

QPAS PROGRAM REVIEW – FALL 2004

Program Title: Health and Physical Education **Program Manager:** Mary Marks
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Date of Report: October, 2004 **Period Covered:** FY 2003- FY 2004

Program Intent

Program Purpose, Goals, and Objectives

The Fairfax County Public Schools Comprehensive Health and Physical Education Program provides a K-10 comprehensive physical education and health education program, including classroom driver's education, that prepares all students to actively and effectively achieve and promote lifelong wellness, physical activity, and safety. The curriculum is designed as continuous sequence of learning, firmly rooted in public health, educational research, and effective instructional practice, and designed to ensure students meet minimum physical fitness standards. In addition, at high school level grade 11 & 12 elective physical education programs are provided.

Goal I: Grades K-8 Health and Physical Education: The health and physical education Curriculum at each grade level will reflect the Virginia Standards of Learning (2001) and the FCPS Program of Studies (POS).

Objective 1A: By June 2004, the K-8 health education and physical education POS will be revised to align to the Virginia Standards of Learning.

Objective 1B: Each year, students in grades 4th-8th will meet minimum age and/or grade level standards for fitness components of upper-body strength, flexibility, abdominal strength, and aerobic capacity on a Virginia Wellness Tests established by the Virginia Department of Education.

Goal II: Grades 9-12 Health and Physical Education: The health and physical education Course at each grade level will reflect the Virginia Standards of Learning (2001) and the FCPS Program of Studies.

Objective 2A: Each year, 85% of students in grades 9 – 10 will meet minimum age and/or grade level standards for fitness components of upper-body strength, flexibility, abdominal strength, and aerobic capacity on Virginia Wellness Tests established by the Virginia Department of Education.

Objective 2B: By June 2004, the 9-10 health and physical education POS will be revised to align to the Virginia Standards of Learning.

Objective 2C: Each year, 85% of grade 9 students will have passed and earned a basic cardio-pulmonary resuscitation (CPR) certificate.

Goal III: Grade 10 High School Driver Education (classroom portion): Students will have a Detailed knowledge and understanding of the fundamentals of driving and the details concerning laws and responsible attitudes and behaviors.

Objective 3A: Each year, 85% of students enrolled in the classroom portion of Driver Education will have passed the course and be eligible to receive the Virginia Driver Course Completion Certificate.

Goals related to the continued alignment of FCPS curriculum to the Virginia SOLs will be added in future reports.

Nature of the Program/Intervention(s)

The Health and Physical Education program is a required subject area for grades K-10 and an elective physical education program is offered for 11th and 12th grade students.

Physical Education: During this review cycle, the physical education instructional program was in transition to aligning the POS to meet Virginia Standards of Learning for this content area. The result has been a Physical Education POS that reflects the needs of students in the 21st century by providing a standard based document designed to help students develop movement and wellness literacy. The grades 1-3 physical education POS was distributed to all schools in January 2004. The “On the Move: A Roadmap to Fitness and Wellness” physical education POS series grades 1-3, 4-5 6-8, and 9-10 were distributed to schools during this review cycle. The kindergarten physical education POS has been in development during this review cycle, it is targeted for completion early in next review cycle. In addition, the elective high school “Sports Medicine” POS has been under development during this review cycle and is targeted for distribution early in the next review cycle. In addition, the elective course, “Weight Training & Conditioning course I, II” has been under revision during this review cycle and is targeted for distribution early in the next review cycle.

Grants: During this review cycle, the Health and Physical Education coordinator applied for and received a competitive Federal Grant (PEP) for \$496,000. The purpose of the grant was to improve fitness assessment equipment for all high schools including alternative high schools. Twenty-seven high schools received fitness technology equipment and accompanying staff development on using the new equipment. All high schools received a computerized fitness assessment system to measure all aspects of health related fitness (muscular strength, muscular endurance, flexibility, cardio-respiratory, body-composition). All high school teachers received extensive staff development on the equipment and software including instructional strategies. This equipment and staff development was to help high schools meet the Virginia SOL for physical education, especially in regards to fitness/wellness goals.

Driver Education: During this review cycle, the driver education program received a new supporting videos and CD Rom. Teachers received staff development on new teaching techniques as well as new driving techniques.

