The Auditor State of Hawaii

## **OVERVIEW**

## A Review and Assessment of the Department of Education's Development of Educational Standards

Report No. 01-15, October 2001

## **Summary**

Senate Concurrent Resolution No. 57 of the 2000 legislative session requested the State Auditor to review and assess the Department of Education's (DOE) development of educational standards for public schools statewide to ensure that Hawaii's standards for competency in the basic educational skills are on par with the standards of other states. The resolution cited a Fordham Foundation report that gave poor marks to Hawaii's educational standards in English, history, geography, science, and math.

The DOE has developed two types of standards that collectively identify learning expectations for students. **Content** standards are statements that clearly define what students should know and be able to do in various subject areas and at different points in their education. **Performance** standards provide concrete examples and explicit definitions of how well students must learn the material presented by content standards. In 1999, the DOE completed the development of content standards for ten subject areas and published a separate content standards document for each area.

The Office of the Auditor contracted with Mid-Continent Research for Education and Learning (McREL) to assess the DOE's **content** standards for language arts, mathematics, science, and social studies and to compare the department's standards with core subject standards in selected states. McREL assessed each content standard for coherence, clarity, and comprehensiveness. *Coherence* refers to how well each standards document is organized so that the material will make sense to the reader and will be easy to use. *Clarity* refers to how clearly the standards describe the concepts and skills that students should learn and can demonstrate. *Comprehensiveness* refers to whether the standards address significant concepts and skills for each subject area, whether the concepts and skills are presented at the appropriate level of difficulty, and whether the content and skills described are specific enough to be meaningful.

Generally, the DOE's content standards for language arts, mathematics, science, and social studies are coherent and well organized. However, the level of specificity of some benchmarks is inconsistent. Furthermore, in the language arts content standards, two strands (categories of standards) differ in character and scope from the other language arts strands, which makes them less effective as content organizers. With some minor revisions, the standards for language arts, math, science, and social studies would be more coherent and user-friendly.

The content standards for language arts, mathematics, science, and social studies are generally measurable and clearly describe the concepts and skills students

Report No. 01-15 October 2001

should learn. However, the glossaries in each subject area appear incomplete and benchmarks are written too broadly in some subject areas. Revisions are needed in each of the standards to improve clarity.

In general, content standards for language arts, mathematics, science, and social studies cover significant concepts and skills. However, all of the subject areas would benefit from the inclusion of skills and concepts found in highly regarded state and national documents. Overall, the documents reflect an appropriate level of rigor, although issues concerning specificity of language in some of the subject areas make the level of rigor difficult to determine.

## Recommendations and Response

We recommended that the DOE make a number of changes to the content standards to improve their coherence, clarity and comprehensiveness. Recommendations for improving the content standards include removing two strands from the language arts content standards and revising a number of mathematics and science benchmarks to establish a common level of specificity.

We recommended that the clarity of the language arts, mathematics, science, and social studies contents standards be improved through the use of expanded and more comprehensive glossaries. Broadly stated language arts and social studies benchmarks also should be revised. The language arts contents standards can also be improved by removing standards that resemble general curriculum goals and statements about student dispositions.

With respect to the comprehensiveness of the standards, we recommended that the language arts benchmarks be made more specific; the mathematics standards be revised to include content related to problem-solving skills and strategies; and the science contents standards be expanded to include several additional important concepts and skills. The social studies contents standards should be improved by: including missing topics and benchmarks, clarifying expectations regarding student knowledge and skills, and establishing clearer distinctions on what students should have learned at different grade clusters.

The DOE stated that it is in agreement with the recommendations regarding the content standards and benchmarks, and reported that a comprehensive review is currently underway as part of a legislatively mandated review of the standards. It also concurs that there is a need for additional work to ensure that the content and performance standards clearly define what is expected of students at each stage of their education. The department also reported on its efforts to develop K-12 grade level objectives aligned to the content standards and benchmarks.

Marion M. Higa State Auditor State of Hawaii