

Maryland Voluntary State Curriculum in Health Education Review



Executive Summary

RFP# R00R7202533

April 23, 2008

Prepared for:

Maryland State Department
of Public Instruction
Baltimore, Maryland

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Executive Summary

ToucanEd, in collaboration with subcontractors R²E² and Catalyst Health Concepts, conducted an external review of the Voluntary State Curriculum (VSC) in Health Education for the Maryland State Department of Education (MSDE). The purpose of the review was to ensure an appropriate scope and sequence for essential learnings in health by analyzing draft documents in health education at grades Pre-K–12 for content rigor, developmental appropriateness, clarity of language, parallel levels of specificity in format, assessability, and consistency of format with the VSCs in mathematics and reading.

The Review Team

ToucanEd is a woman-owned certified small business founded in 1995 by Kathleen Middleton, MS, CHES. ToucanEd worked extensively on the CCSSO Health Education Assessment Project (HEAP) project from its inception. One of the major products developed was the *Assessing Health Literacy Assessment Framework*, which has been the basis for numerous other state-specific projects. Subsequently, ToucanEd has worked with several states, including Vermont, Delaware, and Connecticut, to develop their state health education curriculum frameworks.

R²E², a woman-owned small business, conducts research and evaluation to inform and support the development and implementation of effective health promotion programs in schools, worksites, and communities. Catalyst Health Concepts is a woman-owned small business based in Montgomery County, Maryland, that conducts research-based projects in health education and health promotion.

Kathleen Middleton, MS, CHES, is currently President and CEO of ToucanEd, Inc. She has been in health education for over 25 years, beginning her career teaching health in a public school classroom setting and working as an instructor for teacher education in five different California universities, including California State University, Long Beach, California State University, Los Angeles, St. Mary's College, California State University, San Francisco, and Cal Poly Pomona. Prior to founding ToucanEd, she was Administrator for Health Education and Physical Education for the Monterey County Office of Education; Editor-in-Chief for ETR Associates, where she was the project manager for all school health publications, including the *Comprehensive School Health Challenge* (with Dr. Peter A. Cortese, 1994, ETR Associates); and served as the Director of School Health for the National Center for Health Education (NCHE), where she directed the revision and national implementation of the Growing Healthy K–6 Curriculum. Since 1995, Ms. Middleton has worked with the Health Education Assessment Project (HEAP) as its national content consultant. She has provided technical assistance, materials development, and custom training in health education and assessment to Maine, Rhode Island, Hawaii,

Michigan, Vermont, Delaware, Connecticut, and Pennsylvania, as well as to large school districts, including Long Beach (California) Unified and the Department of Defense Schools.

Susan Giarratano Russell, MSPH, EdD, CHES, R²E², has been a health education curriculum and evaluation consultant to the Centers for Disease Control and Prevention's (CDC) National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health, and the Office on Smoking and Health since 1997. Most recently, she was a contributing author for the CDC's *Health Education Curriculum Analysis Tool* (HECAT). Previously, from 1988 to 1997, Dr. Russell served as a professor at California State University, Long Beach, and at California State University, Northridge, Health Science Department. While at those institutions, she coordinated the teacher education program in health science and the undergraduate health education program. Currently, her consulting firm R²E²: Russell and English Research and Evaluation conducts studies such as the process and impact evaluation of the implementation of the California Department of Health Services' *Harvest of the Month (HOTM)* program's standardized materials in California schools.

Jill English, PhD, CHES, R²E², has over 25 years experience in education, health education, and health promotion. Her emphasis has been in the development, implementation, and evaluation of health education/promotion programs for school-age youth. Topic areas include physical activity, nutrition, and drug education. She has conceptualized and directed several large-scale school and community-based health promotion demonstration and research projects, including several for the U.S. Department of Education. Dr. English has published extensively in the field of health promotion; presented at many national, state, and local conferences; and served on advisory and working committees for numerous organizations and agencies. Several of the curricula she developed have been used nation-wide.

Donna Lloyd-Kolkin, PhD, Catalyst Health Concepts, also has more than 25 years of experience in health promotion and health education. Most recently, she has conducted formative research for a National Health Education Initiative targeting African Americans for the National Institutes of Health (NIH), and she is currently designing a childhood obesity initiative for the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). She is the author of numerous textbooks in health education for publishers including Glencoe, McGraw-Hill, and ETR Associates; currently, she writes a national electronic newsletter for health education teachers. Previously, Dr. Lloyd-Kolkin directed the health communication business practice at Abt Associates, Inc., in Bethesda, Maryland, from 2001-2006 and served as Managing Partner of Health & Education Communication Consultants (HECC) in Berkeley, California, where she developed a wide array of health education curriculum materials and guidance documents, in addition to conducting evaluations of school-based health promotion initiatives. Dr. Lloyd-Kolkin was also a developer

of assessment items for the National Health Education Assessment Project and served as a member of an early HEAP rubric development panel.