Health Education: During this review cycle several health education units were revised and aligned to the Virginia health SOLs, these included: 7th grade “Disease & Human Body” unit; 8th grade “First Aid & Safety” unit, 9th grade “Nutrition” unit, 9th grade “Environmental Health” unit. In addition, three units for 4th, 5th, and 6th grade were in development, “Disease Prevention,” “Personal Health,” “Injury Prevention,” included in the “Injury Prevention” revision was an increased emphasis on lessons regarding violence, bullying, and gangs.

In general, with the few exceptions listed above, the majority of the health education K-10 POS has not been aligned to the Virginia health education SOLs (2001). Of particular concern is the fact that due to revisions in content in the Kindergarten core content, the health lessons no longer exist as an integrated approach. Kindergarten has no health POS. The elementary health education POS has units that are over 10 years old without a revision. Health Education revisions that align to Virginia health education SOLs will continue to be a high priority in next evaluation cycle. In addition, including a stronger emphasis in safety, violence, bullying and gang prevention has become a community priority.

Number and Location of Sites

All schools and centers are required by State and County regulations to provide health and physical education. Classroom driver education is offered within the 10th grade health and physical education course for a 9-week unit. All high schools and two centers offer the classroom portion of driver education.

All school sites, including centers, offer health and physical education for grades K-10. Adapted physical education is offered for students with physical and mental disabilities. The elective physical education program is offered in 11 and 12 grades at 24 high school sites.

At the secondary level, many health education classrooms are in trailers due to high enrollment at various school sites. Schools that have had renovations during this two-year period have improved the physical education facility and improved health and driver education classroom facility. The schools that have benefited from renovations have an improved instructional climate, and significantly more classroom space dedicated to physical education and health subjects.

Health and driver education classrooms at the secondary level continued to be impacted by large class size. The large class size is a problem since classrooms are not constructed to seat 35 plus students.

Groups Targeted for Impact

All students in grades K-10 receive health and physical education. Students in grades 11 and 12 have an opportunity to take elective physical education at 24 school sites.

Program Organization

Program Staff

Central Office Staff: The Health and Physical Education (HPE) Instructional Services staff are under the supervision of the Director of High School Instruction and K-12 Curriculum Services (OHSICS). Two Instructional Services office staff coordinate and facilitate the health and physical education program, grades K-12. The HPE coordinator and PE specialist are specialists in the area of health and physical education with expertise in teacher training and curriculum development. Central Office staff coordinates and facilitate CPR certification training, including providing instructor training services and certification records for Transportation Department and Adult Education. The coordinator of health and physical education is a specialist in health and physical education with an advanced degree (Ph.D.) in teacher education. The physical education specialist is a former physical education teacher with a master's degree in physical education and administration. During this review cycle, a health resource teacher (11-month contract) was added. The health resource teacher is a former high school health teacher with a master's degree in athletic training.

School Based Teachers: There are 810 health and physical education teacher specialists in FCPS (this number does not include the adapted physical education teachers whose program is based in Student Services).

Elementary Level: Approximately 260 elementary physical education teacher specialists teach physical education at the elementary level. One-third of the elementary physical education teacher specialists have a two school teaching assignment. Elementary students receive physical education a minimum of two times a week for a minimum of 30 minutes per session. Classroom teachers K-6 grade are responsible for teaching the elementary health education POS. On average, the health curriculum requires approximately 45 minutes of instruction weekly at the elementary level. Three middle schools (Glasgow, Holmes and Poe) have 6th grade health education delivered by a health and physical education teacher specialists.

Secondary Level: There are approximately 550 health and physical education teacher specialists at the secondary level. These teachers deliver the physical education curriculum, health education curriculum, and the driver education curriculum. There is at least one certified driver education teacher at each high school and two centers (Cedar Lane and Quander Road). Cardio-pulmonary resuscitation (CPR) is a required component of the ninth grade health curriculum. Ninth grade HPE teachers are CPR instructors certified by American Heart Association standards. The CPR program is managed and budgeted through the HPE office. Virginia requires teachers to hold a health education certification to teach health at the secondary level. Most teachers at the secondary level are hired with dual certification in health and physical education.

There has been an increase in health and physical education teachers over the two-year period due to increase in number of schools and increase in student population. Class size especially at the secondary level has increased in health and physical education courses. The increase in class size averages has impacted instructional delivery and classroom space.

