and the health and physical education teachers developed the 2015 health and physical education curriculum units using the 2015 health and physical education standards of learning during the summer of 2015. These units include home and school connections that include a lifetime, personal fitness focus.
•	Modify the observation tool for principals to use to observe physical education classes to monitor the alignment and implementation of curriculum, focusing on the items with high inter-rater reliability.	Revise the observation tool to align with the new SOLs and share it with school administrators or create a new tool with the HPE program evaluation committee.
	crease the proportion of students meeting the ellness level for aerobic capacity	
•	Engage all physical education teachers in discussion to include vigorous activity in every lesson	Physical education professional development has stressed that students should be engaged in moderate to vigorous (MVPA) physical activity in at least 50% of the time during lessons.
•	Develop unit plans that integrate technology to assess, plan, and maintain personal fitness across all levels	The 2015 physical education curriculum units were developed in the summer of 2015 to incorporate technology to assess, plan, and maintain personal fitness across all levels.
•	Monitor implementation	Staff uses the health and physical education observation tools when conducting classroom observations to

		ensure that curriculum is being delivered through best instructional practices.
3.	Create Program Goals and Objectives for Driver Education	
	<ul> <li>Define goals and objectives for APS driver education that includes a requirement for students to attend the driver education parent awareness meeting, Keys to Safety (compliance with proposed bill HB1782) by 2010-11 for law.</li> </ul>	The Health and Physical Education Office has defined goals and objectives for APS driver education by using the 2015 driver education standards of learning. Parents and their child attend a mandatory driver education parent awareness meeting before their child begins taking driver education.
4.	Investigate the Effectiveness of Health Education, Specifically the Specialist Model	
	• This evaluation did not gather the data required to address this ongoing concern. Steps will be taken in the coming years to gather information that will address the approaches used to provide effective health instruction.	N/A
Re	commendations Requiring Work with Other Programs,	Departments, and Schools:
5.	Staff believes that it is critical to continue its work with all community efforts to address the risk behaviors of Arlington's youth through:	
	<ul> <li>Continued participation in Arlington strategic planning process lead by the Arlington Public Health System and called Mobilizing for Action through Planning and Partnerships (MAPP). APS staff will continue to work closely with MAPP's Strategic Issues Team (including its committees for underage drinking and sexually transmitted infections), Arlington's Partnership for Children, Youth, and Families, Arlington Department of Health Services, Arlington Police Department,</li> </ul>	The Health and Physical Education Office continues to work closely with the Arlington Police Department, Juvenile and Domestic Relations Court, the Probation Department, and the Arlington Partnership for Children, Youth, & Families, and Vanguard Services.

	Juvenile and Domestic Relations Court, the Probation Department, and Vanguard Services.	
	Continued participation in school and county committees including but not limited to School Health Advisory Board, the Comprehensive School Health Advisory Board, the Teen Alcohol Prevention Coalition (Parent and Community Awareness and Education Committee), and the Northern Virginia Healthy Kids Coalition.	The Health and Physical Education Office continues to participate in APS and county community groups.
6.	Annually monitor and report on class size at all levels.	Class sizes are monitored throughout the year through Synergy
7.	Work with schools to improve the implementation of the Too Smart to Start Program and the Family Event.	The Health and Physical Education Office holds an annual Too Smart to Start planning meeting for counselors, nurses, and school resource officers to meet to discuss strategies to promote the implementation of the Too Smart to Start Program and the family event.
8.	Work with Information Services to create mechanisms to efficiently capture student results on wellness and swim assessments	Wellness assessments are now inputted into WelNet (a web based software) so teachers can pre and post test their students and analyze student data. Elementary teachers have been using a swim assessment tool spreadsheet for the past two years, and the high school teachers piloted using a swim assessment tool spreadsheet last year. The high school teachers will continue to use the assessment tool spreadsheet this year. The Health and Physical Education Office is investigating the use of WelNet software for teachers to input their students' swim pre and post test scores and to be able to analyze student swim data.