Gloria Stables, PhD, Catalyst Health Concepts, was the National Program Director for the National 5 A Day Program at the National Cancer Institute. 5 A Day was a research initiative, national communications, and community nutrition education program with a major impact on Healthy People 2010 nutrition objectives. As program director, Dr. Stables's activities included coordinating common research indicators across school-based policy and behavior change research to facilitate best practices in School Nutrition Programs. As a partner in Catalyst Health Concepts, she worked on the NIH National Health Education Initiative for African Americans and is currently developing a national childhood obesity initiative for NIDDK.

Methodology

The VSC in Health Education was reviewed for three major factors: content (rigor, developmental appropriateness, clarity of language and parallelism, and scope and sequence), consistency (format and language), and assessability. To conduct the review, the Review Team developed a series of rubrics to use in scoring the content rigor, assessability, and consistency domains of the VSC. Reviewers used the rubrics to score the VSC at Pre-K to grade 2, grades 3 to 5, grades 6 to 8, and grades 9 to 12.

Although the review began with the scoring of the VSC components according to the rubrics, it became clear in discussions among reviewers that this method was inadequate for providing guidance to MSDE on the strengths and weaknesses of the VSC. This report therefore contains more specific discussions of the VSC with specific examples of problem areas and recommendations for improvement.

Other Documents Used to Benchmark the MD VSC in Health Education

In conducting its review, the review team took into account several national and state documents and used them to benchmark the Maryland VSC in Health Education. These other documents included the National Health Education Standards, CDC's HECAT, Arizona Comprehensive Health Education Standards, Wisconsin's Model Academic Standards for Health Education, Indiana Academic Standards for Health Education, and Health Education Content Standards for California Public Schools, kindergarten to grade 12. These particular state standards were selected because they provided a diverse representation of state standards (i.e., the documents were different from each other), and a rationale for their standards. Additionally, those state documents presented a variety of health education content and skill areas, and ultimately were firmly based upon the National Health Education Standards.

Summary of Strengths of the MD VSC in Health Education

The VSC in Health Education content standards are at the heart of a coherent, standards-based education system. They define expectations for student learning, serve as a roadmap for curriculum and instruction, and should serve as the basis for assessments. Among the document's strengths are

- **Health Is Recognized As an Important, Separate Discipline**
The Maryland State Department of Education recognizes health education as an important and separate academic discipline.
- **Standards Are Broad Enough to Allow Articulation across Grades**
Maryland's vision for the VSC in Health Education presents standards that are written at a level of generality that is broad enough to allow the articulation of performance indicators (benchmarks) across K–12.
- **Standards and Performance Indicators Are Declarative**
The standards and related performance indicators of the VSC in Health Education are based on declarative knowledge of information and component parts. In addition, there is clearly an effort to include procedural knowledge—the knowledge exercised in the performance of health promoting skills and tasks.
- **Curriculum Is Built on a Substantial Foundation**
Maryland's current draft is a commendable and thoughtful effort, that provides a substantial foundation that can direct the development of a model scope and sequence of comprehensive health education not only for the state's local education agencies, but exemplary for other states to emulate. The development of the VSC appears to be guided by certain assumptions; standards provide a common set of expectations, and they serve both to clarify and to raise expectations; and an attempt to address a higher level of cognitive complexity (application and analysis) over knowledge acquisition alone.
- **Curriculum Is Aligned with National Health Education Standards**
The VSC in Health Education is aligned with the National Health Education Standards, addressing the health concepts and skills that are key to understanding and promoting health.
- **Curriculum Addresses Needs and Priority Health-Risk Behaviors of Youth**
The VSC in Health Education is forward-thinking and should be commended for the choice to address contemporary health issues and the related priority health-risk behaviors of youth, such as sexual behavior and practices, lifestyle choices, and sexual harassment and bullying.
- **Curriculum Reaches beyond Individual Health**
Additionally, the standards reach beyond individual student and personal health and apply health knowledge and skills to the family and community.

Summary of Areas of Needed Improvement

Content Rigor

Two general recommendations about content rigor were made.

- Each standard should be supported by a rationale statement that reflects the purpose of and support for the standard (for both the health content and health skill) and where appropriate, the rationale should provide a purpose and support for conjoining the health content area(s) and skills. This is consistent with the National Health Education Standards and those from other states used as benchmarks.
- The format of performance indicators (PIs) should be changed to eliminate the specification of audience in all PIs; currently, some PIs specify students as the audience and others do not.

