

CREDENTIAL INFORMATION ALERT

DATE: October 1, 2002 NUMBER: 02-08

SUBJECT: Computer Subject Definitions for Designated Subjects Credentials

In October 1996, the Commission issued Credential Information Alert 96-12 pertaining to the definition of "Computer Applications" on Adult and Vocation Education Teaching Credentials. Needless to say the world of technology has changed considerably over the past six years. The Commission still receives questions about the type of experience necessary for the wide array of computer authorizations on the Adult and Vocation Education Teaching Credentials. Below the Commission staff has updated the definitions for computer authorizations on the designated subject credentials.

Computer Applications--Any data entry, update, query or report program that processes data for the user. Includes spreadsheets, word processors, database programs, etc. Experience must include at least one word-processing, spreadsheet, and database program, to be qualified for this subject.

Computer Programming--Must be able to develop program logic to solve a particular problem, write the program in a specific programming language (coding the program), compile the program machine language, and test the program.

Computer Software Operations--Experience working with instructions for the computer. The instruction must include *System Software* (programs used to control the computer and develop and run application programs. Includes operating systems, TP monitors, network operating systems and database managers [DBMS]), and *Application Software* (programs that process data for the user [inventory, payroll, spreadsheet, word processor, etc.]). Working knowledge of system software must be held to receive this subject area.

Information Processing--Same as data processing; processing information by machines.

Computer Systems Operation--Computer Systems are made up of the CPU, memory and related electronics (main cabinet), all the peripheral devices connected to it and its operating system. Computer systems fall into two broad divisions: clients (laptop, desktop and workstation) and servers (low-end servers, midrange servers and mainframes).

COMMISSION ON TEACHER CREDENTIALING

CERTIFICATION, ASSIGNMENT AND WAIVERS DIVISION

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Adult Subjects Only

Computer Technology--involves the practical application of computer knowledge; a manner of accomplishing a task using technical processes, methods, or knowledge: the specialized aspects of the computer field.

Adaptive Computer Technology--involves the practical application of computer knowledge; a manner of accomplishing a task using technical processes, methods, or knowledge, while adjusting to environmental or physical conditions.

Vocational Subjects Only

Information Systems Management--The discipline that analyzes information, from data processing, as an organizational resource. Evaluates the kinds of data/information an organization requires in order to function and progress effectively. Other titles are: Information Services, Management Information Systems, and Management Information Services.

Computer Assisted Manufacturing (aka Computer-Aided Manufacturing)--

Experience with the integration of design and manufacturing into a system under the direct control of digital computers. Using computers in computer-aided manufacturing operations, the automation of manufacturing systems and techniques.

Computer Maintenance and Repair--Experience maintaining and restoring computer equipment by replacing subassemblies.

Computer Electronics--Experience testing, repairing and modifying subassemblies, by replacing, installing or upgrading components, such as transistors, diodes, transformers, etc.

All of these require a minimum of 5 years experience/and or education and must meet recency requirements.

If you have further questions, please contact the Information Services Unit toll-free at (888) 921-2682 between 8 a.m. and 5 p.m., weekdays or by e-mail at credentials@ctc.ca.gov.