



The Maryland Assistive Technology Guide

A Resource for Integrating Assistive Technology
into Specially Designed Instruction within
an Integrated Tiered System of Supports

MARYLAND STATE DEPARTMENT OF EDUCATION

DIVISION OF SPECIAL EDUCATION/EARLY INTERVENTION SERVICES

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INTRODUCTION

Background

The “Maryland Assistive Technology Guide” (MD AT Guide) was developed by the Maryland State Assistive Technology Steering Committee in collaboration with the Maryland State Department of Education (MSDE) to provide guidance on the comprehensive integration of assistive technology (AT) into specially designed instruction (SDI) within an integrated tiered system of supports. Elements of the guide were identified through data collected and examined by members of the Maryland Assistive Technology Network (MATN) board, consisting of local school system (LSS) leaders, representatives from higher education, policy/outreach, and research communities. The Maryland Assistive Technology Guide reinforces the bold vision of the MSDE Division of Early Intervention and Special Education Services (DEI/SES) to improve outcomes for students with disabilities by narrowing the gap between their achievement levels and grade level curriculum standards and functional expectations.

Specially Designed Instruction (SDI) is defined by IDEA as “adapting, as appropriate to the needs of an eligible child, the content, methodology, or delivery of instruction to address the unique needs of the child that result from the child’s disability and to ensure access of the child to the general curriculum, so that the child can meet the educational standards within the jurisdiction of the public agency that apply to all children” 34 C.F.R. §300.39(b)(3). A collaborative team that includes special and general educators, other service providers, and the student and family relies on knowledge of the student and academic and functional expectations of the standards and school setting co-develops, co-implements, and co-evaluates a comprehensive program of interventions and support to meet the student’s needs. For students with a variety of disabilities, assistive technology devices/tools and services that reduce barriers and enhance the student’s ability to access information, demonstrate learning, and engage actively and independently in the activities and environment are an essential part of this program. Since the 2004 reauthorization, the Individuals with Disabilities Education Act (IDEA) has required that AT devices and/or services must be considered for all students with disabilities within the Special Considerations section of the IEP development process, not just those with the most significant physical, cognitive, and/or communication needs.

These requirements have previously been interpreted to suggest that AT be treated as a stand-alone related service on the IEP, with direct service hours listed. Experience suggests that in too many cases, this led to AT devices being underutilized or used only in isolated settings, rather than integrated

throughout the student’s day to enhance access and learning. Research shows that AT devices and/or services have not been routinely included as SDI for many students with disabilities, leading to some students not receiving AT solutions, underused devices and/or inconsistent services.

This guide has been produced to illustrate how to seamlessly integrate AT solutions into the SDI of students with disabilities. It reinforces the concept that AT is not a related service; instead AT may encompass a wide range of solutions that remove barriers from the student’s environment. Therefore, AT is a critical element of specially designed instruction for students with disabilities.

This guide includes strategies, considerations and samples of integrated AT through the processes of SDI collaborative development, implementation and evaluation. Guidance is presented to support the critical thinking IEP and instructional teams will experience when co-developing, co-implementing and co-evaluating the use of AT solutions within the context of uniquely developed SDI. This guide supports the careful consideration of AT throughout the IEP process, the identification of appropriate AT devices and/or services that match the unique academic and functional needs of students and the consistent, ongoing evaluation needed to determine the effectiveness of AT across all academic and non-academic settings. Within each section, guidance is exemplified through a case study that models the integration of AT into SDI. As you read the guide, you will follow Xavier’s IEP and instructional teams as they collaboratively develop, implement and evaluate SDI and AT solutions to meet his individual needs.

In conjunction with outlining actions for IEP and collaborative teams around the co-development, co-implementation, and co-evaluation of SDI, this guide includes a case study that models the thoughtful consideration of AT. As you read this guide you will follow Xavier and his IEP team as they work within the framework of co-development, co-implementation, and co-evaluation process to develop specially designed instruction (SDI). Additional resources to support the integration of AT solutions to accelerate student learning and close the achievement gap are also available. One seminal resource is the Quality Indicators for Assistive Technology (QIAT). The QIAT was originally developed in 1998 by several national AT experts as a comprehensive guide for AT service providers to address issues of educational access and complexity of providing AT devices and/or services in schools and postsecondary environments. These professional guidelines were used in the development of this guide.

Assistive Technology Defined

AT is defined by IDEA and COMAR as the provision of both AT devices and/or AT services.

