

Using HECAT Online 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 school board members, administrators, curriculum directors, teachers, students, and parents and caregivers. 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 12th grade. A health education scope and sequence should identify *what* the student should know and do at the end of each grade or grade span and *when* it should be taught.

A health education scope and sequence should

- Correspond with national, state, or local health education standards, benchmarks and indicators.
- Correspond with the state health education framework.
- Reflect locally identified health priorities.
- 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.

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 spans (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 knowledge and skill expectations relevant to the health topic and grade span or grade level.

A scope and sequence can be simple or complex, typically arranged on multiple pages so that more specificity can be provided for topic and grade span or grade. Although national or local health education standards may not be specifically stated in a curriculum scope and sequence, the knowledge and skill expectations or performance indicators 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 knowledge and skill expectations will increase in complexity as the sequence advances up grade levels.

Developing a Scope and Sequence for Health Education

A "ready-made" scope and sequence provided by commercial developers to match their curricula and ancillary instructional materials rarely addresses 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 standards or benchmarks, and additional knowledge and skill expectations required at the local level.
2. Clarify health priorities by using local, state, and national health data on youth health-related behaviors including health problems and risk-taking behaviors among school-aged youth.¹
3. Select key health topics, based on data that should be addressed in grades pre-K through grade 12.
4. Identify and prioritize expected healthy behavior outcomes (HBO) for students for each topic which will meet the needs of the community and school district.
5. Determine the essential knowledge and skill expectations for each health topic that directly relate to the HBO. The knowledge and skill expectations 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 *when* each of the essential health education knowledge and skill expectations should be taught *across* the curriculum for all grades.
7. Determine the overall amount of instructional time. Allow sufficient time for each knowledge and skill expectation 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.
9. Use the validated scope and sequence as a guide in developing a health education curriculum and to select appropriate and aligned curriculum materials.
 10. Establish a plan for helping teachers to implement scope and sequence and related curriculum materials and disseminate the scope and sequence to all teachers who are teaching health education.

A clearly organized scope and sequence is critical for developing or selecting appropriate health education curricula. For more details, see CDC's [Developing a Scope and Sequence for Sexual Health Education](#) step-by-step resource or [brief overview](#).

Using the HECAT Online

The HECAT Online can also be used to inform the development of a scope and sequence for a single health topic or grade span, or for comprehensive health education across multiple health topics and grades pre-K through 12.

In HECAT Online, users can begin developing a scope and sequence for health education by pressing the **NEW PROJECT** button to create a new project. Existing projects are opened using the **SELECT** link. When a new scope and sequence project is created, the user must enter a title and description, and then click on the **SAVE** button to continue.

Steps to Create a Scope and Sequence Project in HECAT Online

1. Navigate to the *Scope and Sequence* menu at the top of the page.
2. Select the **NEW PROJECT** button.
3. Enter a project title and description.
4. Save the project.

¹A 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

The user is now ready to select the health topic module(s) to be included in their scope and sequence and to identify which grade spans (e.g., pre-K–2, 3–5, 6–8, 9–12) will receive instruction in the selected health topic module(s). Once health topic module(s) and grade spans(s) are selected, the user can select Healthy Behavior Outcomes as well as grade-span specific knowledge and skill expectations to prioritize for each health topic module in their scope and sequence.

Steps to Develop a Scope and Sequence in HECAT Online

1. Select health topic module(s).
2. Select grade spans(s) for health topic module(s).
3. Select priority Healthy Behavior Outcomes (HBOs) for health topic module(s).
4. Select grade-level knowledge and skill expectations for health topic module(s).
5. Repeat for each health topic module and grade span.

Depending how much time is allotted for health education, it may not be realistic to address every health topic module, HBO, knowledge expectation, or skill expectation for every grade span. **Users may consider the following when prioritizing content to include in a scope and sequence for health education:**

- **Health Topic Modules and HBOs:** Use existing health education standards and benchmarks, local requirements, and priorities established by local data to prioritize health topic module(s) and HBOs.
- **Knowledge Expectations:** Use HECAT to identify knowledge expectations that are essential to meet the objectives of select HBOs. Then, identify any concepts that are taught as part of another school course (e.g., biology) and determine whether they can be removed from the health education scope and sequence.
- **Skill Expectations:** Decide on the 1–2 skills that should be taught at each grade span for each health topic module. It is important to remember that it takes significant time to teach a health skill (e.g., decision

making or interpersonal communication). It is unrealistic to teach every skill in every health content area in every grade.

Reviewing a Completed Scope and Sequence in HECAT Online

Once users have finished selecting HBOs, knowledge expectations, and skill expectations for the desired health topic module(s) and grade spans, they can review their completed scope and sequence in HECAT Online. Scope and sequence summaries are organized by health topic module and grade span. To access a scope and sequence summary, users should navigate to a specific health topic module(s) within the scope and sequence project. At the bottom of the page for each module, users will see “*Results Summary by Grade Span.*” Results summary for each grade span(s) (e.g., pre-K–2, 3–5, 6–8, 9–12) are presented and the user will select appropriate grade span.

Steps to Review the Scope and Sequence in HECAT Online

1. Open the **Scope and Sequence** project.
 2. Select a health topic module.
 3. Scroll to the bottom of the module.
 4. Select a *Results Summary by Grades Span.*
- Download or print the Results Summary.

