

Using HECAT Online to Perform a Curriculum Analysis

Overview

The review and selection of health education curricula for use in any school district should be based on clearly identified goals, health behavior expectations, and outcomes for health education. In order to get maximum benefit from using the HECAT, a school should have a scope and sequence that identifies student expectations and outcomes for health education at each grade level.

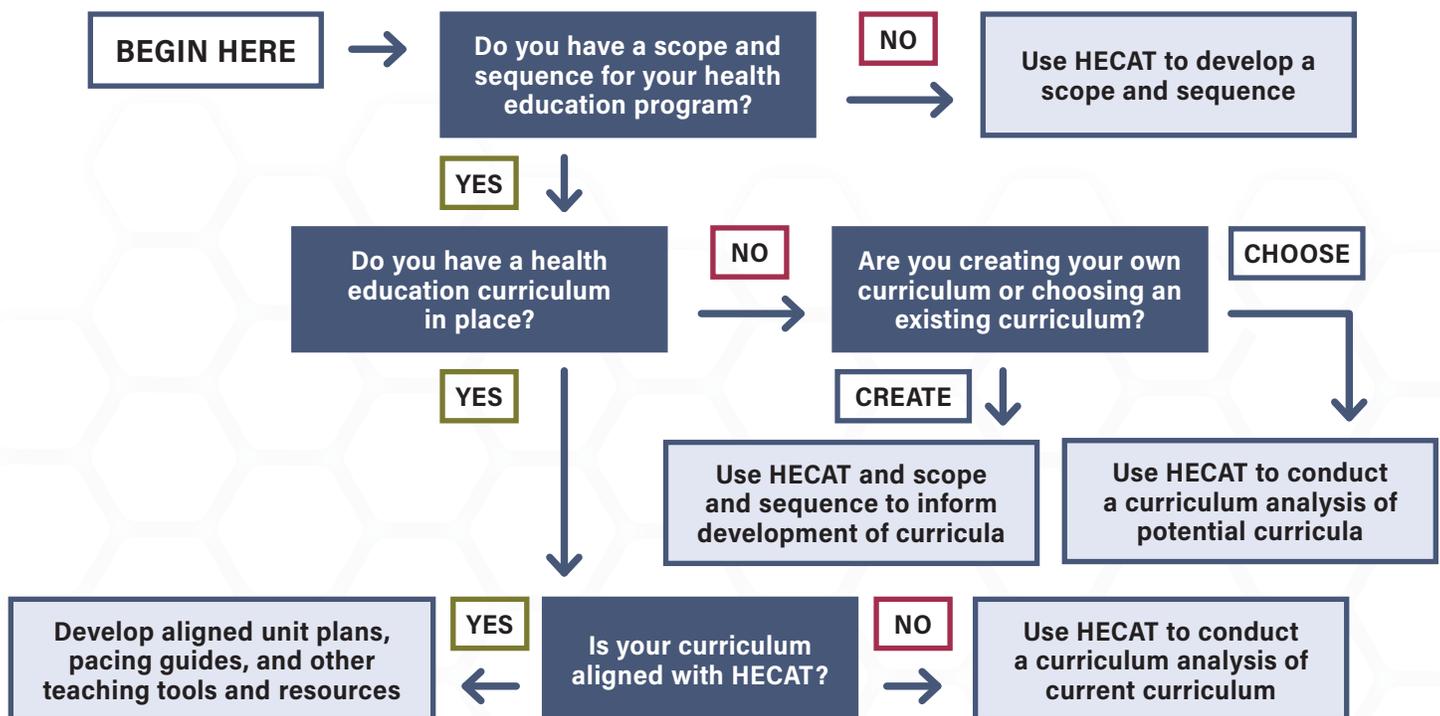
The scope and sequence should take into account district benchmarks, local, state and/or national health education standards or guidelines, and education codes that influence the teaching of health education. It should be responsive to the current health risks reflected by local student data and students' health needs.

The scope and sequence will help determine curriculum

priorities and help guide the refinement of the HECAT items to be used in assessing health education curricula.

