

Writing Assistive Technology Into the IEP

Overview of Assistive Technology and the IEP

The IEP is a collaboratively created document designed to help guide the delivery of special education supports and services for the student with a disability. Section 5 outlined the requirement to consider AT for every student who has an IEP and documentation of that consideration. This section will discuss further documentation of AT devices and services within other sections of the IEP.

The IEP must include a description of AT devices or services, or both, to be provided, if such devices and/or services are required as part of the special education program. The IDEA requirements for school districts state:

Assistive Technology

- A. Each public agency shall ensure that assistive devices or assistive technology services or both ... are made available to a student with a disability if required as part of the child's
 - 1. Special education,
 - 2. Related services, or
 - 3. Supplementary aids and services.

- B. On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in a setting is required if the child's IEP team determines that the child needs access to those devices in order to receive FAPE.

(IDEA, 2004, 300.105)

Quality Indicators for Including Assistive Technology in the IEP

The Individuals with Disabilities Education Improvement Act (IDEA) requires that the IEP team consider AT needs in the development of every Individualized Education Program (IEP). Once the IEP team has reviewed assessment results and determined that AT is needed for provision of a free, appropriate, public education (FAPE), it is important that the IEP document reflects the team's determination in as clear a fashion as possible. The Quality Indicators for AT in the IEP help the team describe the role of AT in the child's educational program.

1. The education agency has guidelines for documenting assistive technology needs in the IEP and requires their consistent application.

Intent: The education agency provides guidance to IEP teams about how to effectively document assistive technology needs, devices, and services as a part of specially designed instruction, related services, or supplementary aids and services

2. All services that the IEP team determines are needed to support the selection, acquisition, and use of assistive technology devices are designated in the IEP.

Intent: The provision of assistive technology services is critical to the effective use of assistive technology devices. It is important that the IEP describes the assistive technology services that are needed for student success. Such services may include evaluation, customization or maintenance of devices, coordination of services, and training for the student and family and professionals, among others.

3. The IEP illustrates that assistive technology is a tool to support achievement of goals and progress in the general curriculum by establishing a clear relationship between student needs, assistive technology devices and services, and the student's goals and objectives.

Intent: Most goals are developed before decisions about assistive technology are made. However, this does not preclude the development of additional goals, especially those related specifically to the appropriate use of assistive technology.

4. IEP content regarding assistive technology use is written in language that describes how assistive technology contributes to achievement of measurable and observable outcomes.

Intent: Content which describes measurable and observable outcomes for assistive technology use enables the IEP team to review the student's progress and determine whether the assistive technology has had the expected impact on student participation and achievement.

5. Assistive technology is included in the IEP in a manner that provides a clear and complete description of the devices and services to be provided and used to address student needs and achieve expected results.

Intent: IEPs are written so that participants in the IEP meeting and others who use the information to implement the student's program understand what technology is to be available, how it is to be used, and under what circumstances. "Jargon" should be avoided.

COMMON ERRORS

1. IEP teams do not know how to include AT in IEPs.
2. IEPs including AT use a "formula" approach to documentation. All IEPs are developed in similar fashion and the unique needs of the child are not addressed.
3. AT is included in the IEP, but the relationship to goals and objectives is unclear.
4. AT devices are included in the IEP, but no AT services support the use.
5. AT expected results are not measurable or observable.

(The QIAT Consortium, 2012, pp. 5-6)

There is no clear-cut criterion for where AT devices and services should be documented in the IEP. Necessary AT may be included in several sections of the IEP, as noted in the following list:

- Special Instructional Factors
- Child's Profile
- Present Level of Academic Achievement and Functional Performance
- Postsecondary Transition Services

- Measurable Annual Goals
- Measurable Objectives
- Description/s of Specially Designed Services
- Statewide and District Testing
- Children With Visual Impairments

Considering the purpose of the AT can help in selecting an appropriate area. Questions that a team might consider when documenting AT in the IEP include the following:

- Is the AT to be used as an allowable accommodation for state and district testing?
- Does the student need AT when transported to and from school?
- Is the student visually impaired?
- Do others need to be trained in order for the AT to be successful for the student?
- Is the AT needed for employment, independent living, or postsecondary activities?