Assistive Technology Device

“Assistive technology device” means 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 a student with a disability, in accordance with 34 C.F.R. §300.5.

“Assistive technology device” does not include a medical device that is surgically implanted, or the replacement of such a device. **[COMAR 13A.05.01.03B(4)]**

Per the legal definition, an AT device can be any item, object, or piece of equipment that removes barriers to student learning and/or engagement in their school, community, or home environments. The collaborative team is responsible for implementation of the AT device across all school and natural environments in which it is needed for the student to access his or her education. Therefore, AT is implemented by a collaborative team that includes all staff, educators, providers, and/or family members who are pivotal to the educational program.

The continuum of AT solutions ranges from no-tech to high-tech (Reed, 2004).

- **Low:** “aided” AT devices/tools (those that are in addition to the student’s body) that are easy to use, intuitive, and usually do not require a power source, such as pencil grips, slant boards, adapted chairs, etc.
- **Medium:** sometimes referred to as “light tech”, this approach includes AT devices/tools requiring some training, and may require batteries and/or electricity to operate, such as calculators, spell check, alarms, etc.
- **High:** “aided” and complex AT solutions requiring an electronic power source with a dynamic interface that always requires training as well as electricity and/or batteries.

AT Services include direct or indirect support provided by IEP team members that promote the selection, acquisition, and use of AT devices. AT services are variable and flexible to meet the unique needs of the learner, specifically to promote the independent use of the AT solution across the school and other settings. Effective AT Services rely on shared responsibility for implementation by multiple team members, with guidance and training as needed from an individual with expertise in selecting and

adapting AT tools and devices. The AT specialist (as needed) and other team members collaborate to support implementation that builds the student's ability to use the AT solution as independently as possible in all relevant environments.

Together, appropriate AT devices and/or services produce a viable solution that enables a student with a disability to engage in meaningful instruction and social interactions as independently as possible.

AT and the Law:

IDEA and Code of Maryland Regulations (COMAR) state that public education agencies must make assistive technology devices and/or services available to children and youth who require them in order to receive a Free and Appropriate Public Education (FAPE). As a result of the federal mandate, consideration and documentation of AT is a required part of the IEP development process in Maryland [COMAR 13A.05.01.08A(3)(e)]. AT is a required consideration when developing the IEP for every student with a disability, not only those **with intensive** physical, cognitive, and/or communication needs. Each IEP team must consider whether one or more integrated technology solutions is needed to allow the student to access and progress in the curriculum and to meet IEP and post-secondary transition goals and outcomes. AT exists to remove barriers in all areas of a student's life including academics, postsecondary, home, and community. The excerpts from the law describe the responsibility to provide assistive technology devices and or services as needed to ensure FAPE:

IDEA Mandate to Make Assistive Technology Available

(a) Each public agency must ensure that assistive technology devices or assistive technology services, or both, as those terms are defined in §§ 300.5 and 300.6, respectively, are made available to a child with a disability if required as a part of the child's:

- (1) Special education under §300.39;
- (2) Related services under §300.34; or
- (3) Supplementary aids and services under §§ 300.42 and 300.114(a)(2)(ii).

(b) On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required, if the child's IEP Team determines that the child needs access to those devices in order to receive FAPE [34 C.F.R § 300.105 Assistive technology].

Our students

IEP teams must carefully consider AT for **all** students with disabilities. Xavier’s case study has been woven through the MD AT Guide to provide fictional but concrete examples of how this thought process can be applied to students of various ages and needs. As you read this guide, apply the considerations and thought process described to the vignettes and/or to students who you currently serve.

Evaluation of Assistive Technology Device(s) and/or Service(s)

“Evaluation” as defined in this guide does not refer to a formal assessment conducted by an assistive technology specialist, rather it is a continuous data-informed decision-making process facilitated by the IEP team. AT evaluation is an iterative, ongoing process that begins when a student becomes eligible for special education services and continues until the learner no longer requires an AT solution as part of their SDI.

IEP and Collaborative Teams Defined

COMAR states, “In developing an IEP, the IEP Team shall consider and document whether the student requires AT devices and/or services” **[COMAR 13A.05.01.08A(3)(e)]**.

