

## APPENDIX 4

### Using the HECAT to Develop a Scope and Sequence for Health Education

A scope and sequence provides a picture of a school district's entire curriculum in a subject area. It is intended to serve as a general guide for curriculum directors, administrators, teachers, parents, and school board members. A health education scope and sequence outlines the breadth and arrangement of key health topics and concepts across grade levels (scope), and the logical progression of essential health knowledge, skills and behaviors to be addressed at each grade level (sequence) from pre-kindergarten to the 12<sup>th</sup> grade. A health education scope and sequence should identify *what* the student should know and do at the end of each grade or grade group, aligned with the national, state, or local health education standards, benchmarks<sup>1</sup> and indicators,<sup>2</sup> and *when* it should be taught.

A scope and sequence is most often represented in a table or matrix. The format of the table may vary, but the essential elements common to a scope and sequence include the health topic, grade groups (e.g., Pre-K –2; 3 – 5, 6-8, 9-12) or individual grade levels (e.g., K, 1, 2, 3), key health education topics, and specific concepts and skills relevant to the health topic and grade group or grade.

A scope and sequence can be simple or complex, typically arranged on multiple pages so more specificity can be provided for topic and grade group or grade. Although national or local health education standards may not be specifically stated in a curriculum scope and sequence, the concepts and skills identified for each topic and grade level should be based on those standards. To coincide with the maturity level and cognitive abilities of the learner, the progression of health education concepts and skills will increase in complexity as the sequence advances up grade levels.

Figure 1 shows an example of one page of a scope and sequence chart for physical activity. This example addresses the national health education standards for one topic, one grade group, and a few concepts and skills examples appropriate for this topic and grade group. The concept and skill examples are from the HECAT, Chapter 6, *Physical Activity Curriculum (PA) Module*. A complete scope and sequence would be multiple pages, encompassing all relevant topics, standards, grade groups, and pertinent concept and skills.

---

<sup>1</sup> A benchmark is a standard for judging performance. A benchmark provides a description of student knowledge and skill expected at specific grades, ages, or developmental levels. Benchmarks are often used in conjunction with standards, and may be described quantitatively (as on a measurement scale) or qualitatively.

<sup>2</sup> An indicator is used as evidence of success in accomplishing an educational goal; it measures movement (progress or decline) relative to a given target or standard. An indicator describes specific and measurable aspects of a standard.

## APPENDIX 4

### Using the HECAT to Develop a Scope and Sequence for Health Education

Figure 1: Partial, Sample Scope and Sequence Chart (Physical Activity Example)

<b>PHYSICAL ACTIVITY</b>				
<b>Standards</b>	<b>Grades Pre-K – 2</b>	<b>Grades 3 – 5</b>	<b>Grades 6 – 8</b>	<b>Grades 9 – 12</b>
	<b>Concepts/Skills</b>	<b>Concepts/Skills</b>	<b>Concepts/Skills</b>	<b>Concepts/Skills</b>
1. Students will comprehend concepts related to health promotion and disease prevention.	<ul style="list-style-type: none"> <li>• Describe the recommended amount of physical activity for children.</li> <li>• Explain ways to be active everyday.</li> <li>• Describe behaviors that are physically active and physically inactive.</li> </ul>			
2. Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.	<ul style="list-style-type: none"> <li>• Explain how television viewing can decrease an individual's level of physical activity.</li> <li>• Describe how peers can help an individual be physically active.</li> <li>• Describe activities an individual's family can do that would increase physical activity.</li> </ul>			
3. Students will demonstrate the ability to access valid information and products and services to enhance health.	<ul style="list-style-type: none"> <li>• Identify people who can provide accurate information about physical activity.</li> </ul>			
4. Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.	<ul style="list-style-type: none"> <li>• Demonstrate how to ask for help from trusted adults to improve physical activity.</li> </ul>			
5. Students will demonstrate the ability to use decision-making skills to enhance health.	<ul style="list-style-type: none"> <li>• Choose active over inactive behaviors.</li> <li>• Identify physically active alternatives to watching television or playing video games.</li> </ul>			
6. Students will demonstrate the ability to use goal-setting skills to enhance health.	<ul style="list-style-type: none"> <li>• Describe how being physically active can help a person feel better.</li> </ul>			
7. Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.	<ul style="list-style-type: none"> <li>• Demonstrate ways to be physically active in ways that cooperate with others.</li> <li>• Demonstrate the ability to follow playground rules.</li> </ul>			
8. Students will demonstrate the ability to advocate for personal, family, and community health.	<ul style="list-style-type: none"> <li>• Ask parents, guardians, and other caretakers to be physically active.</li> <li>• List ways you can help friends become physically active.</li> </ul>			

## APPENDIX 4

### Using the HECAT to Develop a Scope and Sequence for Health Education

A “ready-made” scope and sequence provided by commercial developers for their curricula and ancillary instructional materials rarely address the unique needs of individual schools and school districts. A school district should develop its own health education scope and sequence.

