

Evaluation Instrument Assessment

The Cruisers Program:

Part I--Qualitative Assessment

Submitted to:
The Automotive Safety Research Institute

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Introduction

The overall objective of the Cruisers Program is to stop youth deaths and injuries on highways by instructing youth on the skills necessary to maintain a “lifestyle of safety and health”. The Cruisers Program is a curriculum for Pre-K through Grade 12, which is designed to be taught in a variety of educational settings including: health education, character education, and life skills courses¹. The specific goals of the Cruisers Program are to provide participants opportunities to develop the following skills:

- Respect for self and others
- Communication
- Responsibility
- Self-awareness
- Assessing consequences
- Decision making and problem solving

This report examines the current instruments used to assess the traditional Cruisers program and the expanded Cruisers Plus program in three upstate South Carolina elementary schools. The participants in the two Cruiser programs are fourth grade students, their parents, and teachers at Clemson, Pickens, and Forest Acres Elementary schools.

The examination of both Cruisers programs includes an analysis of the Attitude Survey (Pretest) and the Unit One Pretest: Passenger Safety.

Assessment

Assessment in education is a process of collecting data used to evaluate a student or a system (class, school, program, etc). Educational assessment should focus on a students' attaining literacy in a content area (health and character education in this case), including the knowledge of related information. Just as important, is the students' ability to synthesize, apply and evaluate the knowledge gained under real-life situations and varied circumstances. The successful synthesis, application and evaluation of behavioral skill sets will likely be obtained through the use of ²:

- Critical thinking and applied problem solving;
- Exhibiting responsible behavior, productive citizenship;
- Self-directed learning
- Effective communication.

Principles of Student Assessment and Cruisers-- Qualitative Analysis

The examination of the Cruisers Program assessment is grounded on important principles of student evaluation that serve as a basis of our analysis of the program objectives. The following principles, we suggest, should be integrated into a redesign and selection of all student assessment in the Cruisers Program. The observations and analysis are indicators of validity (content, criterion-related, and construct). Only subsequent administrations of any revised assessment will yield indications of reliability (test-retest, alternate forms, and internal consistency). Therefore, based on an analysis and observations of both the pretest survey and unit I pretest, the assessment revisions include the following recommendations:

- I. The current assessment should be revised to evaluate student achievement with a variety of measures (projects, work samples, tasks, portfolios, and particularly more varied test items, etc).
The current tests (survey and unit) are limited in their item design and should therefore reflect

a wider variety of individual test items. The overall appearance (face validity) of the test could be improved and it may be re-constructed to appear similar to other tests the students are currently taking (PACT, Measures of Academic Progress—MAP³, etc.).

- A. The current assessment redesign should include clarification and defining of certain terms used in the tests. Students expressed confusion with particular terms like unlicensed, drink and drive, ATVs, courteously, multilane, pedestrian, protective clothing, and restrained.
 - B. The current assessment may require certain items to include a diagram to assist with content (item #23). Students expressed frustration and confusion with the lack of an adequate visual context to comprehend certain items.
 - C. Certain sections of the current assessment may require the use of a word bank or glossary. Students expressed more frustration and confusion with the lack of an adequate vocabulary context to comprehend certain items.
 - D. The current assessment fails to account and provide for all modalities of learning. As instruction must account for all modalities of learning, future assessment modifications should also provide for the four student learning characteristics:
 - Auditory
 - Visual
 - Tactile
 - Kinesthetic
2. The current assessment appears to be limited in its ability to examine the extent to which students have achieved all four underlying ideas of health and safety literacy (critical thinking and problem-solving skills; responsible, productive citizenship; self-directed learning; and

effective communication). These objectives are more likely to be accurately measured with the adoption of the recommendations.

3. The current assessment items are predominately knowledge based, when considering Bloom's Taxonomy, and are limited in their ability to assist students learning at higher levels of learning. Knowledge based items are often subject to simple memorization and frequently fail to assist students to synthesize, analyze, and evaluate the acquisition of new knowledge and skills.

- A. The current item content may be re-constructed to reflect all levels of Bloom's Taxonomy—knowledge, comprehension, application, analysis, synthesis, and evaluation. These categories may be thought of as degrees of difficulty when presenting test items and can be presented in a variety of fashions.

4. While the current curriculum has referenced the South Carolina Health and Safety Education Curriculum Standards, it should strategically align assessments with those standards. Furthermore, assessments will need to measure a greater preponderance of all the standards (standard B, listed below is referenced only once in the curriculum). Teachers at participating schools have expressed a need, given the demands on their time, for programs like Cruisers to provide more curriculum content that can be modified to fit their schedules while still meeting the increased demands of accountability. Teachers have further indicated that they “have had to modify Cruisers from an out-of-the-box approach.”

Future modifications of Cruisers can include more choices of assessments, while still addressing critical standards. The standards that should be cross referenced with assessment modifications and assessment choices include:

- A. Students will comprehend health promotion and disease prevention concepts.
 - B. Students will demonstrate the ability to access valid health information, products, and services.

- C. Students will demonstrate the ability to practice behaviors that enhance health and reduce risks.
- D. Students will analyze the influence of personal beliefs, culture, mass media, technology, and other factors on health.
- E. Students will demonstrate the ability to use interpersonal communication skills to enhance health.
- F. Students will demonstrate the ability to use goal-setting and decision-making skills to enhance health.
- G. Students will demonstrate the ability to advocate for personal, family, and community health.

In addition to continuing with curriculum standard alignment, modifications to the current assessment should include performance indicators that benchmark how students demonstrate their achievement with Cruisers. Performance indicators are more specific illustrations of the Cruisers material and ideas implied by the learning standards. Indicators state very specific skills that fifth, eighth, and twelfth-grade students, according to the South Carolina Department of Education², should know and be able to perform to demonstrate achievement of the standards. Since learning standards are broad statements, performance indicators on the test will show specific applications of the standards in more measurable terms and for specific content areas (traffic and pedestrian safety). These indicators are intended to help teachers focus on the essential knowledge and skills basic to the development of their students. The performance indicators will serve as the map for organizing the curriculum and aligning it with student assessment.

This modification is of particular importance since it will demonstrate the Cruisers capacity to be deployed on a state-wide (South Carolina) basis given that performance indicators are

built into the new design. Assessment criteria like performance indicators are strict requirements of No Child Left Behind (NCLB) which Cruisers would satisfy, given the modifications.

5. The current assessment may be limited in its ability to provide meaningful feedback (for individual students and improvement of instruction) in a timely manner. This is a vital consideration for teachers and students with the demands of increased accountability and the need to reduce the influence of gaps in achievement attributed to slow assessment response time. This phenomenon, referred to as the “turn around”, is how quickly instruction and assessment can be adapted and re-deployed.

The traditional paper and pencil test is being replaced in many schools and classrooms throughout the United States with more advanced assessments. Those assessments like MAP can be delivered and scored through computer networks. A rapid turn around provides a more efficient means of assessment delivery and feedback to students, teachers, administrators, and parents that will likely result in optimum performance of the program and improved student performance.

References

¹ Retrieved from--<http://www.clemson.edu/scg/youth/FYDcruisers.htm>

² South Carolina State Board of Education, Health and Safety Curriculum Standards, 2006

³ Northwest Evaluation Association, Lake Oswego, OR 97035