# Pennsylvania Assistive Technology Consultant Competencies

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## Introduction

# **Assistive Technology Devices and Services**

The Pennsylvania Department of Education (PDE) and the Bureau of Special Education (BSE) view the capability to read, write, speak, listen, and otherwise participate in rigorous learning opportunities aligned to academic standards, as fundamental to achievement for all students. Students with disabilities may not be able to access curriculum, instruction and daily functional activities across their natural environments without the use of assistive technology (AT). The Individuals with Disabilities Education Act of 2004 (34 CFR Part 300) defines AT as both devices and services. An *AT device* is defined as any item, piece of equipment, or product system, whether acquired commercially off-the-shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities (34 CFR 300.5). *AT Services* refer to any service that directly assists a child with a disability in the selection, acquisition, or use of an AT device (34 CFR 300.6).

#### AT Technical Assistance

In Pennsylvania, training and consultation in AT is provided to local education agencies (LEAs) by AT consultants working through the Pennsylvania Training and Technical Assistance Network (PaTTAN) and intermediate unit technical support systems. AT consultants working in schools may enter the field of AT from a variety of training backgrounds, such as special education, speech/language pathology, occupational or physical therapy, visual impairment, or education of students with hearing loss. Most hold Pennsylvania instructional certification in one or more areas, and some are licensed or certified by national professional organizations. AT consultation is provided to multidisciplinary teams to assist in the selection, acquisition, and use of AT to meet individual needs of students. AT consultants also provide training to build the capacity of LEAs to provide AT services. Support from AT consultants who have and share this specialized expertise is a crucial component of services to students with disabilities in Pennsylvania schools.

# **Competencies for AT Consultants**

In an effort to guide effective practices in AT supports and to improve outcomes for students with disabilities, PDE, BSE, in collaboration with PaTTAN, have identified specific competencies in the area of AT for educational consultants serving public schools in Pennsylvania. Input from AT stakeholders in Pennsylvania and the guidance of national leaders in the field of AT directed the development of the *Pennsylvania Assistive Technology Consultant Competencies (AT Competencies)*. The Quality Indicators for Assistive Technology (QIAT), a set of over-arching guidelines for quality AT services, created and monitored by AT practitioners, were utilized throughout the process.

The AT Competencies, when employed collaboratively by LEA educators, administrators, and AT consultants, provide a framework for professional development and services. These voluntary AT

Competencies may serve as a guide for LEAs to develop and implement local AT supports and procedures. AT professionals may utilize the competencies to self-assess and increase their knowledge and skills in implementing AT supports and services. This document is not intended as a tool for evaluation, but as guidance for skill development and improvement. AT devices and services, for the purposes of this document, are considered appropriate when provided in a manner that complies with federal and state special education statutes and regulations, including those related to provision of a free appropriate public education (FAPE).

# **Areas of Competency**

AT Consultant Competencies have been identified in five distinct areas of practice, with necessary knowledge and skills delineated for the delivery of effective services by AT consultants:

- I. Legal Statutes, Regulations, and Policy
- II. AT Tools and Resources
- III. Assessment and Decision Making
- IV. Leadership, Consultation, and Professional Development
- V. Curriculum Integration and Implementation

# I. Legal Statutes, Regulations, and Policy

This area includes knowledge and skills relating to those statutes and regulations that provide LEAs with a framework for legally correct provision of AT devices and services.

**I A.** Knowledge of federal and state education requirements that impact the consideration and provision of AT in LEAs

- Assist stakeholders (e.g., families, educators, administrators) in interpretation of legal requirements pertaining to AT (i.e., IDEA, PA Chapters 14 and 711, Section 504 of the Rehabilitation Act, American with Disabilities Act, US copyright laws) and implications within educational contexts.
- 2. Assist LEAs in developing and aligning local procedures and policies to state and federal requirements pertaining to AT.
- Provide guidance to teams in provision of AT devices and services that support educational benefit to students with disabilities, in a manner that adheres to all applicable statutes and regulations.