Organizational Structure

Central Office: The three health and physical education staff are part of the Office of High School Instruction and K-12 Curriculum Services (OHSICS) team within Instructional Services. The direct supervisor is the Director of OHSICS. Family Life Education (FLE), a component of health education, is under the Office of Middle School Instruction (OMSI). The direct supervisor for FLE is the Director of OMSI. (Please see the FLE QPAS report for further details.)

Communication Strategies: Central Office staff use multiple communication strategies to ensure communications among central office teams and principals, teachers and community members. The health and physical education Instructional Services staff attends staff meetings of Elementary, Middle and High School teams. The coordinator of HPE is a member of the School Health Advisory Committee (SHAC) facilitated by Student Services. The coordinator meets with adapted physical education specialist in Student Services and attends adapted physical education teacher meetings. An adapted physical education lead teacher attends the middle and high school HPE department chair meetings held 4 times per year. The coordinator of HPE attends regularly the Family Life Education Community Advisory Committee (FLECAC) as a non-voting member. The HPE Coordinator and PE specialist facilitate the Health and Physical Education Community Advisory Committee (HPECAC). In addition, the health and physical education coordinator is an active committee member for several community health services organizations (i.e. Healthy Kids Partnership INOVA, Northern Virginia Asthma Coalition, and Northern Virginia Chapter American Cancer Society, Virginia Action for Healthy Kids, American Heart Association).

The Instructional Services HPE staff participate in school based HPE department meetings, attend IEP meetings, and communicate with Guidance Directors. In addition, the HPE staff communicate with staff in Financial Services and Facilities Services on issues related to safety and equipment.

The HPE staff keep records of school visits and strives to provide a balance of school visits between elementary and secondary levels. Over this evaluation cycle, 100% of the secondary schools have received an on-site visit from the HPE staff. Sixty-five percent of the elementary schools have received an on-site visit. Forty-five percent of centers and alternative schools that deliver health and physical education have received an on-site visit. These visits consisted of one-on-one conferences with teachers or administrators, department meetings, trainings, teacher observation/feedback as a member of a teacher intervention team, parent/principal conferences, IEP meetings, and equipment/safety visits.

School Based: Health and Physical Education teacher specialists are hired at the school level by the Principal in cooperation with Human Resources. Building Principals conduct the teacher evaluation of all school-based health and physical education teachers.

Organizational Structure Changes:

The organizational structure changed over this two-year period with the addition of a health resource teacher (11 month). Due to the number of programs and services for which the health

and physical education office are responsible, it is proposed that an additional health specialist (12 month) be added to the team. Although, the HPE staff have been working diligently on revising POS since the new SOL revision (2001) in health, physical education, and driver education, the K-10 health curriculum still needs revision to align with the Virginia health SOL adopted in 2001. Curriculum development takes an enormous amount of staff resources and time. The HPE staff continues to be challenged by the need to develop curriculum for 13 grade levels while having very limited financial and staff resources.

Training/Staff Development

Staff development and training opportunities offered through health and physical education office are primarily related to enhancing teacher knowledge and skills regarding curriculum in this content area.

Physical Education Staff Development:

- All secondary HPE teachers received staff development related to technology in integrating heart rate monitors into the instructional program (School year 2003-04).
- Twenty-seven (27) high schools' HPE staffs received an 8-hour training in operating and integrating a computer assessment system that assesses a student's nutrition, flexibility, body composition, blood pressure, and heart rate during exercise and the use of student portfolios.
- All elementary physical education teachers have received four half-day trainings and 10 two-hour workshops related to new POS (School year 2003-04).
- All secondary HPE department chairs have received leadership training related to implementation of new physical education POS during the eight all county HPE Department Chair meetings held during this review cycle. In addition, department chairs have received staff development regarding "professional learning communities" to help them be stronger leaders in their schools.
- During this review cycle, 40 new elementary physical education teachers, and 15 secondary teachers participated in "Great Beginnings", central HPE staff facilitated course development and staff development sessions and worked with Great Beginnings coaches support the mission and objectives of this program.
- HPE coordinator working with staff development office placed every new teacher with a trained mentor, during this review cycle there were 66 new teachers in 2003 and 73 new teachers in 2004.