## **Expressed Concerns**

A number of persistent concerns have been identified through discussions with teachers and the Health and Physical Education Advisory Committee. These include:

- the extent of too large class sizes in both health and physical education
- the extent of implementation of the APS health and physical education curriculum
- the extent that students are active during physical education
- the efficiency of driver education instruction
- the effectiveness of the instructional swim program
- support for ESOL/HILT students in health classes at the secondary level
- the delivery of the health curriculum at the elementary level

## Health and Physical Education Evaluation Methodology

The evaluation of the Health and PE program began in 2015-16 with the development of an evaluation design. A planning committee met regularly throughout the year to develop the evaluation questions that would guide data collection for this report. Committee members included staff from Planning and Evaluation, the Health and PE Office, and schools; as well as a parent and member of the Health and PE Citizens Advisory Committee. Data collection for the evaluation occurred during the 2016-17 school year and the fall of 2017. This evaluation employed various methodologies to collect data with which to examine the success of the APS Health and PE program. In particular, this report addresses the following three components outlined in Arlington Public Schools (APS) policy and procedures (A-6.31) for accountability and evaluation:

- 1. A description of the department, program, or service (Appendix A1)
- 2. Evaluation questions that ask:
  - a. How effectively was the Health and PE program implemented?
  - b. What were the outcomes?
- 3. Recommendations

The executive summary and appendices are located online at www.apsva.us/evaluationreports.

## **Evaluation Design and Questions**

**Table 1** displays the Health and PE evaluation design.

**Table 1: Health and PE Evaluation Design** 

Program/Service Objective	Program/Service Question	Data Source(s)
Evaluation Question 1: Implementation – How effectively was the Health & PE Program implemented?		
Objective 1: Best instructional practices for emotional support, classroom organization, instructional support, and student engagement are evident across instruction in health & PE classrooms.	1a To what extent are best instructional practices evident in observed health & PE instruction?	Classroom Assessment Scoring System (CLASS)  Health – all CLASS domains  PE – all domains except instructional support
<b>Objective 2</b> : The APS Health & PE program follows best practices specific to health and physical education.	2a To what extent are best instructional practices specific to health and physical education evident in observed health and PE instruction?	APS-developed observation tools  Health instructional practices  PE instructional practices  PE physical activity time

Program/Service Objective	Program/Service Question	Data Source(s)
<b>Evaluation Question 1: Implen</b>	nentation – How effectively was the Heal	th & PE Program implemented?
	2b What is the level of consistency in the delivery and quality of instruction of  • PE curriculum  • Health curriculum  • Mental health curriculum  • Family Life Education (FLE) curriculum	<ul> <li>APS-developed observation tools</li> <li>Teacher survey</li> </ul>
	2c To what extent do secondary APS health and PE class sizes align with national standards?	<ul><li>SHAPE standards</li><li>Secondary enrollment data</li><li>Teacher survey</li></ul>
	2d What is the impact of class size on delivery of health and PE instruction? How does this vary throughout the district?	<ul> <li>APS-developed observation tools</li> <li>Teacher Survey</li> </ul>
	2e What is the role of the PE teacher across levels and schools?	<ul> <li>Teacher survey</li> <li>Administrator survey</li> <li>APS-developed observation tools</li> </ul>
<b>Objective 3:</b> New state Health and PE standards are implemented consistently across APS.	<ul> <li>3a What is the level of consistency in implementation and delivery of the new Health and PE SOLs?</li> <li>3b What is the level of consistency in how/how often teachers assess students' physical education and health knowledge and outcomes?</li> </ul>	<ul> <li>APS-developed observation tools</li> <li>Teacher survey</li> </ul>
	3c To what extent do teachers report that they are confident in implementing the new SOLs? 3d To what extent do teachers report that they are satisfied with the support for implementation of the new SOLs?	Teacher survey
<b>Objective 4:</b> Health and physical education instruction is available and accessible to all APS students.	4a To what extent do students with special needs and English learners receive the necessary support in health and PE classes to meet their individual needs?	<ul> <li>APS-developed observation tools</li> <li>Teacher survey</li> <li>Student focus groups</li> </ul>

Program/Service Objective	Program/Service Question	Data Source(s)
Evaluation Question 1: Implementation – How effectively was the Health & PE Program implemented?		
	4b To what extent do health and PE teachers report that they have the support they need to serve students with special needs, including  • Students with disabilities  • English learners	Teacher survey
	4c What is the extent and impact of external disruptions to health and PE instruction?	Teacher survey
Objective 5: APS manages Health & PE resources effectively.	5a To what extent do teachers and students have access to technology and other resources that support high quality health, physical, and driver education instruction?	<ul> <li>APS-developed observation tools</li> <li>Teacher survey</li> </ul>
	5b What is the availability and quality of professional development available to health and PE teachers?	<ul><li>Electronic Registrar Online</li><li>Teacher survey</li></ul>
	5c What is the impact of physical space considerations on health and PE instruction?	Teacher survey