# II. Assistive Technology Tools and Resources

This area encompasses knowledge and skills pertaining to the range of AT devices, software, and strategies that may be used to provide access for students with disabilities. The selection of tools and resources requires consideration of the needs of the student, the environments in which the student is learning, and the academic and functional tasks, in addition to knowledge of particular AT tools.

**II A**. Knowledge of characteristics of students with physical, intellectual, neurological, sensory, and other disabilities (inclusive of all disability categories served under IDEA)

#### **Skills:**

- Describe the effects that these disabilities may have on a student's ability to access and achieve in the general education curriculum and to develop functional skills and independence.
- 2. Describe how AT, including customized/specialized and off-the-shelf technologies, can improve, and/or maintain functional capabilities and provide access to materials and instruction.
- **II.B.** Knowledge of features and functions of AT devices, software, accommodations, and strategies to provide access to both academic and functional goals

- 1. Describe and demonstrate the functions and features of devices, software, accommodations and strategies for students who may need:
  - a. Augmentative/alternative communication (AAC) modes and systems
  - b. Adapted access to computers or other electronic learning tools (e.g., adapted or alternative mouse/keyboard, switch access)
  - c. Adapted access to auditory information (e.g., amplification or captioning systems)
  - d. Alternative tools and strategies for writing and expression (e.g., word prediction, text-to-speech output)
  - e. Access to standard instructional materials such as textbooks, in alternative format (e.g., braille, enlarged print, digital text-to-speech, auditory formats)
  - f. Access to modified and/or complementary curricular materials and activities in auditory, visual, and/or tactile formats, or using multimedia tools
  - g. Access to alternative, compensatory or complementary strategies and activities to scaffold learning (e.g., multimedia tools, computer simulations)
  - h. Devices or strategies to support memory, organization, and executive function

- i. Mounting or positioning of AT or other equipment for functional access
- j. Access to environmental controls
- 2. Describe and demonstrate the functions and accessibility features of instructional technologies provided by school and commercially available technology, including computer hardware and peripherals, software, mobile devices, and other consumer electronics that may be utilized to meet the access needs of students with disabilities.
- 3. Facilitate consideration of a range of AT solutions, including no-tech, low-tech, and high-tech options, when teaching about or supporting teams in selection and use of AT tools to effectively meet student needs.
- 4. Assist teams in the provision of accessible instructional materials (AIM) and use of technology to provide auditory, tactile, enlarged print and/or electronic access to curriculum for the learner who needs access in alternative formats.
- **II C.** Knowledge of the importance of matching AT features and supports to multiple factors related to the environments (school, home, and community) in which the student is expected to learn and function

- Collaboratively gather and analyze information about sensory, physical, social, and other
  factors in the student's learning environments, as they impact on the student's functional
  capabilities and current or prospective AT use.
- 2. Guide teams in consideration of environmental accommodations and modifications to promote improved access or function.
- 3. Assist teams in considering and planning for the implementation of AT devices, supports and services across school, home, workplace, and/or community environments.
- **II D.** Knowledge of how AT can be utilized in educational environments to provide access and increase opportunities for student participation, engagement, and learning

#### **Skills:**

Discuss and demonstrate a variety of technology tools for classroom use, providing options
for representation, action and expression, and engagement, promoting increased
opportunity for students using AT and "off-the-shelf" technology to access instruction and
content.

- 2. Discuss and demonstrate instructional accommodations, including allowable assessment accommodations, and AT options to increase access in academic tasks and learning activities, and to enable students with disabilities to demonstrate achievement.
- Demonstrate and facilitate methods of consistently providing meaningful opportunities for students who use AT to communicate and participate in instruction.

## **II E.** Knowledge of resources related to AT

#### **Skills:**

- 1. Identify, locate, and utilize AT resources and information from a variety of sources at local, state, and national levels (e.g., professional networking sites, organizations and agencies, product manufacturers, local instructional technology resources).
- 2. Suggest and/or obtain support in AT when additional expertise is needed, utilizing resources of Pennsylvania statewide and other AT professional learning networks.
- 3. Utilize training and other learning opportunities in AT to increase own and others' skills and knowledge.
- 4. Utilize and contribute to resources of Pennsylvania statewide AT professional learning networks.