See *Figure 1: Decision Tree for Using the HECAT* to determine how your school district or school can best benefit from HECAT. It is recommended that if a school district or school does not have a health education scope and sequence then one should be developed as a first step. See [Using HECAT Online to Develop a Scope and Sequence for Health Education](#) document using a link found on the [HECAT Online Home page](#) for more guidance on using the HECAT to assist with this process. If a scope and sequence for school health education has been established or it is determined that one is not necessary to complete a review of a curriculum, continue with the general instructions.

Figure 1: Decision Tree for Using the HECAT



General Instructions

These instructions guide the overall coordination and organization for carrying out a complete examination of a health education curriculum, using the HECAT. Effective curriculum appraisal requires both personnel and time.

Before Starting the Curriculum Appraisal Process

1. Identify a health education curriculum coordinator.

The health education curriculum coordinator will lead a team (health education curriculum review team) through the curriculum appraisal process, using the HECAT. The coordinator should understand the health education needs of the students as well as the school health interests and concerns of the school leadership, parents/guardians, and community. This individual should have several years of experience in health education and knowledge of how a health education curriculum is developed and how it should be used. The coordinator should be able to

- Identify and acquire the health education curricula to be reviewed.
- Determine if curriculum analysis will be conducted using the hard-copy PDFs of HECAT or through the web application, HECAT Online. If conducting the analysis using HECAT Online, launch web application for tailored instructions available at <https://www.cdc.gov/hecatonline>.
- Complete the *General Curriculum Information* or relevant section of HECAT Online for all curricula to be reviewed.
- Assemble the health education curriculum review team. An existing curriculum review team, or some of its members, may be the most appropriate individuals to make up the review team who will use the HECAT to review possible curricula.
- Ensure that appropriate numbers of curricular and HECAT materials are available for use by the team.

- Provide necessary background information and guidance to help team members complete a thorough and consistent review.
- Make curriculum review assignments to ensure that the most appropriate and knowledgeable team members review each aspect of the curriculum.
- Prepare a curriculum review schedule to ensure that discussions and decisions are completed in a timely manner.
- Assemble completed HECAT scores and comments and make these summaries available to all team members for review and discussion. This would include collecting hard-copy summary forms from reviewers or accessing completed forms from the corresponding team project in HECAT Online.
- Facilitate or identify a skilled facilitator for the review process and team discussions. If selecting an individual external to the review team, choose one who has expertise and experience as a group facilitator, can manage discussions, maintain focus, and process decision-making.
- Use the HECAT results and the health education curriculum review team's discussions to summarize the curriculum decisions.
- Distribute or report results to appropriate decision makers and stakeholders and, if necessary, to those who are responsible for making revisions.

2. Form a health education curriculum review team and identify the roles and responsibilities of each member.

A team of people will be responsible for analyzing curricula and making recommendations based on the HECAT scores. The team might be

- A new group of people assembled for this purpose.
- An existing district or school curriculum committee.
- A subcommittee of the district or school health council.
- Members of a school health team.