The AT may be included and referenced in more than one section of the student's IEP. This might occur if a student uses AT across a wide range of activities and environments such as is often the case with AAC devices as well as many other types of AT.

Following are descriptions and examples of the various sections of the IEP where AT might be included.

Special Instructional Factors

Within the IEP document, provision is made for special factors, which includes consideration of the student's need for AT. This is the statement that is listed on the Special Instructional Factors page of the IEP:

Does the child need assistive technology devices and/or services?

YES NO

This simple check system does not offer any suggested means for the IEP team to reach a conclusion or documentation that the student's AT needs have been considered. The [OCALI Consideration for Assistive Technology Checklist](#) outlines a process that IEP teams should follow in making consideration for AT. See Section 5 for more information about the AT consideration process.

Child's Profile

This section is a place to summarize the child's strengths and needs. As such, it typically includes relevant medical history, safety information, interests, background information, present levels of academic achievement and functional performance that would not be included in the goals to be addressed, and, as appropriate, performance on state and district assessments. This is also the area of the IEP where the parents' educational concerns are documented. Additionally, for students of preschool age, a summary of the child's developmental strengths and needs in all relevant areas should be documented. AT documentation in this area might include information about prior AT assessments with a summary of results, past use of AT and the outcomes, and descriptions of current AT systems and how they impact the child's progress in the general education curriculum.

Example of AT in the Child's Profile:

K.D. has a functional verbal vocabulary consisting of intelligible single words that she uses effectively to convey her wants and needs, label, protest, and greet. She uses an augmentative communication system (to make comments, ask questions, and talk about things that are not in her environment). The augmentative communication system characteristics include direct selection, dynamic display with pictures and words using 64-84 locations, and generating single words to full sentences. K.D. is using a portable AAC device in a variety of settings. This speech-output system positively impacts her progress in the general education curriculum because it enables her to contribute to class discussions. This, in turn, allows for adequate assessment of what she knows.

Postsecondary Transition and Transition Services

At age 14, in Ohio, students enter the transition process. At that time, they complete one or more age-appropriate transition assessments. The data from these assessment/s will guide the development of a statement of transition service that focuses on the student's course of study. A summary of the results of the transition assessments is included in the IEP. At the age of 16, a postsecondary transition plan is developed, which includes measurable postsecondary goals in the areas of education and training, employment, and independent living.

If AT is used by the student or it is suspected that AT could assist the student in postsecondary, employment, or independent living activities, it should be incorporated into the transition plan. The need for AT may be documented directly in the sections goals, services, and activities sections of the transition plan.

Present Level of Academic Achievement and Functional Performance

This section should include current baseline data showing skill gap or need. These skill gaps or needs should emerge later as targets for goals and objectives. If the IEP was well written prior to consideration of AT, the information within the Present Level of Academic Achievement and Functional Performance should provide a clear description of the student's abilities. If not, the data that have been collected during the AT assessment process should be included. Modifications, accommodations, or AT devices and services that are currently implemented should also be included, along with a statement indicating why these are effective or indicating if further needs should be addressed.

The following are examples of three possible outcomes of AT consideration and implementation that may be represented in the Present Levels of Academic Achievement and Functional Performance section of the IEP.

1. Current AT No Longer Effective for the Student

The following are examples of ways that AT may be written in the Present Level of Academic Achievement and Functional Performance:

Example indicating need to reassess AT supports for written communication:

Jon is in the fourth grade; his handwriting is illegible and slow. He handwrites at a speed of 3 WPM, which is much slower than that of his fifth-grade peers. He has difficulty meeting the written production demands required this school year. He is able to type using a portable word processor at 10 WPM, and while this has helped to ensure that his typing speed is much closer to the speed of grade-level peers, he may benefit from the additional use of keystroke reduction such as abbreviation/expansion and word prediction to further increase his typing speed. Jon needs further assessment of his AT needs to determine if additional AT supports can further increase his written production speed to meet better meet the current academic writing demands.

