TITLE 6 PRIMARY AND SECONDARY EDUCATION

CHAPTER 64 SCHOOL PERSONNEL - COMPETENCIES FOR LICENSURE

PART 9 COMPETENCIES FOR ENTRY-LEVEL INFORMATION TECHNOLOGY COORDINATORS

6.64.9.1 ISSUING AGENCY: Public Education Department

[09-15-99; 6.64.9.1 NMAC - Rn, 6 NMAC 4.7.1.8.1, 10-31-01; A, 06-30-06]

6.64.9.2 SCOPE: Chapter 64, Part 9, governs the competencies that will be used by New Mexico institutions of higher education to establish a curriculum for persons seeking an endorsement in information technology coordinator to a New Mexico educator license.

[09-15-99; 6.64.9.2 NMAC - Rn, 6 NMAC 4.7.1.8.2, 10-31-01]

6.64.9.3 STATUTORY AUTHORITY: Sections 22-2-1, 22-2-2, 22-10-3, and 22-10-22, NMSA 1978. [09-15-99; 6.64.9.3 NMAC - Rn, 6 NMAC 4.7.1.8.3, 10-31-01]

6.64.9.4 DURATION: Permanent

[09-15-99; 6.64.9.4 NMAC - Rn, 6 NMAC 4.7.1.8.4, 10-31-01]

6.64.9.5 EFFECTIVE DATE: September 15, 1999. [09-15-99; 6.64.9.5 NMAC - Rn, 6 NMAC 4.7.1.8.5, 10-31-01]

6.64.9.6 OBJECTIVE: This rule is adopted by the public education department ("PED") for the purpose of establishing entry-level information technology competencies that are based on what beginning information technology coordinators must know and be able to do to provide effective information technology programs in New Mexico schools. The competencies were developed to ensure alignment with New Mexico's content standards and benchmarks for all content areas and with the national standards of educational technology as prepared by the international society for technology in education.

[09-15-99; 6.64.9.6 NMAC - Rn, 6 NMAC 4.7.1.8.6, 10-31-01; A, 06-30-06]

6.64.9.7 DEFINITIONS: [RESERVED]

- **6.64.9.8 CORE LICENSURE REQUIREMENTS:** Persons seeking an endorsement in information technology to a New Mexico educator license must complete the following core requirements.
 - A. hold a minimum of a baccalaureate degree from a regionally accredited college or university;
- B. have completed an approved educator preparation program that includes at least 14 weeks of supervised student teaching; and
- C. pass any PED required licensure examination. [09-15-99; 6.64.9.8 NMAC Rn, 6 NMAC 4.7.1.8.8, 10-31-01; A, 06-30-06]

6.64.9.9 COMPETENCIES FOR ENTRY-LEVEL INFORMATION TECHNOLOGY COORDINATORS:

- A. Foundations
- (1) Basic computer and technology operations and concepts: Candidates will use computer systems to: run software, access, generate, and manipulate data; and publish results. They will also evaluate performance of hardware and software components of computer systems and apply basic troubleshooting strategies as needed. The educator will:
- (a) operate a multimedia computer system with related peripheral devises to successfully install and use a variety of software packages;
- (b) use terminology related to technology appropriate to the teaching field in written and oral communication:
- (c) describe and implement basic troubleshooting techniques for multimedia computer systems with related peripheral devices;
 - (d) use imaging devices;
- (e) demonstrate knowledge of uses of computers and technology in business, industry, and society;

- (f) operate a variety of audio-visual devices.
- (2) Personal and professional use of technology: Candidates will apply tools for enhancing their own professional growth and productivity. They will use technology in communicating, collaborating, conducting research, and solving problems. In addition, they will plan and participate in activities that encourage lifelong learning and will promote equitable, ethical, and legal use of computer and technology resources. The educator will:
- (a) use productivity tools for word processing, database management, and spreadsheet applications;
 - (b) apply productivity tools for creating a multimedia presentation;
- (c) use computer -based technologies including telecommunications to access information and enhance personal and professional productivity;
- (d) use computers to support problem solving, data collection, information management, communications, presentations, and decision making;
- (e) demonstrate awareness of resources for adaptive assistive devices and software for students with special needs;
 - (f) demonstrate awareness of resources for culturally and linguistically diverse students;
- (g) demonstrate knowledge of equity, ethics, legal, and human issues concerning use of computers and technology;
- (h) demonstrate awareness of computer and related technology resources for facilitating lifelong learning and emerging roles of the learner and the educator;
- (i) demonstrate awareness of broadcast instruction, audio/video conferencing, and other distant learning applications.
- (3) Application of technology to support teaching and learning: Candidates will apply computers and related technologies to support teaching and learning in their grade level and subject areas. They will integrate a variety of software, applications, and learning tools in the teaching and learning process. Lessons developed must reflect effective grouping and assessment strategies for diverse populations. The educator will:
- (a) explore, evaluate, and use technology resources including applications, tools, educational software, and assorted documentation;
- (b) describe best practice and appropriate assessment as related to the use of technology resources in the curriculum;
- (c) design, implement, and assess learning activities that integrate technology for a variety of grouping strategies for diverse populations;
- (d) design learning activities that foster equitable, ethical, and legal use of technology by students;
- (e) practice responsible, ethical, and legal use of technology, information, and software resources.
- B. Research and theories: Candidates will identify and apply educational and technology-related research, the psychology of learning, and instructional design principles in guiding use of computers and technology in education.
- (1) Summarize knowledge of best practice and trends related to the use of technology to support teaching and learning.
- (2) Apply theories of learning, teaching, and instructional design and their relationship to the use of technology to support teaching and learning.
- (3) Identify human and equity issues concerning the use of computers and related technologies in education.
- C. Facilities and resource management: Candidates will be able to demonstrate knowledge of issues related to facilities and resources planning and management. Candidates will be able to:
- (1) facilitate and use budget planning and management procedures related to educational computing and technology facilities and resources;
- (2) plan, develop, implement, and evaluate strategies and procedures for resource acquisition and management of technology-based systems including hardware and software;
- (3) identify, describe, and analyze procedures related to basic trouble shooting, preventive maintenance, and procurement of system wide maintenance services;
- (4) describe and maintain current information involving facilities planning issues related to computers and related technologies;