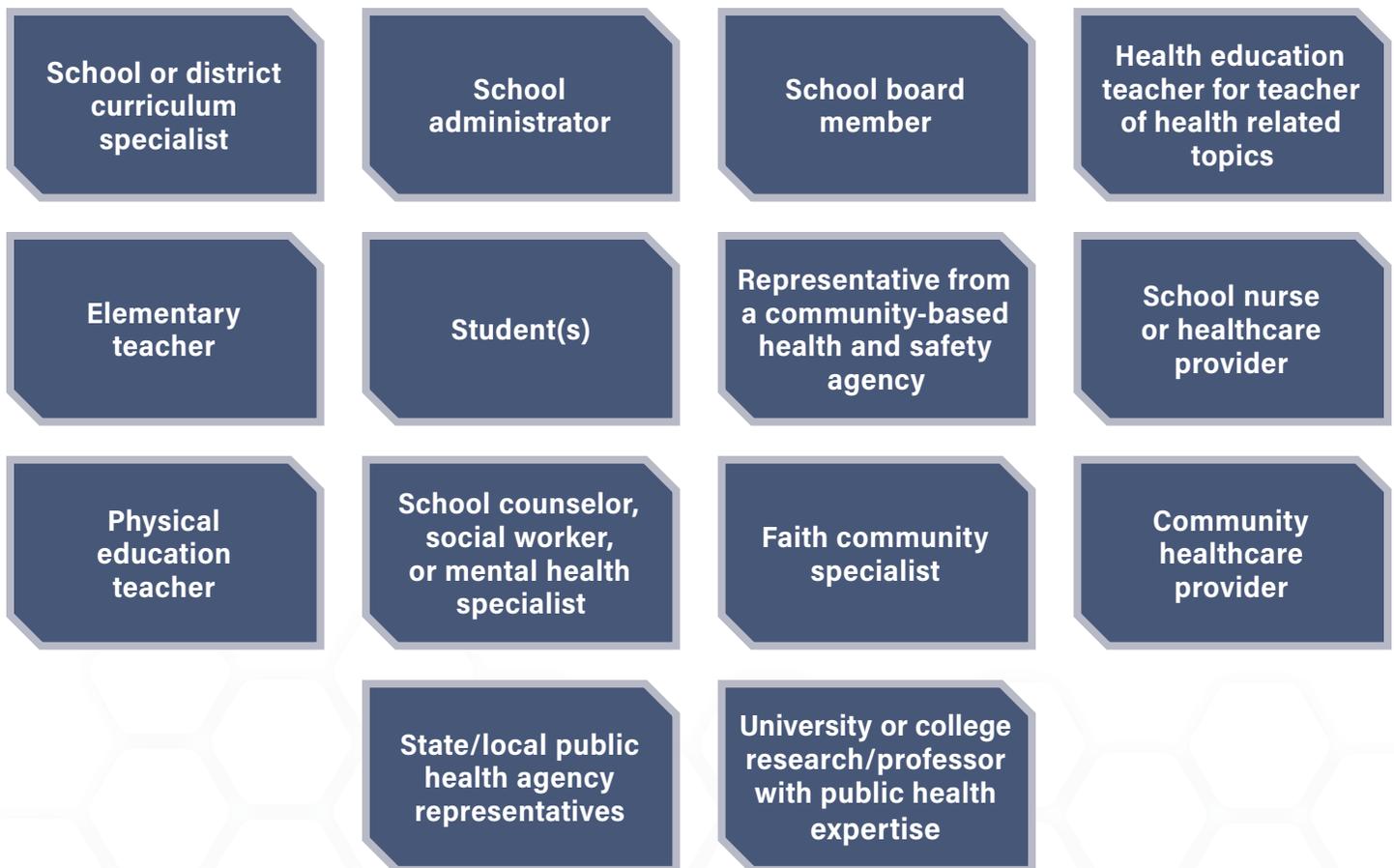
The number of reviewers can vary, but the team membership should include those individuals from the school and community who

- Understand schools, the educational and health needs of students, and the norms and values of their community.
- Supervise curriculum and instruction for the school district or school.
- Can make final decisions about the curriculum for the school district or school.

- Have expertise in health education curriculum and instruction.
- Are knowledgeable about relevant health education content.

Figure 2 lists the type of people who may be considered as members of a health education curriculum review team.

Figure 2. People who might serve on a Health Education Curriculum Review Team



3. Obtain curriculum for review and assessment.

Obtain an adequate number of copies of each curriculum for team members to review. A complete curriculum might include learning objectives, step-by-step instructions for teachers, related learning packets, videos/CDs/DVDs, and other materials for

use in classroom instruction or for student learning. If each team member cannot access a complete curriculum to review separately, members can share the materials and complete the HECAT on a predetermined review schedule.

4. Determine the HECAT items that are essential for analyzing the curriculum.

The selection of an effective and appropriate health education curriculum starts with clear expectations of the HECAT review process and HECAT tools used for analyzing curricula. Clarifying expectations will help keep the review process focused on what is relevant, appropriate, and essential.

Identify the grade groups and health topics that are addressed by the curriculum under review. This will guide the selection of appropriate HECAT chapter(s), modules, and analysis items.

Review the HECAT to determine any additions, deletions, or modifications to the analysis items are needed to address

- State or local health education requirements and priorities.
- Community needs and values.
- Any additional issues relevant to a locally developed curriculum.

Eliminate items that are irrelevant or inappropriate. For example, it might not be necessary to analyze the affordability of a locally developed curriculum.

If completing the health education curriculum analysis using HECAT Online, see Figure 3 for additional guidance for Steps 5a-7a of the process before conducting review.

