

The Health Education Curriculum Analysis Tool (HECAT): How It Can Help Improve Health Education Curriculum Development or Selection

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* Centers for Disease Control and Prevention. Health Education Curriculum Analysis Tool. Atlanta, GA: U.S. Department of Health and Human Services; 2011.

Objectives

- Describe the essential aspects that are necessary to assess in a health education curriculum.
- Describe how the HECAT can help assess the application of the National Health Education Standards in a curriculum.
- Explain the importance of identifying expected Healthy Behavioral Outcomes in order to determine health education knowledge and skill expectations.
- Explain how the HECAT can be used to improve health education curriculum writing, revision, and selection.
- Describe how school health practitioners can use the HECAT to write health education unit plans.
- Explain how school districts can use the HECAT to revise their health education scope and sequence.

What is the Health Education Curriculum Analysis Tool (HECAT)?

- The *Health Education Curriculum Analysis Tool (HECAT)* contains guidance, tools, and resources for a school district to carry out a clear, complete, and consistent analysis of health education curricula.
- Gives analysis results that a school district can use to improve an existing curriculum, select a commercially- packaged curriculum, or to develop or revise a locally-developed curriculum.

Organization of the HECAT

- Acknowledgements
- Overview of *HECAT*
- Chapter 1: General Instructions
- Chapter 2: General Curriculum Information
- Chapter 3: Overall Summary Forms
- Chapter 4: Preliminary Curriculum Considerations
- Chapter 5: Curriculum Fundamentals
- Chapter 6: Curriculum Analysis Modules*
 - AOD: Promoting Alcohol and other Drug-Free Lifestyle
 - HE: Promoting Health Eating
 - MEH: Mental and Emotional Health
 - PA: Promoting Physical Activity
 - PHW: Personal Health and Wellness
 - S: Safety
 - SH: Sexual Health
 - T: Promoting a Tobacco-Free Lifestyle
 - V: Violence Prevention
 - CHE: Comprehensive Health Education
- Appendices
- Glossary

How can the HECAT be used?

- Help assess and revise existing health education curricula.
- Help develop health education curricula.
- Help develop a district health education scope and sequence.
- Help develop health education unit plans.

What is the Goal of Health Education?

How can health education teachers help students adopt and maintain healthy behaviors?

1. Create unit and lesson plans that support the Characteristics of Effective Health Education Curricula*.
2. Use **Healthy Behavior Outcomes (HBO)**, identified in the *HECAT*, as the starting point for creating a unit plan.
3. Use the knowledge and skill expectations in the **HECAT** (Chapter 6) to guide the development of unit and lesson plans.

*Centers for Disease Control and Prevention. *Health Education Curriculum Analysis Tool. Characteristics of Effective Health Education Curricula*. Atlanta, GA: CDC, 2011 (2nd Ed.), Overview, pgs. 4-7.

What is a unit plan?

- A unit plan is developed by the teacher and serves as a long-range plan.
- It contains multiple lessons that are connected, sequenced, and related.

Designing an effective unit plan using the **HECAT**

Steps:

1. Determine the health topic, grade group and time allotment.
2. Using the *HECAT*, determine the Healthy Behavior Outcomes (HBOs).
3. Using the *HECAT*, determine the knowledge expectations aligned with the HBOs.
4. Determine the skills standards from *National Health Education Standards* to best help students reach the HBOs.
5. Determine the objectives for the unit.
6. Determine assessment strategies.
7. Write a detailed outline for the unit.
8. Write a lesson plan for each day of the unit.

Step 1: Determine the health topic, grade group and time allotment for the unit.

Example

- **Unit topic:** Tobacco-Use Prevention
- **Grade group:** Middle school (grades 6 – 8)
- **Time allotment:** 6 days/classes, 45 minutes per lesson

Step 2: Determine the Healthy Behavior Outcomes (HBOs) for the unit .

- **Write the Healthy Behavior Outcomes* for the topic (see handout).**
 - **Example: Tobacco-Use Prevention Curriculum**
 - **A pre-K–12 tobacco-free curriculum should enable students to:**
 - HBO1** - Avoid using (or experimenting with) any form of tobacco.
 - HBO 2** - Avoid second-hand smoke.
 - HBO 3** - Support a tobacco-free environment.
 - HBO 4** - Support others to be tobacco-free.
 - HBO 5** - Quit using tobacco, if already using.

* Go to HECAT web page at: <http://www.cdc.gov/HealthyYouth/hecat/>

Step 2: Determine the Healthy Behavior Outcomes (HBOs) for the unit.

