

## Technology Competencies for All Candidates in Teacher Certification

### Gate 1

1. Turns on a computer and monitor, using both PC and Mac platforms.
2. Distinguishes between hard, floppy, zip, and CD-ROM drives
3. Launches an application from a hard, floppy, zip and CD-ROM drive
4. Initializes diskettes in preparation for using them to store information
5. Operates a mouse, pointer, and pad to direct the on-screen cursor
6. Adjusts monitor to maximize visual information
7. Re-boots the computer
8. Loads paper in a printer and fixes simple printer jams
9. Turns off the computer and monitor
10. Uses a word processing program to prepare class assignments, correspondences, and other written documents
11. Creates a new document
12. Edits a document
13. Saves document to designated hard drive or disk
14. Retrieves document from designated hard drive or disk
15. Prints a document
16. Uses available program functions to edit a document, e.g., spell checker, grammar checker, format options, etc.
17. Underlines, bolds, and italicizes print
18. Sets margin and line spacing.
19. Has an email account from the Computer Center or an outside Internet provider
20. Has completed the Information Resources tour from Buley Library

### Gate 2

21. Describe the characteristics and the types of computer programs.
22. Discriminate between technology as a tool and technology as a problem.
23. Define terms and concepts related to technology applications in education.
24. Identify major issues associated with the use of technology in education.
25. Access information from electronic data bases to support professional activities (e.g., ERIC, professional associations, etc.)
26. Use the computer as a learning resource by employing self-help software programs and information databases.
27. Develop and continue in all courses a resource file of information about technology in education.
28. Describe appropriate ethical standards (copyrights, licenses, netiquette, etc.)
29. Navigate around the Internet using at least two different Internet browsers to locate specific course materials
30. Describe the uses of technology to support effective instructional practices.
31. Create plans for arranging the physical environment of the classroom to facilitate the use of technology.
32. Describe techniques to monitor the effectiveness of computer technology being used by pupils in the classroom.
33. Create a plan for teaching pupils to use computers to enhance written composition and expository skills using word processing programs
34. Evaluate the appropriateness of computer software for all students, including those students with disabilities.
35. Uses email to complete class assignments
36. Uses at least two Internet search engines to locate research materials
37. Able to access course assignments from faculty web page.

38. List and describe types of software available for student assessment and individualized educational planning in the math and science areas
39. Describe computer-assisted scoring and test interpretation software to assist in the development of diagnostic reports
40. Describe the advantages and disadvantages of computerized objective banks and individualized educational plan generators.
41. Articulate and implement systematic procedures for teaching pupils to use computers to increase personal productivity, learning and independence.
42. Develops appropriate assignments in the use of computer generated teaching aids in Mathematics and Science.
43. Develop specific programs using computer software to meet the social, emotional, behavioral and instructional needs of all pupils.
51. Articulates and implements systematic procedures for teaching all pupils to use the Internet and e-mail to facilitate student learning.
52. Uses email to complete class assignments with peers
53. Uses presentation software (e.g., PowerPoint, Hyperstudio, etc.) to illustrate course outcomes
54. Identify major issues associated with the use of technology in education.
55. Describe techniques to monitor the effectiveness of computer technology being used by pupils.
56. Subscribe to a discussion group; send a message to that group
57. Read and summarize information about technology applications in education that appear in the professional literature and trade magazines.

### **Gate 3**

44. Evaluate specific software available for student assessment in the language arts and reading.
45. Articulates step-by-step procedures for teaching pupils to use computers to increase personal productivity, learning, and independence in the use of language arts
46. Demonstrate systematic procedures to teach someone to use computers using composition and communication skills, including keyboarding and alternative and assistive technology devices.
47. Describe techniques to monitor the effectiveness of computer technology being used by pupils in the classrooms.
48. Develop plans that include appropriate computer software to meet the particular academic and individual learning styles and needs in reading, written and oral expression, and overall language development
49. Develop specific lesson plans using computer software to meet the social, emotional, behavioral and instructional needs of pupils.
50. Evaluate the appropriateness of computer software for a student with special needs.
58. Outline a plan for teaching pupils to operate computer equipment, keyboarding and alternative and assistive technology devices to run appropriate software.
59. Uses technology to assess student work (spreadsheets, rubrics applied to presentations, electronic grade books, etc.)
60. Integrate technology in a plan for teaching pupils to use peripheral devices, such as printers and modems.
61. Use technology in lesson plans that include appropriate software to meet the particular academic and individual learning styles and needs in the following areas:
  - Mathematics
  - Reading
  - Written expression
  - Language
  - Social Studies
  - Science
62. Adds to their resource file additional information about using technology in education.

#### **Gate 4**

63. Develop one-page essay (in Seminar) describing best practices for using computers and related technology in education.
64. Identifies basic adaptive computer hardware, software and peripherals for use with students with physical disabilities
65. Uses principles in Assistive Technology to effectively plan to integrate technological applications with special needs students.
66. Uses computer technology and appropriate graphics design program to integrate technology into the teaching of visual and performing arts, health and physical education