5. Finalize the curriculum analysis tool for use by the reviewers.

Prepare the final version of the HECAT for the review team members. Consolidate essential chapters, pages, and items and make an adequate number of copies so that reviewers can complete a written analysis of all curricula under review. Additional space might be needed for locally developed curricula so that reviewers can record information to use when making improvements.

6. Provide an orientation and direction for team members.

The coordinator provides an overview of the HECAT review process, schedule, and expected results. The

orientation for all reviewers should include

- A timeline for completing reviews.
- A description of how the HECAT forms and scoring process work.
- A description of how HECAT Online works, if applicable.
- How reviewers can get assistance if they have questions.
- What reviewers should do with their results and curriculum materials after completing their reviews.

When reviewing a locally developed curriculum, reviewers should be encouraged to make complete notes of additions, deletions, and changes that they think would enhance the curriculum.

It is important that all reviewers become familiar with the curriculum before review. The orientation should help reviewers become familiar with the information from the *General Curriculum Information* (Chapter 2) and allow time for them to become familiar with all the curriculum materials. To increase the likelihood of getting thorough and consistent reviews, the coordinator should also describe the knowledge and skill expectation analysis items from each health topic modules that will be used.

Team members will probably have different levels of expertise in health education. An orientation can help all team members understand the essential characteristics they should consider in rating a health education curriculum, why the characteristics are important, and how the HECAT addresses them. In the orientation, emphasize the importance of analyzing a curriculum's approach to addressing norms, functional concepts, and essential skills rather than factual, but unusable, information. If appropriate, include an overview of the *National Health Education Standards (NHES)*, state health education standards, and local, benchmarks.

Reviewers who are least familiar with state-of-the-art health education instructional strategies and curriculum materials might need extra assistance in learning to identify the extent to which a curriculum addresses the fundamentals found in Chapter 5 and the essential knowledge and skill expectations in relevant

health topic modules found in Chapter 6. They might need additional information, examples, and practice to complete the analysis items reliably. For example, provide a list of what might be included in a “culturally relevant” curriculum or describe an actual instructional strategy that might be used to “demonstrate” a skill. It might be beneficial to pair an expert or experienced team member with an inexperienced team member when making review assignments.

7. Determine curriculum review assignments for team members.

There is no one set way to assign reviewers to complete the HECAT. The curriculum review team may decide to complete an entire HECAT component or health topic module together at one time or do sections separately over an extended period of time. More than one person from the curriculum review team should review and complete each HECAT component or health topic module for each curriculum.

Individuals with expertise in health education content should complete the *Accuracy Analysis*. Individuals with expertise in community norms and values should be asked to complete the *Acceptability Analysis* and done before members begin reviewing Curriculum Considerations and relevant *Health Topic modules*. This could reduce the workload because a curriculum might be found to be so faulty, unacceptable, or expensive in *Preliminary Curriculum Considerations* that it does not merit further analysis.

When reviewing a curriculum that addresses multiple health topics, individuals with expertise in specific topics might review the parts of the curriculum that are relevant to their areas of expertise. Figure 4, on page 7, identifies the people who could be included in the analysis of specific sections of the HECAT.

8. Develop a timeline for the review process.

The time required for a curriculum review will depend on several factors:

- Each reviewer’s understanding of health education and relevant health topics.
- Each reviewer’s familiarity with the HECAT or HECAT Online.

- Each reviewer’s familiarity with the curriculum being reviewed.
- The amount of learning materials in a curriculum. More time will be required for a curriculum that includes multiple parts, such as videos/CDs/DVDs, workbooks, and separate guides for teachers, than will a single-packaged curriculum with no extra materials.
- The orderliness of a curriculum. More time will be required for a curriculum that is unorganized, fragmented, or incomplete than for one that is well organized.
- The extent to which curriculum materials are easily available for all reviewers. The process will take longer if members have to share curriculum than if they have their own complete package of materials.
- The breadth and scope of the curriculum under review. For example, a multi-grade curriculum will require more time than a single-grade curriculum, and a comprehensive health education (CHE) curriculum will require more time than a single health topic curriculum.

Analyzing a comprehensive health education (CHE) curriculum takes time!

A comprehensive curriculum addresses health concepts and skills across topics and grades, incorporates uniform instructional methodology and assessment strategies, and intentionally designs lessons to build on prior learned concepts and skills and build a foundation for learning new concepts and skills. The content is more extensive, and every aspect of analysis will take more time than a single topic curriculum.