- **Select HBOs that are aligned with the school district’s curriculum or plan of study.**
- **Select HBOs that are developmentally appropriate for students (8th grade).**
- **Be realistic about how much time is available to teach the unit.**
 - *For example, 6 class periods, 45 minutes each*
- **Determine what HBO(s) can be adequately addressed in 6 class periods.**

Step 2: Determine the Healthy behavior Outcomes (HBOs) for the unit.

If you only had 6 days to teach tobacco prevention to 8th grade students, what HBOs do you think would be the most important ?



Step 2: Determine the Healthy behavior Outcomes (HBOs) for the unit.

Example

- **HBO 1** - Avoid using (or experimenting with) any form of tobacco.

Step 3: Determine the knowledge expectations aligned with HBOs for each topic/unit.

- Use the **HECAT** to determine the knowledge expectations aligned with the HBOs.
 - Look at the **HECAT** Chapter 6, Tobacco Module, page 1.
 - What are the knowledge expectations aligned with HBO 1?
 - HBO 1 - *Avoid using (or experimenting with) any form of tobacco.*

Knowledge Expectations aligned with HBO 1 and Tobacco – Use Prevention.

Avoid using (or experimenting with) any form of tobacco.

- T1.8.1 Describe short- and long- term physical effects of using tobacco. (HBO 1)
- T1.8.2 Summarize the dangers of experimenting with tobacco products. (HBO 1)
- T1.8.3 Describe situations that could lead to the use of tobacco. (HBO 1)
- T1.8.4 Describe the relationship between using tobacco and alcohol or other drugs. (HBO 1)
- T1.8.5 Summarize the benefits of being tobacco-free. (HBO 1)
- T1.8.6 Describe the social, economic, and cosmetic consequences of tobacco use. (HBO 1 & 2)
- T1.8.7 Explain reasons most individuals do not use tobacco products. (HBO 1 & 3)
- T1.8.8 Explain school policies and community laws related to the sale and use of tobacco products. (HBO 1, 3 & 4)
- T1.8.9 Summarize that tobacco use is an addiction that can be treated. (HBO 1 & 4)

Step 4: Determine National Health Education Standards 2 – 8 (skills) appropriate for the unit.

Health Education Skills

- **Analyzing influences** (Standard 2)
- **Accessing valid information** (Standard 3)
- **Interpersonal communication** (Standard 4)
- **Decision making** (Standard 5)
- **Goal setting** (Standard 6)
- **Practicing healthy behaviors** (Standard 7)
- **Advocacy** (Standard 8)

*The Joint Committee on National Health Education Standards. National Health Education Standards: Achieving Excellence (2nd Edition). Atlanta: American Cancer Society, 2007.

Steps in Skill Development

1. Discussing the importance of the skill, its relevance, and relationship to other learned skills;
2. Presenting steps for developing the skill;
3. Modeling the skill;
4. Practicing and rehearsing the skill using real-life scenarios; and
5. Providing feedback and reinforcement.

Step 4: Determine *National Health Education Standards 2 – 8* (skills) appropriate for the unit.

- What one or two skill standards should be taught in the tobacco-use prevention unit? Why?



Step 4: Determine *National Health Education Standards 2 – 8* (skills) appropriate for the unit.

- Determine one or two skill standards to be taught in the tobacco-use prevention unit.
- *Example*
 - Standard 4 - Communication skills
 - Standard 8 - Advocacy
- Topic-specific standards for tobacco-use prevention:
 - 4 . Use interpersonal communication skills to avoid or quit tobacco use.
 - 8 . Demonstrate the ability to influence and support others to make positive choices related to tobacco use.

Step 4: Determine *National Health Education Standards 2 – 8* (skills) appropriate for the unit.

- **Skill Expectations for Standard 4**
 - T4.8.1 Demonstrate the use of effective verbal and nonverbal communication skills to avoid or reduce exposure to secondhand smoke and tobacco use.
 - T4.8.2 Demonstrate effective peer resistance skills to avoid or reduce exposure to secondhand smoke and tobacco use.
 - T4.8.3 Demonstrate effective negotiation skills to avoid or reduce exposure to secondhand smoke and tobacco use.
 - T4.8.4 Demonstrate how to effectively ask for assistance to quit using tobacco.
 - T4.8.5 Demonstrate how to effectively communicate empathy and support for others who are trying to quit using tobacco.

Step 4: Determine *National Health Education Standards* 2 – 8 (skills) appropriate for the unit.

- **Skill Expectations for Standard 8**
 - T8.8.1 State a health-enhancing position about tobacco prevention, supported with accurate information, to improve the health of others.
 - T8.8.2 Persuade others to be tobacco-free and avoid exposure to second-hand smoke.
 - T8.8.3 Collaborate with others to advocate for individuals, families, and schools to be tobacco-free.
 - T8.8.4 Demonstrate how to adapt tobacco-free messages for different audiences.

