

Prior to issuance of the Preliminary Credential - Level I
General Knowledge and Skills

G-1. Each candidate demonstrates knowledge of current basic computer hardware and software terminology.

G-2. Each candidate demonstrates competency in the operation and care of computer related hardware (e.g., cleaning input devices, avoiding proximity to magnets, proper startup and shut down sequences, scanning for viruses, and formatting storage media).

G-3. Each candidate implements basic troubleshooting techniques for computer systems and related peripheral devices (e.g., checking the connections, isolating the problem components, distinguishing between software and hardware problems) before accessing the appropriate avenue of technical support.

G-4. Each candidate demonstrates knowledge and understanding of the legal and ethical issues concerned with the use of computer-based technology.

G-5. Each candidate demonstrates knowledge and understanding of the appropriate use of computer-based technology in teaching and learning.

Specific Knowledge and Skills

S-1. Each candidate uses computer applications to manage records (e.g., gradebook, attendance, and assessment records).

S-2. Each candidate uses computers to communicate through printed media (e.g., newsletters incorporating graphics and charts, course descriptions, and student reports).

S-3. Each candidate interacts with others using e-mail.

S-4. Each candidate is familiar with a variety of computer-based collaborative tools (e.g., threaded discussion groups, newsgroups, list serves, online chat, and audio/video conferences).

S-5. Each candidate examines a variety of current educational digital media and uses established selection criteria to evaluate materials, for example, multimedia, Internet resources, telecommunications, computer-assisted instruction, and productivity and presentation tools. (See California Instructional Technology Software guidelines and evaluations).

S-6. Each candidate chooses software for its relevance, effectiveness, alignment with content standards, and value added to student learning.

S-7. Each candidate demonstrates competence in the use of electronic research tools (e.g., access the Internet to search for and retrieve information).

S-8. Each candidate demonstrates the ability to assess the authenticity, reliability, and bias of the data gathered.

S-9. Each candidate identifies student learning styles and determines appropriate technological resources to improve learning.

S-10. Each candidate considers the content to be taught and selects the best technological resources to support, manage, and enhance learning.

S-11. Each candidate demonstrates an ability to create and maintain effective learning environments using computer-based technology.

S-12. Each candidate analyzes best practices and research findings on the use of technology and designs lessons accordingly.

S-13. Each candidate demonstrates knowledge of copyright issues (e.g., distribution of copyrighted materials and proper citing of sources).

S-14. Each candidate demonstrates knowledge of privacy, security, and safety issues (e.g., appropriate use of chat rooms, confidentiality of records including graded student work, publishing names and pictures of minors, and Acceptable Use Policies).