The CHE module includes additional analysis steps to address the comprehensive and integrated aspects of such a curriculum that are not expected for review of a single topic module. More time is required to make sure all knowledge expectations are met across topics and grades; skill expectations are emphasized at relevant and appropriate grade levels; and skill practice is applied across grades and in appropriate topics.

Figure 3: Additional guidance for Steps 5-7 if conducting analysis using HECAT Online

5a. Create a HECAT Online project for use by the reviewers.

First, create a team for the review or choose a previously created team. Then, invite reviewers to join the team by adding them as team members via email. These functions can be found under the **TEAMS** menu item in HECAT Online. Next, setup a project by choosing the "Curriculum Analysis" project type and entering the descriptive information about the health education curriculum. If any hard copies of the review forms or details of the health topic modules are required for paper distribution, access under the **BLANK** Forms menu.

6a. Provide an orientation and direction for team members.

The coordinator provides an overview of the HECAT review process, schedule, and expected results. The orientation for all reviewers should include

- A timeline for completing reviews.
- A description of how the HECAT instruments and scoring process work.
- How reviewers can get assistance if they have questions.
- What reviewers should do with their results and curriculum materials after completing their reviews.

When reviewing a locally developed curriculum, reviewers should be encouraged to make complete notes of additions, deletions, and changes that they think would enhance the curriculum.

It is important that all reviewers become familiar with the curriculum before review. The orientation should help reviewers become familiar with the information required in the **GENERAL CURRICULUM INFORMATION** component (found near the top of the Curriculum Analysis page) and allow time for them to become familiar with all the curriculum materials. To increase the likelihood of getting thorough and consistent reviews, the coordinator should also describe the knowledge and skill expectation analysis items from each health topic modules that will be used.

Team members will probably have different levels of expertise in health education. An orientation can help all team members understand the essential characteristics they should consider in rating a health education curriculum, why the characteristics are important, and how the HECAT addresses them. In the orientation, emphasize the importance of analyzing a curriculum's approach to addressing norms, functional concepts, and essential skills rather than factual, but unusable, information. If appropriate, include an overview of the *National Health Education Standards (NHES)*, state health education standards, and local, benchmarks.

Reviewers who are least familiar with state-of-the-art health education instructional strategies and curriculum materials might need extra assistance in learning to identify the extent to which a curriculum addresses the *Curriculum Fundamentals* and the essential knowledge and skill expectations in relevant health topic modules found in components on the *Curriculum Analysis* page. They might need additional information, examples, and practice to complete the analysis items reliably. For example, provide a list of what might be included in a "culturally relevant" curriculum or describe an actual instructional strategy that might be used to "demonstrate" a skill. It might be beneficial to pair an expert or experienced reviewer with an inexperienced reviewer when making team member review assignments.

7a. Determine curriculum review assignments for team members.

There is no one set way to assign reviewers to complete the HECAT. The curriculum review team may decide to complete an entire HECAT component or Health Topic Module together at one time or do sections separately over an extended period of time. More than one person from the curriculum review team should review and complete each HECAT component or health topic module for each curriculum.

Individuals with expertise in health education content should complete the *Accuracy Analysis* components. Individuals with expertise in community norms and values should be asked to complete the *Acceptability Analysis* components. These should be completed before members begin reviewing and entering data into the *Curriculum Fundamentals* components and relevant *health topic modules*. This could reduce the workload because a curriculum might be found to be so faulty, unacceptable, or expensive that it does not merit further analysis.

When reviewing a curriculum that addresses multiple health topics, individuals with expertise in specific topics might review the parts of the curriculum that are relevant to their areas of expertise.

After completing the above steps, return to Step 8 to develop a timeline for the review process.