IEP teams work within an effective integrated educational system for all students as they co-develop, co-implement, and co-evaluate SDI. In addition to the legally mandated members including the family, general and special education teachers, and related service providers, the IEP team may include any person deemed important to the life of the student, including but not limited to: adult support staff, transition personnel, assistive technology specialist, and any additional person identified by the family. To ensure that AT devices and/or services are appropriately considered and implemented, one or more members of the IEP team should be knowledgeable about potential AT solutions to meet the diverse needs of students with disabilities. Once potential AT solutions are identified, the IEP team is responsible for the provision and implementation of the AT devices and services, just as they are for other elements of the student’s SDI. Individuals who were not part of the IEP team that developed the student’s program may play a role in implementing aspects of the SDI, including AT; the need to provide training and other resources **for these implementation team members should be considered and documented in the IEP.**

CO-DEVELOPMENT OF SPECIALLY DESIGNED INSTRUCTION WITH INTEGRATED ASSISTIVE TECHNOLOGY

Assistive Technology is a “Special Consideration”

AT is a special consideration that is documented in the IEP. The IEP team must consider AT for all students with disabilities during the IEP co-development process. The dialogue at the annual IEP team meeting is critical for considering AT solutions. The IEP team must carefully review the Present Levels of Academic and Functional Performance (PLAAFP), including historical progress and data regarding any previous AT devices and/or services. The team should ask the question, “What tasks does the student have difficulty doing independently, and is there an AT solution that could promote independence and/or remove barriers to learning?”

Present Levels of Academic Achievement and Functional Performance PLAAFP

The PLAAFP statement is the **foundation** of a standards-aligned IEP for a student with a disability. The PLAAFP statement describes the abilities, performance, strengths, and unique needs of the learner. The statement is developed using a variety of information and data, including formal assessments, curriculum-based measures, work samples, observations, and input from educators and family members.

AT is considered annually for all new and existing students with IEPs. While developing and/or reviewing a PLAAFP, the IEP team must consider current and historical data and trends to determine if an AT solution would accelerate progress and remove learning barriers. If a student is currently utilizing an AT device or receiving AT services, the IEP team documents the impact of the current AT solution in the PLAAFP.

Meet Xavier

Xavier is a rising fifth grader with Autism. He has received special education services since preschool. His strengths include visual memory, addition and subtraction calculation that does not require regrouping, and following a multi-step process given clear directions and visual supports. He is working towards a Maryland High School diploma. He currently participates in general education approximately 90% of the day; he receives one-on-one services for speech-language therapy twice a week and reading intervention for 30 minutes daily outside of the general education setting.

The IEP team must review last year's PLAAFP and develop the PLAAFP for Xavier's next IEP before considering his AT needs.

As you read Xavier's PLAAFP, consider the following questions:

- Is there evidence of previous AT device or tool use and/or AT services?
- What barriers exist for Xavier to access the general education curriculum?
- Is additional data/information necessary for the team to thoughtfully consider Xavier's need for AT devices and/or services?

Xavier's PLAAFP

Family Input: Xavier's mother shared that by the time he gets home, he does not always want to complete his homework, so she uses a preferred choice board to provide a menu of break options. Using a timer, Xavier takes a 30 minute break and then is able to transition to complete his homework. When he is ready to begin his homework, she uses visual supports, repetition of clear, succinct directions, and positively reinforces his time on task. She also checks his homework for accuracy and communicates with his teacher to provide time for re-teaching of difficult concepts. These strategies have been implemented with Xavier throughout elementary school and have proven to be successful across the school and home setting.

English/Language Arts

Assessment Information

Universal Reading Inventory

Fall 2017: 661 Spring 2018: 718

Fall 2018: 776 Spring 2019: 846

Fall 2019: 852 (4th Grade Level Band = 740L – 940L)

Local Reading Comprehension Benchmark Assessment

Grade 2: 89%

Grade 3: 88%

Grade 4: 58%

MCAP

ELA Grade 4: 743 Level 3

Reading Foundational Skills and Fluency:

Xavier's decoding skills are a strength. He reads grade-level sight words with 95% accuracy and can apply strategies to decode most unfamiliar words. On a recent probe administered by the special education teacher, he read grade-level text at 90 words per minute correct, which is within the target range for fourth grade.

Reading Comprehension:

When Xavier is reading a grade level text, he tends to have difficulty understanding metaphors, figurative language, and multiple-meaning words which impacts his ability to comprehend the text, which can lead to frustration. On teacher-made and county-level benchmark assessments, he answers literal comprehension correctly approximately 80% of the time. He can refer to the source of the information in the text. He has more difficulty with comprehension questions requiring inferences or drawing conclusions, answering these questions correctly approximately 25% of the time. Using a notes page to record key details from the text and summarizing strategies like "somebody wanted but so" and other techniques helps him connect information from the text in order to answer inferential questions. When he does identify the correct answer, he has difficulty explaining his reasoning, even when provided with sentence starters/frames.