# III. Assessment and Decision-Making

This area includes knowledge and skills related to the establishment and use of appropriate frameworks for consideration and selection of AT. The provision of AT devices and services should be an outcome of multi-disciplinary assessment and decision-making processes, both initial and ongoing, which should be guided by clearly defined local procedures.

**III A.** Knowledge of appropriate frameworks for consideration of AT in the context of multidisciplinary assessment and in all aspects of educational plan development

- Guide teams in systematic consideration process by addressing the need for AT devices and services that support the student's educational goals, access to curricular and extracurricular activities, and progress in the general education curriculum.
- Explain the relationship among functional performance, academic skills, and potential AT solutions.
- 3. Model appropriate AT consideration in assessment, outcomes, and implementation within the student's educational documentation.

## III B. Knowledge of collaborative team decision-making processes for AT assessment

#### **Skills:**

- 1. Articulate and model defined AT decision-making processes that can be consistently applied.
- Facilitate team discussions by framing relevant questions to foster decision-making for individual students based on the needs and abilities of the student, demands of the customary environment(s), educational goal(s), and participation in the general education curriculum.
- Advise teams in conducting meaningful assessment through trials of potential AT solutions, including identifying contexts, supports, and data collection strategies to assist team decision-making.
- 4. Assist teams in generating and documenting clear recommendations for AT devices, services, and supports that are based on assessment and ongoing data collection.
- **III C.** Knowledge of methods and strategies for gathering and analyzing information to guide the selection, acquisition, and use of AT devices, services, and supports

## **Skills:**

- 1. Describe and model the use of a variety of data collection tools and strategies in the context of team decision making.
- 2. Facilitate team analysis of assessment data results to determine effectiveness of the AT tool(s) and strategies for targeted tasks.
- 3. Support teams in ongoing use of data to monitor the student's performance and AT effectiveness.
- 4. Guide teams in reassessment of AT needs when changes result in the student's needs not being met with current devices, services, and/or supports.

# IV. Leadership, Consultation, and Professional Development

This area encompasses knowledge and skills related to the provision of effective training and technical assistance by AT consultants. The appropriate provision of AT devices and services requires that LEAs have access to capacity-building technical assistance opportunities, including effective team consultation and support, and high quality professional development.

**IV A.** Knowledge of state education agencies (SEA), LEA, and other agency structures, functions, and practices that affect the work of AT professionals in Pennsylvania schools

- Describe national, state, and local policies, procedural guidelines, and practices affecting AT, including those that impact assessment, acquisition, funding, budgeting, management, and implementation of AT.
- 2. Guide development and support implementation of LEA AT processes.
- 3. Collaborate with education personnel who can support AT at the local, regional, and state level.
- 4. Identify and utilize local, state, and national agencies, organizations, associations, centers, manufacturers, and distributors that are resources for AT devices and services.
- **IV B.** Knowledge of multi-disciplinary team membership and team members' potential roles and responsibilities regarding consideration, assessment, and implementation

#### Skills:

- 1. Assist teams with the integration of members' collective knowledge and skills, in order to share responsibilities for AT assessment, acquisition, and implementation.
- 2. Facilitate identification of the need for additional expertise or input, so that teams have the collective knowledge and skills to make informed AT decisions.
- 3. Guide LEAs and teams to develop and maintain a collaborative system of effective AT services that is defined, communicated, and consistently used throughout the organization.
- Support team decision-making by communicating information about AT, including appropriate AT resources, using nontechnical language.
- **IV C.** Knowledge of effective professional development models and training techniques for students' teams and professionals

- Demonstrate effective training practices, using research-based models for adult learning
  including multiple formats, which can be delivered at differentiated skill levels and
  customized to meet the identified needs of individuals, teams, and programs.
- 2. Incorporate the elements of effective AT professional development into training plans including audiences, purposes, activities, expected outcomes, and evaluation measures.
- 3. Present appropriate, research-based content within comprehensive AT professional development and training plans, including the selection, acquisition, and use of AT.
- 4. Align AT professional development and training with other local, state, and national professional development initiatives.