Figure 4: People who could be included in the HECAT analysis

HECAT Chapter or Section	Who could be included in analysis
Chapter 2: <i>General Curriculum Information</i>	<ul style="list-style-type: none"> ▪ Curriculum review (HECAT) coordinator ▪ Health education and classroom teachers
Chapter 4: <i>Preliminary Curriculum Considerations, Accuracy Analysis</i>	<ul style="list-style-type: none"> ▪ Local healthcare and public health professionals ▪ Institution of higher education (IHE) health and education experts ▪ Health education teachers
Chapter 4: <i>Preliminary Curriculum Considerations, Acceptability Analysis</i>	<ul style="list-style-type: none"> ▪ District administrators ▪ Health education teachers ▪ School counselor ▪ School nurse ▪ Equity specialists ▪ Parents/guardians ▪ Local faith community leaders ▪ Students
Chapter 4: <i>Preliminary Curriculum Considerations, Feasibility Analysis</i>	<ul style="list-style-type: none"> ▪ Curriculum review (HECAT) coordinator ▪ Health education and classroom teachers
Chapter 4: <i>Preliminary Curriculum Considerations, Affordability Analysis</i>	<ul style="list-style-type: none"> ▪ Curriculum review (HECAT) coordinator ▪ District business administrators
Chapter 5: <i>Curriculum Fundamentals</i>	<ul style="list-style-type: none"> ▪ Health education and classroom teachers
Chapter 6: <i>Health Topic/Curriculum Module(s), NHES Standard 1: Core Concepts</i>	<ul style="list-style-type: none"> ▪ Curriculum review (HECAT) coordinator ▪ Health education and classroom teachers ▪ IHE health and education experts ▪ Parents/guardians ▪ Students ▪ Local faith community leaders ▪ Healthcare and public health professionals
Chapter 6: <i>Health Topic/Curriculum Module(s), NHES Standards 2–8: Health-Enhancing Skills</i>	<ul style="list-style-type: none"> ▪ Curriculum review (HECAT) coordinator ▪ Health education and classroom teachers ▪ IHE health and education experts
Chapter 3: <i>Overall Summary Form: Individual Curriculum Summary Scores and Multiple Curriculum Comparison Scores</i>	<ul style="list-style-type: none"> ▪ Curriculum review (HECAT) coordinator ▪ Health education teachers
Overall discussion and decision making about the implications of the HECAT results	<ul style="list-style-type: none"> ▪ Curriculum review (HECAT) coordinator ▪ Health education and classroom teachers ▪ Parents/guardians ▪ Students ▪ Local faith community leaders ▪ Equity specialists ▪ IHE health and education experts ▪ District administrators ▪ Healthcare and public health professionals

Note: NHES = National Health Education Standards; IHE = institutes of higher education

After Completing the Curriculum Analyses

Use the HECAT results to make recommendations for curriculum selection or revision. HECAT users will need to develop a selection or revision process that works best in their setting. The steps below are general recommendations:

1. Convene a meeting with health education curriculum review team members to discuss the completed HECAT analyses.

Include any additional individuals who will be responsible for revising locally developed curricula.

2. Review the scores and comments.

Review the scores for *Preliminary Curriculum Considerations* and determine whether to eliminate any curricula based on concerns about the accuracy and acceptability of content, feasibility, and cost.

Determine review team members' recommendations for overcoming problems identified. All team members should share their comments from the *Accuracy Analysis* and *Acceptability Analysis* of locally developed curricula so that appropriate updates can be made during revision.

3. Reach a consensus on final scores for *Accuracy Analysis* and *Acceptability Analysis* for each curriculum.

If reviewers' scores are not consistent, try to reach consensus. Focus the discussion on those items for which there is a difference of 2 or more points, such as "0" and "3" or "1" and "4." If consensus is not possible, average the scores. If scores are already consistent among review members, use the opportunity for team members to explain their scores.

Once consensus is reached, team members can make specific recommendations on how to improve the curriculum to achieve a score of "3" or "4" in each area. If scores for a locally developed curriculum are consistently low ("0" or "1"), consider eliminating the current curriculum and developing a new one.

4. If not done prior to review, identify any items from Chapters 4 and 5, and the Health Topic Module, that the team believes are substantially more important than other items.

The HECAT analyzes areas that reflect a quality curriculum and characteristics of effective health education curricula. However, the analysis areas appear to be of equal value (4 point maximum). The tool does not weigh one area over another. For example, *Curriculum Design* has the same scoring value as *Promoting Healthy Norms*. The review team should determine the relative importance of scores based on their specific educational priorities, needs, and values and decide which area or criterion warrants more value. This often becomes more evident to review team members during analysis or after analysis is completed. For example, the team might decide that the *Promoting Healthy Norms* score is more important than the *Curriculum Design* score, or in the Health Topic Modules, the *Student Skill Practice* score is more important than the *Skill Expectations* score.