Example indicating need to reassess AT supports for reading difficulty:

Jill is a high school student in the 10th grade with a specific learning disability in reading. She comprehends text that is presented auditorily at grade level and answers grade-appropriate questions about the text. When attempting to read independently, however, she has a great deal of difficulty decoding words, which interrupts her fluency and interferes with her ability to comprehend the meaning of text. She currently reads at a third-grade level. The use of text-to-speech software on the computer, digitally formatted materials created by her teachers, and the provision of Accessible Instructional Materials (AIM) has improved Jill's ability to independently read and comprehend some grade-level text. Jill also participates in a vocational exploration class provided by her high school. When participating in these school activities outside of the school environment, Jill is occasionally confronted with challenges in accessing text-based materials, Jill needs further AT assessment to determine if there are mobile solutions to support her reading needs while out in the community class.

Example indicating the need to reassess the augmentative communication device:

Brent activates a static display, voice-output device using a head switch at his left temple to scan and convey messages about his basic needs, for social interactions, and to respond to classroom activities. His device has levels but requires that an adult change the content of the vocabulary to match the activity. Brent is in the second grade and currently successfully uses a vocabulary of approximately 300 words. He is just beginning to attempt to combine words to create short phrases and also appears to understand vocabulary classification. Brent needs further AT assessment to determine if he can more independently access his full vocabulary to express his wants and needs without the assistance of an adult to change his vocabulary overlays on his device.

2. Student Needs Assessment of AT Needs

As mentioned, the Present Level of Academic Achievement and Functional Performance is the documented statement of present abilities that leads to the identification of needs to be addressed in the goals and objectives of the IEP. If during the AT consideration process the team recommends extended assessment, a statement to that effect may be included in the Present Level of Academic Achievement and Functional Performance.

Example indicating need for extended assessment:

Nick has a weak grasp due to a progressive neuromotor condition, and as a result he has difficulty handwriting responses beyond a few sentences. Due to his fine-motor difficulties, Nick dictates extended paragraph forms to his resource teacher to complete his assignments. A more independent mode of writing is needed for Nick,

and further assessment is necessary to determine accommodations that will enable him to complete paragraphs without assistance.

Example indicating need to explore assistive technologies for self-help skills:

Kyle enjoys interactions with peers during lunch in the school cafeteria. Due to his motor difficulties, a teaching assistant feeds him. Further assessment and exploration of adapted eating utensils may facilitate more independence while eating.

Example indicating need to explore augmentative communication needs:

Susie, a kindergartener, responds to yes/no questions with appropriate headshakes. She indicates her wants and needs by pointing and gesturing in her environment. Susie needs an AT assessment to determine if she could benefit from an augmentative communication system to increase her ability to communicate with others.

3. Student's Current AT Is Effective

In some instances, the IEP team will determine that the present AT tools and materials are appropriate and that no further assessment is needed at this time. The Present Level of Academic and Functional Performance should indicate this conclusion and include in the Special Factors on the IEP AT devices and systems that have been discussed and determined as needed and effective for the student. This type of accommodation may also be listed in the Specially Designed Services section of the IEP. More information about this section may be found in the following.

Example indicating adequate consideration and inclusion of AT for writing difficulties:

Using a pencil grip, Julie is able to perform all written assignments in her first grade classroom.

Example indicating adequate consideration and inclusion of AT for auditory difficulties:

Angie has a severe hearing loss in both ears for which she wears hearing aids. She is able to adequately hear and understand general classroom lecture and discussion when wearing an FM system.

Example indicating adequate consideration and inclusion of AT for visual difficulties:

Bill is able to read eighth-grade-level text material when enlarged to 1 inch using a closed-captioned TV (CCTV).

