# CSET®

**California**
**Subject**
**Examinations for**
**Teachers®**

# TEST GUIDE

# PRELIMINARY EDUCATIONAL TECHNOLOGY SUBTEST II

## Subtest Description

This document contains the Preliminary Educational Technology subject matter requirements arranged according to the domains covered by Subtest II of CSET: Preliminary Educational Technology. In parentheses after each named domain is the domain code from the Preliminary Educational Technology subject matter requirements.

# Preliminary Educational Technology
## Subtest II: Teaching and Learning Applications of Computer-Based Technology

### Part I: Content Domains for Subject Matter Understanding and Skill in Preliminary Educational Technology

As computer-based technology becomes increasingly important in contemporary society, students and educators alike must become competent and confident in their ability to use computer-based technological tools. The foundational knowledge and skills needed to integrate computer-based technology effectively into the educational context are contained in the Standards of Quality and Effectiveness for Professional Teacher Preparation Programs (California Commission on Teacher Credentialing, 2001), Program Standard 9. Candidates demonstrate a basic understanding of computer operations and care, as well as an understanding of legal, ethical, privacy, security, and safety issues related to the use of computer-based technology in the classroom. Candidates demonstrate knowledge of the ways in which computer-based technology may enhance productivity. Finally, candidates demonstrate their knowledge of teaching and learning applications of computer-based technology to improve student academic achievement.

**TEACHING AND LEARNING APPLICATIONS OF COMPUTER-BASED TECHNOLOGY (SMR Domain 3)**

**0001 Using Current Best Practices and Research Findings on the Effective Use of Technology to Improve Teaching and Learning (SMR 3.1)**

    a. Demonstrate knowledge of how to analyze current research findings on effective uses of computer-based technology in teaching and learning.

    b. Demonstrate knowledge of how to design lessons based on the analysis of current best practices and research findings to improve student achievement.

    c. Demonstrate the ability to make data-driven decisions by using information gathered from multiple sources to guide instruction.

    d. Demonstrate knowledge of strategies for planning learning activities that include a variety of appropriate computer-based technology resources.

    e. Demonstrate knowledge of ways to develop and/or adapt lessons to utilize available technology resources (e.g., single vs. multiple computer instructional settings, static and mobile computer instructional settings).

    f. Demonstrate knowledge of strategies for managing computer-based technology activities along with other classroom activities.

g. Demonstrate the ability to plan learning activities that include appropriate information literacy skills.

h. Identify and use appropriate technologies for addressing a variety of student special needs and learning modalities.

i. Demonstrate an understanding of methods for assessing student learning activities that integrate computer-based technologies.

**0002  Understanding Criteria for Evaluating and Selecting Software and Electronic Learning Media (SMR 3.2)**

a. Demonstrate an understanding of established criteria for evaluating and selecting software and electronic learning media, including alignment with content standards; alignment with instructional strategy; appropriateness for students' reading and vocabulary levels; appropriateness for students' needs (e.g., differing learning modalities, special needs, language abilities); quality and quantity of useful information; relevance and clarity of objectives; logical development, organization, and flexibility; effectiveness of user interface; hardware and operating system requirements; district and school policy requirements; and the presence and effectiveness of built-in assessment tools.