By highlighting the more important areas and items on the overall summary form, the review team can use these highlighted HECAT scores to refine the ranking of curricula and focus the revision priorities.

5. Rank curricula.

If using the HECAT to review **one** curriculum, skip to step 6. If comparing **more than one curriculum**, use the *Overall Summary Form: Multiple Curriculum Comparison Scores* and rank curricula from strongest to weakest.

Consider the following when ranking curricula:

- Each criteria and score stands on its own. Do not add the scores to calculate a "total" score or average score for each curriculum.
- Review scores to determine if accuracy, acceptability, feasibility, or affordability scores and comments should affect the ranking of a curriculum. For example, a curriculum's overall ranking might be reduced because it requires considerably more revision or supplementation than another curriculum that was initially ranked lower but requires no revision.

- Review the *Curriculum Fundamentals* and determine which curriculum scores highest in most of these fundamentals, especially in the areas that your team believes are of greatest importance.
- Review the concepts and essential skills (*Health Topic Module[s]*) and determine which curriculum scores the highest in the application of concepts and skills, especially in the areas that the team believes are of greatest importance. It is unlikely that any single grade level, topic-specific curriculum will adequately address all skills. Reviewers will need to determine the skills most appropriate for that specific topic area.
- Provide a summary of the review process used by health education curriculum review team to analyze a curriculum, using the HECAT.
- Provide a written summary of HECAT scores and the strengths and weaknesses of each curriculum, based on the curriculum review teams' comments. (A curriculum should be made available for public review only after it has undergone HECAT analysis by the curriculum review team.)
- Provide a single copy of each curriculum under consideration.
- Solicit public review and written comments.

The *NHES* were developed for comprehensive school health education curricula which address many health topics across multiple grade spans. When reviewing a single topic-specific curriculum, consider its strengths and weaknesses in relation to the strengths and weaknesses of other health education curricula that also will be used. Some weaknesses might be eliminated when considered in the context of these other curricula.

Be sure to compare and rank only those curricula that have similar objectives. For example, compare and rank only a middle school tobacco-free curriculum to other middle school tobacco-free curricula and compare and rank an elementary comprehensive health education curriculum to other elementary comprehensive education health curricula.

6. If required, make curricula and analyses available to public for comment.

Drawing upon a health education curriculum review team that represents a broad range of school and community perspectives can help ensure that the analysis results and curriculum recommendations match the interests of the public. However, some school boards might require or recommend that curricular materials also be available for general public review and comment. To facilitate an informed public review, the HECAT coordinator should:

- Provide a written summary of each curriculum under consideration, using information from the *General Curriculum Information*.

7. If solicited, review public comments and consider whether the HECAT review team should revise its ranking of the curricula based on the input received.

The HECAT coordinator and members of the review team should examine all public comments, considering the implications of comments for ranking each curriculum.

8. Use final ranking and public comments to make curriculum recommendations for selection or improvement.

Use the final ranking to make recommendations for the selection of a packaged curriculum or revisions to a locally developed curriculum. Assemble these recommendations with a written description of the curriculum, consensus summary of the curriculum's strengths, and additional comments, such as recommendations for use, teacher training, correction of inaccuracies, and plans for supplements to fill gaps.

Submit recommendations and supportive information to appropriate decision makers for final approval.

9. Assign curriculum revisions, supplementations, and improvements.

Revisions, supplements, or improvements to a curriculum should be assigned to a writing team made up of review team members or other health educators who have experience and expertise in writing curricula.

If content accuracy needs improvement, then a content expert should be included on the writing team.

The writing team should

1	Examine the review team's written concerns and recommendations.
2	Identify strategies and materials that appropriately address all concerns and recommendations.
3	Develop a plan for integrating the strategies and materials into the curriculum.

The plan and materials should be reviewed and approved by the health education curriculum review team.

Once the plans, strategies, and materials are approved, the writing team should proceed with revisions. (It might be necessary to seek approval from the publisher if revisions will be made to a commercially packaged curriculum or if some published lessons will be replaced with locally developed lessons.)

Once revisions have been made, the health education curriculum review team should have the opportunity to review the revised curriculum before submitting it for approval or use by classroom teachers.