Measurable Annual Goals

There is a direct correlation between the student's needs as identified in the data and required AT supports and services. The goals and objectives are defined by the needs identified in the Present Level of Academic Achievement and Functional Performance Goals; objectives should include:

- the tasks or skills the student is expected to achieve during the IEP period
- the specially designed instruction for the student
- an observable measure of proficiency

The objectives are the measurable steps that the student will perform to reach the goal. Remember, goals and objectives are measured skills that the student will achieve. If a goal/objective is stated in terms of what the paraprofessional or teacher will do, it is not written as a student performance task. (The assistance required by adults is a "service.")

1. Example of an objective that is NOT student performance:

Objective: The teaching assistant will check the operation of the FM system daily.

The following are examples of AT and modifications that may be included in the goals and objectives of the IEP.

2. Example for physical access:

Goal: Using his power wheelchair, Tom will independently maneuver around the school and classroom environments to get to classes within the allotted class change time of 5 minutes, being late no more than 5 times per week, by the end of second semester.

Objective: Using his power wheelchair and with verbal prompts as needed, Tom will maneuver around the school and classroom environments during class change and arrive at the next class within an 8-minute timeframe, by the end of the first semester.

3. Example for reading:

Goal: Using Braille text, Jeannie will independently read subject-matter assignments and answer 10 questions related the text content with 80% accuracy, by May 30.

Objective: By December 31, Jeannie will answer 3 out of 5 questions accurately as related to the text content with the use of Braille text. She may reference the text as needed to answer the questions.

4. Example for augmentative communication:

Goal: Sarah will produce 3-5 word sentences or phrases using her dynamic display communication device to participate in a three-turn conversational exchange at least once a day, 4 out of 5 days per week, by the end of the second nine weeks.

Objective: Using her dynamic display communication device, Sarah will initiate at least one social greeting with a classmate daily, by the end of the first nine weeks.

5. Example for reading goal:

Goal: Melissa will turn the pages of an electronic book using her switch and switch interface device. She will listen to the audio text on each page before advancing to the next page, in 8 out of 10 pages, by end of the school year.

Objective: With an audio "turn the page" prompt, Melissa will turn the pages of an electronic book using a switch and switch interface device and listen to the audio text on each page before advancing to the next page, in 4 out of 10 pages, by the end of the third nine weeks.

6. Example of an objective for written communication:

Goal: Jon will use an electronic graphic organizer to write an opening topic, a closing, and three supporting detail sentences to construct a five-sentence paragraph, by the end of the first semester.

Objective: Given five sentences in an electronic graphic organizer, Jon will identify and arrange the opening topic, the closing, and three supporting detail sentences to create a paragraph, by the end of the first six weeks of school.

7. Example of writing/spelling objective:

Goal: Carol will compose and submit a final product of a persuasive essay after completing evidence of all editing steps of the writing process and using a talking word processor with word prediction and spelling and

grammar check, with fewer than 10 errors in grammar and spelling, by the end of the school year.

Objective: Using a talking word processor with word prediction software, Carol will select a grammatically accurate word after identifying and typing the initial letter of the word to construct a paragraph with fewer than two errors, 4 out of 5 trials, by the end of December.

Description(s) of Specially Designed Services

The Description of Specially Designed Services section of the IEP includes any specially designed instruction, related services, AT, or accommodations that are necessary for the student to be able to achieve the goals and objectives set forth. While AT may be written into the goals and objectives of the IEP, it is often appropriate to include the AT in the Specially Designed Services section.

If the student requires a specific piece of technology or software, features of the technology or software should be described in the Description of Specially Designed Services section. The amount of time and frequency of related service providers to address the goal should also be included. Additionally, any training for the student and others for effective use of the device should be listed.

Following are examples of how AT may be documented in several areas of the Description of Specially Designed Services.