Health Education Staff Development:

- All 125 8th grade health education teachers received staff development for the new instructional unit in "First Aid & Safety."
- All 125 7th grade health education teachers received staff development for the new instructional unit in "Disease & Human Body."
- All 115 9th grade health education teachers received staff development for two new instructional units "nutrition," and "environmental health."
- All 235 CPR Instructors have received an 8-hour update training on new teaching protocols and CPR techniques. Instructors included instructors in who teach CPR in 9th grade health,

Instructors who teach CPR to Bus drivers and Instructors who teach CPR in Adult Education program and Instructors who provide CPR instruction to elementary, middle staff.

- New staff members (70 teachers) received a 16 hour CPR New Instructor Course.
- All 235 CPR instructors received an on-line update on how to teach the child Automated External Defibrillators (AED).

Driver Education Staff Development:

- All 160 certified driver education teachers received staff training related to the new SOL, and new driving techniques, and Virginia driving laws during this evaluation cycle.
- All 160 certified driver education teachers received new videos and a CD Rom that included instructional visuals and resources for classroom use.
- All 160 certified driver education teachers received a two hour training related to safe driving in a urban environment

Anticipated Changes

During the next review cycle, staff development related to CPR and driver education will continue to require ongoing staff training. CPR instructor certification requires recertification every to years A high priority will be placed on staff development related to health education, especially at the elementary level. As health education units are aligned to Virginia Health Education SOL, staff development will be a component of the alignment process. Resources to provide staff development to classroom teachers will be a challenge with fiscal resources limited. Each elementary grade level has approximately 625 teachers responsible for the delivery of health education in their classrooms. Fiscal costs for instructional materials and staff development have exceeded the budget allocations over the past several years. In addition, the community of Fairfax County has been challenged to confront gangs, violence, and bullying as community and FCPS initiative. Health education plays a role in this goal by reevaluating and developing lessons to help students with resistance skills to cope with pressures of violence in their schools and community. As the health education curriculum is realigned to the VA SOL, violence prevention will be a particular area of emphasis for staff development. In addition, new federal guidelines for nutrition are slated for release in early 2005. These new federal guidelines will make all K-10 nutrition education units obsolete.

Program Implementation

Health and physical education are required subject areas and are implemented at the school level by Virginia certified teachers. The goal is to revise the health education curriculum unit on a 5 to 7 year cycle unless there are circumstances that warrant a change in the revision cycle.

However, due to resource issues the health curriculum has been unable to sustain this revision cycle. When curriculum is revised, teacher training is generally a component of the implementation of the new unit. The health education curriculum is centrally revised and updated. Teachers, community professionals, and HPE staff participate in the development of new units of instruction. Due to new Virginia Health Education SOLs, all health education units K-12 need to be aligned. Progress towards this goal began during this review cycle.

The physical education program of studies for K-10 grades was a high priority during this review cycle. Due to new Virginia SOLs, and a dramatic philosophy change in content delivery,

the physical education needed a complete over-haul. The revision was 90% completed at the end of this revision cycle. Kindergarten is the only grade level for which the physical education POS has not been aligned to the Virginia SOL. Kindergarten is in development but has not been disseminated to schools. Development of the PE POS involved community input, school-based administrator feedback and teacher development. Completion of the physical education POS for grades 1-10 during this evaluation cycle was a major goal accomplishment.

The driver education curriculum was revised in late 2001 and aligned with the new Virginia SOL for driver education. Teacher training and program implementation is complete at all high schools.

Program Impact

Goal I: Grades K-8 Health and Physical Education:

Objective 1A:

- The physical education program of studies for grades 1-10 was revised to meet Virginia Standards of Learning.
- The health education program of studies for grades K-10 was not aligned to Virginia Standards of Learning, although progress in selected units was completed.
- The Disease and Human Body Unit for grade 7, and First Aid and Safety for grade 8 was completed and staff development provided to the middle school health teachers during this review cycle.
- Development of the Kindergarten physical education POS began during this evaluation cycle. It is targeted for completion early in the next review cycle.
- The Virginia Standard of Learning for Health and Physical Education were released in 2001. Staff resources and funding did not allow for all SOLs to be completed during this evaluation cycle. Remaining projects will carry over into the next evaluation cycle.

