

Bayer Corporation
Best Practice in K-12 Science Education Compendium

Key Criteria*

In order for *all students*, regardless of age, gender, cultural or ethnic background, disabilities, aspirations, or inspiration and motivation in science, to achieve in science, they must have access to highly-skilled professional teachers, adequate classroom time dedicated to science learning and quality science learning materials.

Given that, to be considered for inclusion in Bayer Corporation's ***Best Practice in K-12 Science Education Compendium: Volume 2***, a program ***must meet*** the following four criteria:

1. Challenging Content/Curriculum

- ✓ An inquiry-based, experiential curriculum that is clearly defined and understood,
 - related to real-world applications
 - encourages critical thinking, problem solving and team working
 - goes beyond minimum competencies
 - reflects local, state and/or national standards

2. An Inquiry Learning Environment

- ✓ An environment where teachers and their students work together as active learners
 - teachers have access to and time allotted for professional development that hones their science knowledge and experiential teaching approach
 - necessary curriculum materials are supplied in full
 - students' diversity, individuality and uniqueness are recognized and respected

3. Defined Outcomes/Assessment

- ✓ Goals are clearly identified and success is measured against them
 - assessment tools are designed to measure outcomes
 - assessment provides
 - *both quantitative and qualitative information
 - *basis for research and continuous improvement of program

4. Sustained Commitment/Community Support

- ✓ Program has strong leadership and sufficient resources
 - continuity of program funding
 - school and/or school district support
 - community support, including parents and private industry

**NOTE: Criteria based on guidelines provided by Building Engineering and Science Talent (BEST) Commission, National Science Education Standards and National Science Resources Center.*