



eLibrary Science Supports STEM State Initiatives and Goals

Science, Technology, Engineering, and Mathematics (STEM) – The [National Governors Association](#) has been a leader in trying to encourage science and mathematics education and careers by launching STEM initiatives in a growing number of states. President Obama has launched a similar federal [STEM](#) initiative. America's future standard of living depends on our global economic competitiveness in science and math. STEM goals focus on increasing the number of science, math, and engineering graduates that are now in short supply in the United States.

Goal 1. Student Learning: Prepare all students with the science, engineering, and math skills needed to succeed in the 21st century technological economy, whether in postsecondary education or the workforce; and graduate students with the capability and motivation to become STEM professionals, educators, and leaders.

Goal 2. Teacher Quality: Recruit and retain teachers with majors or minors in STEM fields and increasing the content knowledge of current K-12 STEM teachers.

Goal 3. Engagement: Increase student engagement in STEM and their perception of its value to their lives.

eLibrary Science -- Unique content and tools provide *direct support* for STEM goals and the Science and Math standards of all states, while integrating critical thinking, problem solving, and depth of knowledge using, the scientific method.

1. **eLibrary Science Content** – Provides a wide variety of [science content](#), including **websites, multimedia, and interactives**, that meet the teaching and learning needs of **challenged, mainstream, and AP/IB/Honors** science students. Teachers can keep textbooks current by finding and printing articles, graphs, and visuals for student notebooks and class discussion.
2. **eLibrary Science BookCarts** – Provides a tool for teachers to **create custom inquiry-based learning activities** that support critical thinking and [differentiating instruction](#). Differentiation meets the needs of individual or small groups of student through varying learning resources by reading level, media type, and student interest.
3. **eLibrary Science Training & Professional Development** – [CEU eligible training](#) by [P21 certified training team](#) focuses on creating **custom learning activities** using the BookCart teacher tool. Inquiry-based learning activities are designed to integrate **critical thinking and problem solving**.
4. **eLibrary Science Report and Presentation Models** – These presentation models and rubric evaluation models provide science teachers with a variety of ways to differentiate student reports and presentations that include [mini-debates](#), [PowerPoint](#), Podcasts, and traditional [written reports](#). Each of these models integrates critical thinking strategies through [essential questions](#).
5. **eLibrary Science CourseCarts** – Editor-created collections of BookCart learning resources that correlate to major science textbooks table of contents and course syllabi for (a) [Biology](#) and (b) [Earth & Space Science](#). These CourseCarts effectively **update, expand, and enrich science textbooks** for these courses. Copy them freely and adapt them easily to jump start teacher and student use.
6. **eLibrary Science Activities** – [Teachable Moments](#) provides monthly learning activities for teachers to assign students as well an [archive of past activities](#). Each activity integrates critical thinking on a variety of issues that include knowledge of content being applied to real-world issues.
7. **eLibrary Science QuizCarts** – Teachers can create multiple choice [quizzes within a BookCart](#) to **pre-assess** student knowledge of the topic/issue. Quizzes are emailed back to the teacher with **automatic scoring** so that teachers **know more about the depth of knowledge of their students**.
8. **eLibrary Science and Math Standards Tools** – Provides links to all state [Science and Math Standards](#) and auto correlates eLibrary Science standards searches made by teachers to specific standards and benchmarks. Teachers use this tool in building BookCarts or printing articles, graphs, and other visuals to update, expand, and enrich textbooks by including these in student notebooks.