Program Service/Objective	Program/Service Question	Data Source(s)	
Evaluation Question 2: Outcomes – What were the outcomes for the targeted population?			
Objective 6: overarching goal about student fitness	6a To what extent does the HPE program impact student health and fitness?	<ul> <li>Cooper Institute         FITNESSGRAM® (Welnet)</li> <li>APS swim assessment</li> <li>Student focus groups</li> </ul>	
<b>Objective 7</b> : Students participate in regular physical activities.	7a To what extent do students participate in regular physical activities?	Youth Risk Behavior Survey	
Objective 8: Students make informed decisions about their life choices and avoid risky behaviors that may lead to unhealthy consequences.	8a To what extent do students make informed decisions about their life choices and avoid risky behaviors that may lead to unhealthy consequences?	<ul> <li>Youth Risk Behavior Survey</li> <li>Your Voice Matters Survey</li> <li>Student focus groups</li> </ul>	

## **Study Measures**

Data sources used to inform this evaluation are described in detail below.

### Classroom Assessment Scoring System (CLASS)

Arlington Public Schools uses the Classroom Assessment Scoring System (CLASS) observation tool to assess the quality of interactions between teachers and students for all program evaluation areas. It was developed by the University of Virginia's Curry School of Education as an early childhood observation tool, and later expanded to include other grade levels. CLASS observations were conducted in health and PE classes throughout the 2016-17 school year at all grade levels. The domains and dimensions of the CLASS tool are described in detail in **Appendix B1**. **Appendix B2** describes the alignment between CLASS dimensions and APS best instructional practices. A summary of CLASS observations conducted for this evaluation is available in **Appendix B3**.

### **APS-Developed Observation Tools**

The Health and PE Office, the Office of Planning and Evaluation, and the Health and PE evaluation planning committee adapted and developed three observation tools to assess the prevalence of best instructional practices specific to the disciplines of PE and health:

- PE instructional practices: occurrence and effectiveness of expected instructional components
- PE physical activity: amount of time students spend being physically active and types of activity
- Health instructional practices: occurrence and effectiveness of expected instructional components

Recently retired health and PE teachers from Virginia school districts were hired to observe both types of classes. Observers participated in an all-day training for the two PE observation tools, and a separate training for the health observation tool. The same set of observers conducted observations in both PE and health classes. PE observations occurred during the 2016-17 school year and health observations occurred during fall 2017 and winter 2018.

Full results for these observations can be found in **Appendix B4** (PE instructional practices), **Appendix B5** (PE physical activity), and **Appendix B6** (health instructional practices).

#### Secondary Enrollment

Secondary enrollment data was accessed through the data warehouse to answer questions related to class size and the total number of PE sections scheduled in the gym at the same time. Class size was assessed against standards published by the Society of Health and Physical Educators (SHAPE America). The full report on health and PE scheduling is available in **Appendix C1**, and SHAPE standards for class size are available in **Appendix C2**.

## Professional Learning Opportunities and Participation

This evaluation includes data from Electronic Registrar Online (ERO) about professional learning opportunities offered by the Health and PE Office. These are summarized in **Appendix C3**.

#### Surveys

This evaluation includes stakeholder feedback from existing districtwide surveys such as the Youth Risk Behavior Survey (YRBS) and the new climate survey launched in 2018-18, Your Voice Matters. In addition, a health and PE teacher survey and an administrator survey were developed specifically for this evaluation. Responses from the health and PE staff surveys are summarized in **Appendix D1**. YRBS trends are summarized in **Appendix E3**, and YRBS exercise questions are summarized in **Appendix E4**. Select responses from the Your Voice Matters survey are summarized in **Appendix E5**.

#### **Student Focus Groups**

In spring 2017, Planning & Evaluation contracted with an external evaluator to conduct focus groups with middle and high school students to gather feedback on a variety of topics related to their experiences with PE and health instruction. The full report is available in **Appendix D2**.

#### **Fitness Assessments**

APS uses WelNet to record results from the Virginia Wellness-Related Fitness Tests. Students at each level perform five fitness tests. Their scores are measured against a national standard that increases in difficulty with age and differs by gender. Teachers submit the best score for the state data collection. Due to inconsistency in implementation and data entry for fall/pre assessments, this evaluation includes spring assessments only, which are summarized in **Appendix E1**.

#### **Swim Assessments**

Arlington Public Schools has a pool at each of the three comprehensive high schools, and the Health and PE program includes a swim unit at the elementary and high school levels. At each level, a pre- and post-test assesses whether or not students can perform certain skills and then assigns a level. The full report on swim assessment results is available in **Appendix E2**.