Type of Service	Goal Addressed
<p>Assistive Technology: Dynamic display communication device with core and fringe vocabulary pages</p> <p>Related Services: Direct speech and language therapy in a small-group setting to provide modeling, prompting, expansion, shaping, and feedback for language skills using her augmentative communication system</p> <p>Support for School Personnel: Train teacher, parent, and paraprofessional to program device with relevant vocabulary</p>	<p>Sarah will use her dynamic display communication device to participate in a three-turn conversational exchange at least once a day, 4 out of 5 days per week, by the end of the second nine weeks.</p>
<p>Assistive Technology: Graphic organizer, electronic</p> <p>Accommodations: Graphic organizer provided for Jon when he needs to write a paragraph</p>	<p>Jon will use a graphic organizer to write an opening topic, a closing, and three supporting detail sentences to construct a five-sentence paragraph, by the end of the first semester.</p>

Transportation as a Related Service

The Transportation section of the IEP addresses the needs the student might have related to special transportation due to a disability. Assistive technologies might be addressed in this area if the child has needs for a wheelchair lift, harnessing system, securement system, or other specialized AT devices that could impact safety and comfort during transportation. Some of these needs can be documented as a part of a check box acknowledgment found in the section; others might be written in as a description of needs. The following are excerpts from the Ohio IEP form (Ohio Required and Optional Forms).

8 TRANSPORTATION AS A RELATED SERVICE

Does the child have needs related to their identified disability that require special transportation? YES NO

Does the child need accommodations or modifications for transportation? YES NO

If yes, check any transportation accommodations/modifications that are needed.

The bus driver will be notified of the child's behavioral and/or medical concerns

Specially Adapted Vehicle Wheelchair lift Bus Aide

Securement Systems Car Seat Harness

Other Specify: _____

Does the child need transportation to and from provider services? YES NO

Check when complete

Nonacademic and Extracurricular Activities

The Nonacademic and Extracurricular Activities section of the IEP addresses supplementary aids and services necessary for a student to participate in athletics, clubs, special interest groups, recreational activities, counseling, health services, and employment services. AT may be included in this area if it is needed to access any of these activities and should be included as a written description.

9 NONACADEMIC AND EXTRACURRICULAR ACTIVITIES

In what ways will the child have the opportunity to participate in nonacademic/extracurricular activities with his/her nondisabled peers?

Describe

If the child will not participate in non-academic/extracurricular activities, explain.

Check when complete

State- and Districtwide Testing

The IEP team must determine how a child with a disability will participate in state- and districtwide assessments. Some students participate in general assessments with allowable accommodations while others

participate in the alternate assessment.

IEP teams should use a decision-making framework to determine eligibility for the alternate assessment. The alternate assessment is designed to measure the knowledge and skills of students with significant cognitive disabilities based on modified achievement standards.

A child should be tested at the age-appropriate grade level. Students taking the assessments with allowable accommodations for statewide and district wide testing may use AT devices as outlined in the accommodations manual. While students may use a wide range of accommodations during routine instruction and assessment, not all of those accommodations may be used for statewide and district wide testing. The State Education Agency (SEA) outlines allowable accommodations.

12 STATEWIDE AND DISTRICT WIDE TESTING

For each subject tested in the child's grade, choose the method of assessment below. If "With Accommodations" is chosen for any subject, provide a description of the Accommodations for each subject in the right column. Alternate Assessment, if chosen, must apply to all tests taken.

- Will the child participate in classroom, district wide and state wide assessments with accommodations? YES NO
- Is the child to be excused from the consequences of not passing the Ohio Graduation Test (OGT)? YES NO
- Met Testing Participation Requirement? YES NO
- Is the child participating in alternate assessment? YES NO
- Check when complete

Needed allowable accommodation per subject area should be documented in the student's IEP in the detail of accommodations in the State- and Districtwide Testing section. In addition, students should practice using their allowable accommodations as they complete formative and summative assessments in their classes.