Step 5: Determine the instructional objectives for the unit.

- The knowledge and skill expectations that support the HBO(s) can be the foundation for the objectives for the lesson.
- Not all knowledge and skill expectations identified can be met, depending on how much time is dedicated to the unit.

Step 5: Determine the instructional objectives for the unit.

- **SMART** -- Criteria for writing effective objectives.
 - Specific
 - Measurable
 - Appropriate
 - Realistic
 - Time-phased

Step 5: Determine the instructional objectives for the unit.

Examples

- Knowledge Expectation (KE)
T1.8.1 Describe short- and long- term physical effects of using tobacco. (HBO 1)
- Instructional objectives* aligned with KE:
 - By the end of the lesson, students will be able to describe 4 negative short-term physical effects of using tobacco.
 - By the end of the lesson, students will be able to describe 3 negative long-term physical effects of using tobacco.

*meet SMART criteria

Step 5: Determine the instructional objectives for the unit.

Examples

- Skill Expectation (SE)
T4.8.2 Demonstrate effective peer resistance skills to avoid or reduce exposure to secondhand smoke and tobacco use.
- Instructional objective* aligned with SE:
 - Demonstrate 3 effective peer resistance skills to avoid tobacco use.

*meets SMART criteria

Step 5b: Determine the focus for each day in the unit.

Day 1	Day 2	Day 3
Lesson Focus – Effects of Tobacco Use Objectives 1. Describe 4 short term physical effects of using tobacco.	Lesson Focus – Effects of Tobacco Use Objectives 1. Explain that most individuals do not use tobacco products. 2. Describe 3 long-term physical effects of using tobacco. 3. Discuss 5 social, economic, or cosmetic consequences of tobacco use. 4. Summarize 3 benefits of being tobacco-free.	Lesson Focus – Influences of Tobacco Use (Peers) Objectives 1. Describe 2 situations that could lead to the use of tobacco. 2. Summarize 2 ways peers could influence tobacco use. 3. Summarize 2 dangers of experimenting with tobacco products. 4. Explain that tobacco is addictive.
Day 4	Day 5	Day 6
Lesson Focus – Refusal Skills Objectives 1. Demonstrate 3 verbal and/or nonverbal ways to refuse tobacco use.	Lesson Focus – Refusal Skills Objectives 1. Demonstrate 3 verbal and/or nonverbal ways to refuse tobacco use.	Lesson Focus – Advocating for Classmates to be Tobacco Free Objectives 1. Make a commitment to be tobacco free. 2. Collaborate with others to advocate for peers to be tobacco free. 3. State a health-enhancing position about being tobacco free, supported with accurate information, to improve the health of others.

Step 6: Determine assessment strategies that can be used to assess the instructional objectives.

- Assessment measures students' achievement of knowledge and skills.
- Assessment is the process of gathering, describing, or quantifying information about student performance and level of achievement based on established standards.

Step 6: Determine assessment strategies that can be used to assess the instructional objectives.

- **Purpose of Assessment**
 1. To diagnose students' strengths and weaknesses.
 2. To monitor student progress.
 3. To provide feedback to students.
 4. To assign grades to students.
 5. To determine if students have met the desired objectives.
 6. To determine if changes need to be made on the way the lesson/unit was taught.
 7. To determine teacher performance

Step 6: Determine assessment strategies that can be used to assess the instructional objectives.

Assessment Examples	
Unit test	Exit ticket
Quiz	Bell-ringer question
Worksheet	Check for understanding
Graded role play	Think-pair-share

Step 6: Determine assessment strategies that can be used to assess the instructional objectives.

Objective:

- By the end of the lesson, students will be able to describe 4 negative short term physical effects of using tobacco.

Assessment:

- Students provide a written response --
In an exit ticket, each student will describe 4 different short term physical effects of tobacco and explain how these short term effects will negatively impact something he or she likes to do.

*Activity sheet, exit ticket, quiz, unit test item.

Example Scoring Rubric

Objective: By the end of the lesson, students will be able to describe 4 negative short-term physical effects of using tobacco.

Scoring Rubric				
Category	4	3	2	1
Negative short-term physical effects of tobacco use	Correctly and clearly writes 4 negative short-term physical effects of tobacco use for teens.	Correctly and clearly writes 3 negative short-term physical effects of tobacco use for teens.	Correctly and clearly writes 1 or 2 negative short term physical effects of tobacco use for teens.	Writes 1 negative short-term effects of tobacco use for teens that is somewhat correct.
Impact on personal life.	Clearly describes one specific way that each of the 4 negative short-term physical effects could negatively impact his or her life.	Clearly describes a specific way that each of the 3 negative short-term physical effects could negatively impact his or her life.	Clearly describes a way that 1 negative short-term physical effect could negatively impact his or her life.	Does not describe how a negative short-term physical effect could negatively impact his or her life.