To review the progression of health education knowledge and skill expectations across grade spans, users have the option to download or print the *Results Summary* for each grade span and health topic of interest. Users also have the option to add specific state/local standards or requirements to the scope and sequence Results Summary.

Figure 1 illustrates a complete scope and sequence *Results Summary* for a single health topic (Sexual Health) and grade span (6–12). The summary includes selected HBOs, knowledge and skills expectations, and standards or requirements from state/local education agencies needed to select, revise, or develop health education curriculum.

As part of the scope and sequence development process, users should review and validate the scope and sequence. Users should:

- 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 spans.
- 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.

Use the validated scope and sequence as a guide in developing a health education curriculum and to select appropriate and aligned curriculum materials. Schools should establish a plan for helping teachers to implement scope and sequence and related curriculum materials and disseminate the scope and sequence to all teachers who are teaching health education. Using HECAT Online to create a tailored, locally developed scope and sequence helps ensure health education curricula meet state/local school and community requirements and priorities, and the unique health needs of students.

Figure 1: Example Sexual Health Education Scope and Sequence Template (Grades 6-12)

Grade	Behavioral Outcomes	Student Learning Objectives	Student Learning Objectives	Standards/Requirements
	Healthy Behavior Outcomes (HBOs)	Knowledge Expectations (KE)	Skill Expectations (SE)	State/Local
6 <i>(sample)</i>	<p>HBO 2: Establish and maintain healthy relationships</p> <p>HBO 5: Be sexually abstinent</p>	<p>SHI.8.10 Describe characteristics of healthy relationships. (HBO 2)</p> <p>SHI.8.13 Explain the qualities of a healthy dating or sexual relationship. (HBO 2)</p> <p>SHI.8.18 Describe how power differences (e.g., age, race/ethnicity, sex, gender, socio-economic status) impact relationships. (HBO 2, 3, 4, 5, 6, 7, 8 & 9)</p> <p>SHI.8.33 Describe the benefits of being sexually abstinent. (HBO 5)</p> <p>SHI.8.34 Describe why sexual abstinence is the safest, most effective risk avoidance method of protection from STIs, including HIV, and unintended pregnancy. (HBO 5, 6 & 7)</p>	<p>SH4.8.1 Demonstrate the effective use of verbal and nonverbal communication skills to promote healthy relationships and sexual and reproductive health.</p> <p>SH4.8.3 Demonstrate effective peer resistance skills to avoid or reduce sexual risk behaviors.</p> <p>SH5.8.1 Identify circumstances that help or hinder making a decision related to a safe or potentially risky sexual situation.</p> <p>SH5.8.5 Distinguish between healthy and unhealthy alternatives to a sexual health-related decision.</p> <p>SH5.8.6 Predict the potential outcomes of healthy and unhealthy alternatives to a sexual-health related decision.</p>	None
7				
8				
9				
10				
11				
12				

Additional references on scope and sequence:

Centers for Disease Control and Prevention. *Developing a Scope and Sequence for Sexual Health Education*. Atlanta, GA: CDC; 2016. Available at https://www.cdc.gov/healthyyouth/hecat/pdf/scope_and_sequence.pdf

Centers for Disease Control and Prevention. *Sexual Health Education Scope and Sequence Processing Guide*. Atlanta, GA: CDC; 2021. Available at https://www.cdc.gov/healthyyouth/health-education/docs/SHE_SS_Process_Guide_508.pdf

Centers for Disease Control and Prevention. *Sexual Health Education Scope and Sequence Checklist*. Atlanta, GA: CDC; 2021. Available at https://www.cdc.gov/healthyyouth/health-education/docs/SHE_SS_Checklist_508.pdf

Centers for Disease Control and Prevention. *Health Education Pacing Guide and Unit Planner*. Atlanta, GA: CDC; 2021. Available at https://www.cdc.gov/healthyyouth/health-education/docs/HED_Pacing_Guide_Unit-Planner_508.pdf

English F. *Deciding What to Teach and Test: Developing, Aligning, and Auditing the Curriculum* (Millennium ed.). Thousand Oaks, CA: Sage Publications; 2000.

Fodor JT, Dalis GT, Giarratano Russell SC. *Health Instruction in Schools: Planning, Implementing and Evaluating*. Bangor, ME: Booklocker, Inc.; 2010.

Hale J. *A Guide to Curriculum Mapping: Planning, Implementing, and Sustaining the Process*. Thousand Oaks, CA: Corwin Press; 2007.

Jacobs HH. *Mapping the Big Picture: Integrating Curriculum and Assessment K-12*. Alexandria, VA: Association for Supervision and Curriculum Development; 1997.

Telljohann S, Symons C, Pateman B. *Health Education: Elementary and Middle School Applications* (6th ed.). NY: McGraw Hill; 2008.

West-Christy J. *Teaching Today. Roadmap to Success: A Curriculum Mapping Primer*. New York, NY: Glencoe/McGraw-Hill; 2003.

Wiggins G, McTighe J. *Understanding by Design* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development; 2005.

Wiggins G, McTighe J. *Understanding by Design: Guide to Creating High-Quality Units*. Alexandria, VA: Association for Supervision and Curriculum Development; 2011.

Wiles J. *Curriculum essentials: a resource for educators* (2nd ed.). Pearson/Allyn & Bacon; 2000.