Will the child participate in classroom, district wide and state wide assessments with accommodations? YES NO

AREA	GRADE	CHILDREN WILL BE TESTED:	DETAIL OF ACCOMMODATIONS
READING		<input type="checkbox"/> WITH ACCOMMODATIONS <input type="checkbox"/> MODIFIED ASSESSMENT	-
WRITING		<input type="checkbox"/> WITH ACCOMMODATIONS <input type="checkbox"/> MODIFIED ASSESSMENT	-
MATH		<input type="checkbox"/> WITH ACCOMMODATIONS <input type="checkbox"/> MODIFIED ASSESSMENT	-
SCIENCE		<input type="checkbox"/> WITH ACCOMMODATIONS <input type="checkbox"/> MODIFIED ASSESSMENT	-
SOCIAL STUDIES		<input type="checkbox"/> WITH ACCOMMODATIONS <input type="checkbox"/> MODIFIED ASSESSMENT	-

Please see the Ohio allowable accommodations list at the following link in The Accommodation Manual- Selection, Use and Evaluation of Accommodations That Support Instruction and Assessment of Children with Disabilities.

Children With Visual Impairments

The Children With Visual Impairments section is only completed if the student has an eligible visual impairment as defined by the IDEA. This section includes a checklist of AT devices and services that might be needed for a student with visual impairments, including appropriate instructional media such as Braille, large print, and tape/auditory formats. Additionally, AT devices needed to access these alternate formats of text-based materials should be documented in other sections of the IEP as appropriate.

15 CHILDREN WITH VISUAL IMPAIRMENTS

This form shall be completed during the IEP meeting for each child who has a visual impairment, as defined by Ohio's Amended Substitute House Bill Number 164, which requires a statement specifying one or more reading and writing media in which instruction is appropriate to meet the child's educational needs. **A copy of this completed form is part of, and must be attached to, the child's IEP form.**

1. Annual assessment of reading and writing skills was conducted with each child in all media considered appropriate. The results of these assessments are included in "Present Levels of Academic Achievement and Functional Performance" on the IEP and indicate both strengths and weaknesses. YES NO
2. The IEP contains a requirement for instruction in Braille reading and writing when that medium is appropriate and is indicated by adding "Standard English Braille" as a special service in Section 7. YES NO
3. Instruction in Braille reading and writing was carefully considered for this child and pertinent literature describing the educational benefits of instruction in Braille reading and writing was reviewed by the persons developing this child's IEP. YES NO
4. The following visual condition(s) was taken into account and discussed in making the above decision:
- Condition is degenerative and progressive loss is expected. YES NO
 - Condition is currently unpredictable in nature and will be reviewed if change in visual condition is noted. YES NO
 - Condition is temporary and expected to improve. YES NO
 - Condition is stable and will be monitored. YES NO
5. Indicate the appropriate instructional media
- Standard English Braille YES NO
 - Large Print YES NO
 - Regular Print YES NO
 - Tape/auditory YES NO
 - Pre-reader YES NO
6. Complete if Braille reading and writing **ARE** appropriate at this time
- Annual goals provided YES NO
 - Short-term objectives provided YES NO
 - Date of initiation indicated YES NO
 - Frequency and duration of instructional sessions indicated YES NO
 - Level of competency to be achieved annually indicated YES NO
 - Objective determinants used to measure achievement provided YES NO
7. Reasons Braille reading and writing **ARE NOT** appropriate this time
- Documented visual acuity allowing the choice of larger type/regular type YES NO
 - Child is considered a pre-reader YES NO
 - Other YES NO

Summary

Documenting AT devices and services into the IEP can be challenging. As there seems to be no single location in the document where AT devices and services should be documented. Instead, the IEP document provides several locations where AT can be included based upon the purpose of the AT, the needs of the student, and, in some cases, the educational disability category. In this section, the various areas of the IEP where AT might be included were discussed along with reasons why those areas might be selected by the IEP team. It was noted that AT needs to be written into the IEP in such a way that it provides a clear and complete description of the devices and services needed by the student and shows how the tools support achievement of goals and progress in the general education curriculum. Examples were provided of goals and objectives that include AT supports.

References

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Resources

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