Step 6: Determine assessment strategies that can be used to assess the instructional objectives.

Objective:

- By the end of the lesson, present a convincing tobacco-use prevention message for teen peers.

Assessment:

- This objective will be met at the end of the unit, when student pairs create a pamphlet on tobacco use prevention that is directed to teens, provides accurate information on 4 short-term and 4 long-term negative effects of tobacco use, describes the influences on teen tobacco use and the benefits of being tobacco free, and states a persuasive and compelling message for teens to be tobacco free.

Example Scoring Rubric
Unit Performance Assessment

Objective: By the end of the lesson, students will be able to create an informative and persuasive message to prevent tobacco use among teens.

Category	4	3	2	1
Target Audience	Pamphlet strongly appeals to teens at their school.	Pamphlet somewhat appeals to teens at their school.	Pamphlet barely appeals to teens at their school.	Pamphlet does not appeal to teens at their school.
Negative Consequences	Clearly and correctly describes 4 negative short-term and 4 negative long-term physical effects that can happen to teens that use tobacco.	Clearly and correctly describes 2 or 3 negative short-term and 2 or 3 negative long-term physical effects that can happen to teens that use tobacco.	Correctly describes at least 1 negative short-term and 1 negative long-term physical effects that can happen to teens that use tobacco.	Describes incorrectly the negative short-term and/or long-term physical effects that can happen to teens that use tobacco.
Internal & External Influences	Clearly and correctly explains how 3 or more specific internal and external influences may put pressure on teens to use tobacco.	Correctly explains how 2-3 internal and external influences may put pressure on teens to use the tobacco.	Correctly explains how 1 or 2 influences may put pressure on teens to use the tobacco; includes internal or external influences, but not both.	Explains vaguely how 1 influence may put pressure on teens to use tobacco.
Advocacy & Benefits of Being Drug Free	Using 2 or more benefits of being tobacco free, convincingly encourages peers to avoid tobacco use.	Using 1 benefit of being tobacco free, convincingly encourages peers to avoid tobacco use.	Using 1-2 benefits of being tobacco-free encourages peers to avoid tobacco use, but not very convincingly.	Encourages peers to avoid tobacco use without including any benefits; encouragement is weak.

Step 7: Write a detailed outline for the unit.

- **The outline should include:**
 - The lesson focus for each day.
 - The instructional objectives for each day.
 - The assessment strategies for each objective for each day.
 - An outline of the materials, functional knowledge, skills, and activities that will be taught for each day.
 - Continuity, connection, and flow between the lessons.
- **Review the selected HBOs, and the scope of the knowledge and skill expectations identified in planning this unit.**
 - Make changes as needed

Step 7: Write a detailed outline for the unit.

Specify:

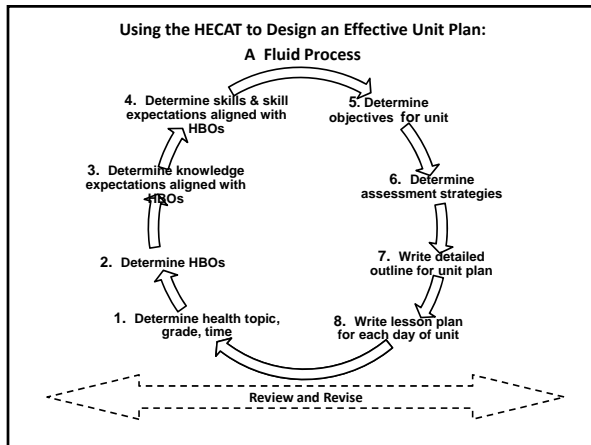
- The unit topic and targeted grade group,
- The number of classes dedicate to the topic, and
- The number of minutes for each class session

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Lesson Focus					
Objective(s)					
Assessment					
Detailed outline of what and how to teach					

Step 8: Write lesson plans for each day of the unit.

The Lesson Plan should include the following:

- Unit topic and targeted grade group.
- Overview of lesson
- Objectives of lesson
- Describe Assessment strategy
- Materials , resources and equipment needed to implement the lesson
- Teacher preparation in advance of lesson
- Handouts or other materials to be distributed/used by students and/or teacher
- Sequence of instruction
- Assessment tool



Developing a Scope and Sequence Using the HECAT

- See the handout - *Using the HECAT to Develop a Scope and Sequence for Health Education*
