
ILLINOIS CERTIFICATION TESTING SYSTEM

FIELD 161: LEARNING BEHAVIOR SPECIALIST II: TECHNOLOGY SPECIALIST

TEST FRAMEWORK

May 2002

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Foundations, Characteristics, and Assessment
Planning and Delivering Instructional Content and Managing the Learning Environment
Maintaining Effective Communication, Collaboration, and Professionalism

SUBAREA I—FOUNDATIONS, CHARACTERISTICS, AND ASSESSMENT

0001 Understand the effects of disabilities on the cognitive, physical, emotional, social, and communication development of individuals.

For example:

- Identify ways that learning disabilities, mental retardation, and emotional impairments affect students' development and learning.
- Identify ways that sensory and communicative disabilities affect students' development and learning.
- Identify ways that physical impairments and medical conditions affect students' development and learning.
- Describe the impact of technology and development on individuals with exceptional learning needs.

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0002 Understand the philosophical, historical, and legal foundations of special education.

For example:

- Demonstrate understanding of the history and philosophies that provide the basis for special education practice.
- Analyze issues and considerations related to the philosophy and goals for using technology in special education.
- Identify legislative mandates and governmental regulations related to students with disabilities and the implications of these mandates and regulations for the use of technology in special education.
- Recognize the implications of meeting diverse individual and social needs through assistive technology as it relates to special education.

0003 Understand the uses of technology in the assessment, diagnosis, and evaluation of individuals with disabilities.

For example:

- Identify and describe the use of technology in the needs assessment, diagnosis, and evaluation of individuals with disabilities.
- Demonstrate knowledge of the ways technology can be used to collect, analyze, summarize, and report student performance data to aid instructional decision making.
- Demonstrate knowledge of methods for screening and identifying functional limitations and needs, and for determining if a comprehensive assistive or instructional technology evaluation is required.
- Demonstrate knowledge of strategies for monitoring outcomes of technology-based interventions, and for reevaluating and adjusting the system as needed.
- Identify methods for facilitating individuals with disabilities in creating and prioritizing functional intervention goals regarding technology-based evaluation results.

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0004 Understand how various assessment strategies can be used to support the continuous development of all students.

For example:

- Identify effective strategies for working with team members to determine assistive and instructional technologies that can help individuals meet the demands placed upon them in their environments.
- Demonstrate knowledge of procedures for placement of devices and positioning of individuals to optimize the use of assistive or instructional technology.
- Identify appropriate methods for examining alternative solutions and trial periods with potential assistive or instructional technologies prior to making an implementation decision.
- Demonstrate knowledge that technology decisions are based on a continuum of options ranging from no technology to high technology.

**SUBAREA II—PLANNING AND DELIVERING INSTRUCTIONAL CONTENT AND
MANAGING THE LEARNING ENVIRONMENT**

0005 Understand how students differ in their approaches to learning and the uses of technology to meet the instructional needs of diverse learners.

For example:

- Identify characteristics of different learning styles of individuals and the demands of various learning environments.
- Apply criteria for selecting software and technology products that meet educational objectives and learning needs of individuals with disabilities in a variety of educational environments.
- Demonstrate general knowledge of the operation of instructional and assistive hardware, software, and peripherals.
- Demonstrate knowledge of options for designing, fabricating, and installing assistive technology materials and devices to meet the needs of individuals with disabilities.

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0006 Understand how technology can support instructional planning and design based on knowledge of the discipline, curriculum goals, students, and community.

For example:

- Recognize ways to integrate technology applications into the curriculum based on student needs.
- Demonstrate understanding of criteria for evaluating computer software and other technology materials for their potential application in special education.
- Identify strategies for providing training to individuals with disabilities according to their needs to operate instructional and assistive equipment and software.
- Identify strategies for providing technology support to students who are receiving instruction in general education classrooms.

0007 Understand methods for promoting the safe and effective use of technology for students with special needs.

For example:

- Demonstrate knowledge of the proper implementation of mechanical and electrical safety practices in the assembly and integration of technology to meet the needs of individuals with disabilities.
- Identify strategies for instructing others in the operation, maintenance, and warranties of technology and in trouble-shooting techniques that may be needed.
- Demonstrate understanding of the ergonomic principles that facilitate the optimal use of technology.
- Identify and describe methods for the organization, management, and security of technology.
- Identify methods for developing and implementing contingency plans in the event that assistive or instructional technology devices fail.

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0008 Understand strategies for acquiring and using technology to create effective and positive learning environments.

For example:

- Demonstrate knowledge of methods for developing clear specifications or plans necessary for technology acquisitions.
- Identify and describe criteria for evaluating the features of technology systems.
- Demonstrate general knowledge of funding sources and processes for the acquisition of assistive technology devices and services.
- Demonstrate knowledge of the national and state pre-kindergarten through 12th grade technology standards.

SUBAREA III—MAINTAINING EFFECTIVE COMMUNICATION, COLLABORATION, AND PROFESSIONALISM

0009 Understand effective written, verbal, and visual communication techniques.

For example:

- Demonstrate knowledge of the appropriate uses of technology-related terminology in written and oral communication.
- Recognize effective methods for writing proposals to obtain funds for technology hardware and software.
- Identify and describe methods for conducting in-service training in applications of technology in special education.
- Recognize effective uses of communication technologies to access information and resources.

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0010 Understand strategies that promote collaboration and supportive interaction among professionals, parents, paraprofessionals, and students.

For example:

- Identify strategies for collaboration among teachers, administrators, students, school service personnel, parents, and others in a culturally responsive program.
- Demonstrate knowledge of the process for referring individuals with disabilities to another professional regarding technology needs.
- Demonstrate knowledge of the process for referring team members and families to assistive and instructional technology resources.
- Demonstrate knowledge of strategies for collaborating with other team members in planning and implementing the use of assistive technology.

0011 Understand the profession of teaching, standards of professional conduct, and the importance of leadership to improve student learning and well-being.

For example:

- Demonstrate understanding of issues related to equity, ethics, legalities, and human rights pertaining to technology in special education.
- Demonstrate understanding of laws about duplication and distribution of software and other copyrighted technology materials.
- Identify and describe methods for maintaining ongoing professional development to acquire knowledge and skills about new advancements in technology.
- Identify and describe approaches to advocate for assistive or instructional technology at the levels of individual and system change.