Objective 1B:

- Wellness scores overall showed little or no improvement during this review cycle. Students in grades 4-8 continued to fall below the 85% fitness/wellness objective. However, improvements from 2002 levels were demonstrated in abdominal strength and flexibility measures. Aerobic capacity remained approximately the same since the last review, while upper body strength experienced a slight decline from 2002 levels. (See Table 1)
- Flexibility scores, which were very poor in 2002, improved. This may be a reflection of emphasis in school programs as previous scores were shared with elementary physical education teachers and instructional strategies were provided to improve performance on flexibility measures. Poor performance on flexibility measures are a reflection of students sitting for extended periods of time.

**Table 1:
Virginia Wellness Scores for Grades 4-8**

Grades 4-8	Spring, 2002	Spring, 2003	Spring, 2004
Abdominal Strength - Total	79%	85%	84%
Aerobic Capacity - Total	80%	81%	79%
Upper Body Strength - Total	85%	84%	83%
Flexibility – Total	66%	80%	73%

Important note about the Virginia Wellness Fitness tests, students who reach the wellness zone are reaching criteria that are at the 35th percentile of National Normative test the Virginia Wellness tests makes no distinction between students who barely reach the criteria (meaning the 35th percentile) and those at the upper ends). The data reported reflect the percentage of students in FCPS who met the minimal criteria.

Goal II: Grades 9-12 Health and Physical Education:

Objective 2A:

- At grades 9-10, students did not meet the stated objective. Of particular concern are flexibility scores, which demonstrated that only 66% of grade 9-10 students met the wellness criteria. Eighty-four percent of grade 9-10 students met abdominal strength criteria, 79% met aerobic capacity, and 83% met upper body strength (See Table 2).
- Although the students did not meet the stated objective, they did show improvement from the previous evaluation cycle. The high school program did receive a grant to improve staff development and high schools received technology and equipment to help improve overall fitness. This along with increased emphasis on implementing the new curriculum may have contributed to increases.

**Table 2:
Virginia Wellness Scores for Grades 9 -10**

Grades 9-10	Spring, 2002	Spring, 2003	Spring, 2004
Abdominal Strength - Total	77%	86%	84%
Aerobic Capacity - Total	74%	75%	73%
Upper Body Strength - Total	80%	84%	83%
Flexibility - Total	55%	75%	66%

Important note about the Virginia Wellness Fitness tests, students who reach the wellness zone are reaching criteria that is at the 35% of National Normative tests, the Virginia Wellness tests makes no distinction between students who are at the bottom criteria (meaning the 35th percentile) and those at the upper ends). The data reported reflects the percentage of students in FCPS who met the minimal criteria.

Objective 2B:

- The grade 9-10 physical education POS was aligned to Virginia SOLs and distributed to schools in 2002.
- The health POS was not aligned to Virginia SOL so alignment to new Health Education SOLs will carry over into next review cycle. During this review, cycle 9th grade health received two new units “nutrition” and “environmental health.” These two units were aligned to Virginia SOL components.

Objective 2C:

- In school year 2002-2003, 71% of grade 9 students passed CPR course and earned an American Heart Association certification (See Table 3).
- In school year 2003-2004, 65% of grade 9 students passed the basic cardio-pulmonary resuscitation (CPR) course and earned an American Heart Association certification. (school year 2002/04)
- These scores are significantly lower than previous evaluation cycle, which were at 80% in 2002.
- The drop in pass rate among 9th graders does not have an obvious explanation. The downward trend over a 4 year period is of high concern. The success rate is not satisfactory to stated goals of the 9th grade health education program. It is of particular concern as it will need serious assessment over the next evaluation cycle to determine by the drop in scores.

**Table 3:
CPR 9th Grade Course Pass Rates by School Year**

2002	2003	2004
80%	71%	65%

Goal III: Grade 10 High School Driver Education (classroom portion):

- In spring 2003, 92% of students enrolled in classroom driver education passed the course.
- In spring 2004, 91% of students enrolled in classroom driver education passed the course.
- The pass rates have remained same and stable from previous evaluation period.
- Northern Virginia has a very high teen driver fatality rate, new state laws have increased the driving age with graduated licensing. This along with parent education components to help parents give beginning drivers experience is an important component to drop teen driver fatality rate. State and National data continues to emphasize that young drivers need experience driving with an experienced adult.