- (5) demonstrate knowledge of issues related to design and development policies and procedures concerning staffing, scheduling, and security for managing technology in a variety of instructional and administrative settings;
 - (6) evaluate school and technology plans and recommend improvements of facilities;
 - (7) collaborate and build alliances and partnerships involving educational technology initiatives;
 - (8) use evaluation findings to recommend modifications in technology implementations.
- D. Operating systems: Candidates will be able to plan, install, customize, and configure the operating systems of computers and computer networks in school settings. Candidates will be able to:
 - (1) identify and describe operating systems associated with computing platforms;
 - (2) use and manipulate software to effectively manage communication networks;
- (3) evaluate, troubleshoot, and maintain operating systems in a variety of learning environments and administrative offices.
- E. Software/hardware design, selection, installation, and maintenance: Candidates will be able to identify and implement software/hardware solutions for a variety of learning environments and administrative environments. Candidates will be able to:
- (1) research and recommend purchasing strategies and procedures for administrative and instructional software and hardware;
 - (2) research and recommend technology maintenance agreements;
 - (3) provide technical evaluation criteria for software and hardware and identify reliable sources;
 - (4) install, maintain, inventory, and manage software;
 - (5) research and recommend ethical and legal procedures for maintaining software;
- (6) provide technical evaluation criteria for adaptive assistive hardware and software for special needs population;
- (7) facilitate instructional design principles to develop, implement, and test interactive multimedia instructional products using authoring environments.
- F. Information access and delivery: Candidates will be able to implement information access and delivery resources in a variety of learning environments. Candidates will be able to:
 - (1) demonstrate knowledge of information access and telecommunications tools to support learning;
 - (2) implement distance learning delivery systems;
 - (3) assist in professional development;
 - (4) install, configure, and maintain devices to store and retrieve information;
 - (5) describe issues related to selecting, installing, and maintaining communication networks;
 - (6) evaluate school and district technology plans and recommend improvements.
 - G. Professional development and technology leadership
 - (1) Candidates will demonstrate knowledge of issues and models related to staff development.
 - (a) Plan and design staff development that integrates national, state, and local standards and
- (b) Evaluate school and distirct technology plans and policies and recommend improvements to facilitate staff development.
 - (c) Describe and identify resources for staff development.
- (2) Candidates will be knowledgebale of supervisiory concepts and demonstrate skills as they relate to the use of technology-based systems in pre K-12 education.
- (a) Demonstrate knowledge of strategies for and issues related to managing the change process in schools using appropriate assessment principles and techniques.
- (b) Identify funding sources available at local, state, and/or national level and collaborate on development of grant proposals.
- (c) Use knowledge of technology to guide the decision making process that best benefits the consituents.

[09-15-99; 6.64.9.9 NMAC - Rn, 6 NMAC 4.7.1.8.9, 10-31-01; A, 06-30-06]

6.64.9.10 IMPLEMENTATION:

benchmarks.

A. Institutions of higher education that prepare teachers shall deliver the competencies in a PED approved endorsement program within a range of twenty-four (24) to thirty-six (36) semester hours of credit twelve (12) semester hours of which must be upper division credit. Or

- B. Persons seeking an endorsement in information technology but who have not completed the requirements in Subsection A of 6.64.9.10 NMAC may receive an endorsement by meeting one of the following provisions:
 - (1) a degree in instructional technologies or a related field; or
- (2) satisfactory demonstration of the competencies through an alternative performance assessment process established by the PED.

[09-15-99; 6.64.9.10 NMAC - Rn, 6 NMAC 4.7.1.8.10, 10-31-01; A, 06-30-06]

HISTORY OF 6.64.9 NMAC: [RESERVED]