A summary list of key findings about areas of needed improvement follows. A detailed description, including examples, recommended changes, and examples of recommended changes can be found in the full report.

1. Two verbs are used frequently within performance indicators and objectives.
2. The terms *appropriate and inappropriate* or *good and bad* are used frequently throughout the objectives.
3. Verbs used in objectives often duplicate those used in the corresponding standards and performance indicators.
4. Throughout the standards, major concepts are omitted; many of these are specified in the HECAT published by CDC after the draft standards were written.
5. Performance indicators and objectives do not provide enough, or provide ambiguous, guidance for teachers on exactly what is to be taught and how it should be assessed.
6. Standards, performance indicators, and objectives are not always aligned.

Consistency

The VSC in Health Education was compared with the VSCs in reading and mathematics for consistency in format. Key findings include:

1. Each VSC has seven standards. Health education and math are organized primarily by content, while reading standards are organized by process.
2. The health education standards are written very broadly at the large “grain size;” grain size is consistent across all standards. In contrast, the mathematics standards are somewhat less consistent and somewhat narrower in their scope, i.e., of a finer grain size. The reading VSC, on the other hand, relies on very broad statements about processes in its standards.

3. The performance indicators in all three VSCs introduce and repeat topics from year to year, sometimes adding to their complexity as the grades advance.
4. There is a stark contrast in the number of indicators in each VSC; reading has two to three times as many performance indicators as does health education.
5. The indicators in the VSC in Health Education are written largely at the comprehension level, according to Bloom's Taxonomy. In contrast, the mathematics and reading VSCs use a wider array of cognitive skills in the construction of their indicators.
6. Both the mathematics and reading VSCs contain Assessment Limits on some objectives; Assessment Limits do not appear for any of the objectives in the VSC in Health Education.

Most of these findings are attributable to the innate differences among the three academic disciplines.

Assessability

The VSC in Health Education offers the foundation and infrastructure to develop assessment materials using existing item banks and professional materials from the HEAP. However, the HEAP assessment items have limitations that should be kept in mind, such as:

- They do not include a separate content area on communicable disease.
- The assessment item bank is limited and aging.
- Items have been developed in grade groupings for upper elementary, middle school, and high school and do not include assessments for younger (Pre-K and primary) children.

Recommendations

The external review report contains the following recommendations for the revision of the VSC in Health Education.

Content Rigor

1. Limit verbs within performance indicators and objectives to only one.
2. Verbs used in objectives should be distinct from and collectively support those in the performance indicators and standards.

3. Articulation of standards, performance indicators, and objectives: replace the terms “appropriate” and “positive” with healthy, or good, while replacing the terms, “inappropriate” and “negative” with unhealthy, or bad (when applicable).
4. Reconsider the topics within each standard, using the Health Education Curriculum Analysis Tool to determine what can be reasonably taught within classroom time.
5. Provide guidance for teachers, by ensuring there is no ambiguity in the language used in performance indicators and objectives.
6. Ensure that there are adequate objectives in a logical progression to assist students in achieving the performance indicators, and master the knowledge and skills.

Consistency

1. Break the content within each Standard down into sub-topic areas (e.g., Standard 1 in Mental and Emotional Health may be broken down into A. Communication Skills; B. Emotional Well-Being; C. Decision-Making Skills; D. Social Well-Being; and E. Stress).
2. Increase the number of performance indicators within each standard and write each indicator at a smaller grain size, i.e., with greater specificity.
3. Increase the number of objectives within each performance indicator and write each indicator at a smaller grain size to provide teachers with more guidance about what students should be able to know and do in regard to that objective.
4. Review all performance indicators and objectives to determine if they reflect a wide range of cognitive skills at all grade levels, particularly at grades Pre-K through 6.

Assessability

1. Provide teachers with multiple forms of assessment feedback for students. Assessing skills requires assessment tools that give students a variety of ways to provide evidence. Do not limit assessment to selected response tests (multiple choice).
2. Carefully review all items for currency and balance (knowledge and skills) and pilot test them if developing standardized tests.
3. Provide performance assessment training to teachers in Maryland to enable them to use performance assessment effectively as a method for feedback.

Conclusion

Although this review highlighted some gaps in the draft of the VSC in Health Education, clearly, many strengths have been recognized and documented. This

review offers guidance to assist the authors of the VSC in Health Education to remedy identified gaps. The VSC in Health Education will serve as the foundation for high-quality health education; the authors of the VSC in Health Education have done a laudable job in crafting the standards and expectations for health education. We encourage the authors to objectively review and consider the findings and recommendations of this review.