- 5. Utilize local, regional, and national resources for AT professional development and training.
- **IV D.** Knowledge of effective strategies in consultation, group process facilitation, and communication.

- 1. Model effective communication (i.e., listening, speaking, and writing) to targeted, diverse audiences.
- 2. Demonstrate culturally-competent consultation and collaboration skills for facilitating team decision making, including building relationships, networking, and building local capacity.
- 3. Effectively use a variety of interactive technology tools to enhance consultation services.
- **IV E.** Knowledge of current and emerging technology and educational initiatives, including relevant research, that have an impact on AT.

## **Skills:**

- 1. Participate in professional development activities such as networking groups, training, and membership in professional organizations.
- Utilize and share skills, knowledge, and experiences attained through professional development activities to support best practices in AT and improve AT consultation services.

# V. Curriculum Integration and Implementation

This area includes knowledge and skills related to providing students with disabilities access to the general education curriculum and the supports to meet individual goals. LEA teams should identify and reduce obstacles to curricular access with ongoing collaborative planning, including plans for supporting and monitoring AT implementation.

**V A.** Knowledge of the relationship of AT use to educational standards and initiatives that promote student achievement (e.g., Pennsylvania Academic Standards, Least Restrictive Environment [LRE], Response to Instruction and Intervention [RtII], Secondary Transition)

- 1. Explain, model and guide the use of AT to support students within the context of educational standards and initiatives.
- 2. Explain the guidelines for appropriate use and documentation of AT as accommodations for state assessments.

**V B.** Knowledge of the integration of AT into the educational program to provide access to the curriculum for a student with a disability

## **Skills:**

- Assist teams in identifying challenges and obstacles regarding student participation, learning, and achievement within the curriculum and natural environments, including obstacles to AT use.
- 2. Guide teams in implementing AT solutions that support achievement of goals and progress in the general curriculum within the natural environments.
- 3. Facilitate the inclusion of AT in the educational plan (e.g., IFSP/IEP, 504 agreement) written in language that describes how AT contributes to achievement of measurable and observable outcomes.
- **V C.** Knowledge of strategies to support the continuity of AT implementation during students' transitions (e.g., preschool to school age, classroom to classroom, school to community/post-secondary/vocational environments)

## **Skills:**

- Assist teams in the development of plans for transitions that address transfer or acquisition
  and implementation of AT devices and services, as well as coordination with supporting and
  receiving entities, potential training needs and funding.
- 2. Promote the participation of the student in planning for transitions at a level appropriate to age and ability.

# **V D.** Knowledge of the relationship of AT and Universal Design for Learning (UDL) principles

- Describe and demonstrate UDL principles of multiple means of representation, action and expression, and engagement.
- Model UDL through the use of flexible strategies to maximize learning opportunities for all students.
- 3. Assist teams to integrate both unique (AT) and universal (UDL) solutions to maximize access and participation in learning environments.
- VE. Knowledge of strategies to support effective implementation of AT

- 1. Facilitate the team's development of AT implementation plans that include:
  - a. Timelines
  - b. AT use across environments
  - c. Data collection and monitoring of progress
  - d. Contingency plan for device repair and maintenance
  - e. Team roles and responsibilities
  - f. Supports and training for team members
- 2. Communicate effective practices in the integration of AT devices and services into the curriculum and daily activities of the student across environments.
- 3. Assist teams in identifying and teaching operational, functional, strategic and social skills necessary for independent AT use.
- 4. Facilitate ongoing team decision-making and adjustments to AT implementation based on data collection and analysis.
- 5. Collaborate with stakeholders to identify AT resources, tools, supports, and strategies at the local, regional, state, and national level that support AT implementation.

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