Program Budget and Expenditures

Elementary

Health and physical education is part of the elementary core academic budget, which encompasses all elementary instruction and is not broken down by content area. Meeting realignment objectives to meet Virginia SOLs in this content area will require an increase in the HPE budget to meet this objective.

Secondary

Health and physical education is part of the secondary core academic budget, which encompasses all secondary instruction and is not broken down by content area. Meeting realignment objectives to meet Virginia SOLs in this content area will require an increase in the HPE budget to meet this objective.

Conclusions/Recommendations

During this review cycle, there have been significant changes to the instructional program for physical education and driver education. The new POS in these content areas has strengthened the instructional program. Teachers, parents, and community members informally express their satisfaction with the POS changes and are supportive of the standard based instructional program.

It is an ongoing goal to help students meet minimum physical fitness standards. This effort on the part of teachers is an ongoing challenge when national statistics indicate this generation of students is more unfit than any previous generation. FCPS continues to place high value on getting and keeping students physically healthy so as to contribute to their academic and personal success. Although facilities and class size continue to challenge the Health and Physical Education instructional program, during this review cycle, the physical education program continues to be an important part of all students' school experience.

It is highly recommended that continued support towards staff development and state of the art equipment be supported. In the next review cycle, it is essential that equipment and resources will be replaced in a timely manner so students can receive instruction in a safe, instructionally current environment. Allocation for funds for replacement of equipment in schools is an essential and on-going need.

During the next review report, careful analysis of the driver education program of studies will be discussed in relation to new driving technology and laws to help young drivers drive safely and within the laws.

Fairfax County Public Schools continues to be national model in the quality of a school based CPR program. In the ninth grade health education program, the CPR program empowers students with knowledge and skills to help family and friends in emergency situations. It is also part of the overall philosophy that if students understand heart disease, they will understand the importance of maintaining a healthy lifestyle. The CPR program is a high management program, but highly valued by students, teachers, and community members. Pass rates of students will be evaluated in the next report to determine how to improve the pass rates of this important life saving course.

Although the health education program was not fully aligned to the new Virginia SOL during this evaluation cycle, completing this task will be a priority over the next review cycle. It is essential that funding for POS development is adequate to meet this objective.

With wellness scores showing little change during the review cycle, an increased emphasis on helping our students become more active needs to be more strongly emphasized. National research studies continue to reinforce that there is a strong link to academic success and fitness.

Recommendations:

Improve the program in the following ways:

- Provide development funds to realign the health education POS K-12 with the state SOLs;
- Provide staff development funds to train teachers on new instructional techniques and content related to health education;
- Provide ongoing funds to improve facilities and equipment in health and physical education;
- Support an additional instructional services HPE staff member to help meet the goals and objectives of the health and physical education program. The program needs a 12-month health specialist to build the program in regards to curriculum and staff development needs. Without additional staff resource the health curriculum cannot complete its mandate to align the curriculum to VA SOL and community needs in a timely manner;
- Evaluate the organizational structure regarding Family Life Education as a subset of Health Education. Recommend the Health Education and Family Life Education fall under one director's supervision rather than two;
- Budget for Curriculum development and staff development in health education is needs to increase to meet curriculum mandates that are already 4 years behind;
- Outsource some of the curriculum development for Health Education to a private vendor to help catch the alignment process up;
- Support sustained reallocation funds to HPE replace aging, worn equipment; reallocation funds for HPE have been under funded for more than 5 years;
- Development of a new Kindergarten Health POS is a high priority in the next review cycle;
- Development of lessons in the Health POS to include gangs, violence and bullying prevention in grades K-12 is a high priority in next review cycle;
- The federal government will be announcing new nutrition standards in 2005, this change will make all nutrition curriculum dated. During the next review cycle, a plan to address new nutrition units will need to be addressed both from a development perspective as well as a fiscal need.
- The Fairfax Community has expressed strong desire to place Automated Electronic Defibrillator (AED) in schools. The CPR course for 9th grade currently does not include AED instruction. It is recommended that the AED portion be added to this course. Instructors are already certified in AEDs; however, AED trainers (machines) (machines) would need to be provided to all high schools for a total cost \$42,000.