The development of a health education scope and sequence is usually completed through a group process, facilitated by an experienced and knowledgeable leader. The leader establishes a regular meeting schedule and timeline for completion, and actively involves individuals with knowledge, expertise, and experience in health education, curriculum development, and the health needs of youth. The scope and sequence development process will include these general steps:

1. Determine the necessary health education standard and additional benchmarks required at the local level.
2. Clarify health priorities by using local, community and national health data on youth health-related behaviors<sup>3</sup> including health problems and risk-taking behaviors among school-aged youth.
3. Select key health topics, based on data, that should be addressed pre-K through grade 12.
4. Identify and prioritize expected behavioral outcomes for students for each topic which will meet the needs of the community and school district.
5. Determine the essential concepts and skills for each health topic that directly relate to the behavioral outcomes. The

concepts and skills should specify what students should know and be able to do relevant to each of the key health topics and aligned with standards or benchmarks.

6. Decide specifically *what* and *when* each of the essential health education concepts and skills should be taught *across* the curriculum for all grades.
7. Determine the overall amount of instructional time. Allow sufficient time for each concept and skill to be introduced, reinforced and mastered, and for students to successfully develop the breadth and depth of knowledge of all health education concepts, and be able to perform all health behavior skills.
8. Review and validate the scope and sequence.
  - Ensure that all skills build progressively on one another, and that students will have sufficient time and opportunity to successfully develop skills relevant to all essential concepts across topics and grade levels.
  - Examine and verify that the specified outcomes, concepts and skills to be learned, for each topic and grade, are appropriate and meet the needs and maturity level of the students, as well as the needs of the community and school district.

A clearly organized scope and sequence is critical for developing or selecting appropriate health education curriculum.

<sup>3</sup> A school district might have state or local data. Information about national, State, territory, and local Youth Risk Behavior Surveillance data is available at [www.cdc.gov/healthyyouth/yrbs](http://www.cdc.gov/healthyyouth/yrbs).

## APPENDIX 4

### Using the HECAT to Develop a Scope and Sequence for Health Education

#### A scope and sequence should:

- Correspond with national, state or local health education standards, benchmarks and indicators.
- Correspond with the state health education framework.
- Show an awareness of students' developmental needs.
- Address the concepts and skills students need before problems emerge.
- Exhibit effective coordination within a standard and across grades pre-K-12.
- Show balance, so that one grade is not over-loaded.
- Show reinforcement of skills and concepts, without excessive repetition.

#### Using the HECAT to Inform a Scope and Sequence for Health Education

The HECAT provides valuable information to assist groups in the scope and sequence planning process. The HECAT articulates the National Health Education Standards, identifies the expected outcomes (Healthy Behavioral Outcomes) of a topic-specific curriculum, and identifies the essential concepts and skill examples that are directly related to each topic by grade group. This information can be used directly or modified to expedite the development of a health education scope and sequence.

Once a school district has developed its scope and sequence, it can be used to inform revisions to the HECAT analysis tool and to identify appropriate health education curricula. Developing and using a locally-developed scope and sequence chart and the HECAT will ensure the selection of the most appropriate health education curricula.

#### Additional references on mapping scope and sequence:

English F. *Deciding What to Teach and Test: Developing, Aligning, and Auditing the Curriculum*. Thousand Oaks, CA: Sage Publications; 1999.

Fodor JT, Dalis GT, Giarratano-Russell SC. *Health Instruction: Theory and Application for Community, School, Health Care and Workplace Settings*. Dubuque, IA: Kendall/Hunt; 2002.

Glatthorn A. Curriculum alignment revisited. *Journal of Curriculum Supervision* 1999;15:1:26-34.

Jacobs HH. *Mapping the Big Picture: Integrating Curriculum and Assessment K-12*. Alexandria, VA: Association for Supervision and Curriculum Development; 1997. Available at: [http://www.curriculummapping101.com/Curriculum\\_Mapping.html](http://www.curriculummapping101.com/Curriculum_Mapping.html).

West-Christy J. *Teaching Today. Roadmap to Success: A Curriculum Mapping Primer*. New York, NY: Glencoe/McGraw-Hill; 2003. Available at: <http://www.glencoe.com/sec/teachingtoday/educationupclose.phtml/35>.

Wiggins G, McTighe J. *Understanding by Design*. Alexandria, VA: Association for Supervision and Curriculum Development; 2005. Available at: <http://shop.ascd.org/index.cfm>.