Students in fifth grade are expected to ask and answer questions about key ideas and details in literary and informational texts. They are expected to determine explicit and implicit information from text and cite evidence to support drawn conclusions. They are also expected to determine central ideas and themes and summarizing key details and ideas and interpret simple and complex words and phrases as they are used in the text.

Writing

Xavier is a reluctant writer who easily becomes frustrated with the composition and revision process. He is able to produce legible printing, but his writing is slow, and he becomes fatigued when asked to produce multiple sentences. Students in his fourth-grade class are asked to "free write" in response to a prompt several times a week; Xavier typically produces two or three short sentences in a ten-minute period. He will often say that he "[doesn't] know what I'm supposed to write." If allowed to dictate to adult scribe, he will produce more (usually 5 or 6 sentences) but does not often elaborate on ideas or

provide many details. Given a structured writing tasks (e.g., a letter, book report, etc.), a graphic organizer or story web, and adult support, he will produce a longer product, but often requires multiple prompts and questions. When relating personal experience or information about a self-selected topic of interest (e.g., video games, computers, or the Baltimore Ravens), he will dictate or write a long list of facts but requires extensive support to organize them into a clear narrative or argument and has difficulty selecting the most important information from supporting or irrelevant details. He is working on using information and reasoning to support statements of opinion.

Xavier is a good speller, relying on his strong visual memory to write most words correctly and knows how to use a dictionary to check the spelling of a word he is unsure of. Given a reminder checklist on his desk, he follows rules for capitalization, spacing, and basic punctuation (periods, exclamation points, quotation marks, etc.). He tends to write mostly in subject-verb-object declarative sentences. He is beginning to incorporate narrative devices that have been explicitly taught (e.g., “in conclusion,”) but needs to work on varying his sentence structure, making transitions between sentences and paragraphs, and using sensory details and persuasive language. He will correct the mechanics of his writing as needed using a proofreading guide and/or feedback but tends to shut down or become resistant when asked to expand, reorganize, or revise content, especially if the changes require rewriting. Given the use of a word processor with spelling and grammar checker, this has helped Xavier to reduce errors and increase production.

Students in fifth grade are expected to write opinion pieces that introduce a topic, use a logical organization structure, support their reasons with facts and details, include a conclusion, using linking words and phrases to build an argument, and use conventions of grammar, spelling, punctuation, and format. They are expected to edit, revise, and publish their work using input from adults and peers.

PLAAFP AT Summary

Xavier's AT Solutions
<ul style="list-style-type: none">● Preferred choice board● Menu of break options● Timer● Visual Reminders● Graphic Organizers● Word Processor with Spell Check

Once AT is identified as a need and documented in Special Considerations, the IEP team includes the AT solution throughout the IEP, as appropriate, in the following sections of the IEP: PLAAFP, Goals and Objectives, Supplementary Aids and Services, Accommodations, Special Considerations, and Transition.

AT is **not** a direct related service but an integral part of SDI that may be facilitated by anyone on the student's implementation team, with support and coaching from an AT expert or related service provider, when necessary. This intentional documentation clarifies what the AT device and/or service implementation should look like, what supports the student needs, and how the team will know when the student is successful.

The definitions and explanations below demonstrate how IEP teams document AT within each of these sections of the IEP.

Special Considerations

Considering Assistive Technology

Consideration of AT is a recursive process guided by thoughtful examination of student needs based upon multiple and varied data in the PLAAFP, including barriers impacting academic achievement and participation in daily living activities. IEP team members examine data collected through trials, implementation, and monitoring of assistive technology. The co-development process guides the IEP team to select the most appropriate outcome regarding AT devices and/or services to support the learner's needs and provides an opportunity to document their basis for both decisions separately.

The IEP team discusses four specific AT outcomes during the consideration process, as listed on the 2019 Maryland IEP Form. One of the outcomes below must be documented on the IEP:

1. The student does not require AT device(s) or AT service(s).
2. The student does not require AT device(s) but does require AT service(s).
3. The student requires AT device(s) and requires AT service(s).
4. The student requires AT device(s) but does not require AT service(s).

ASSISTIVE TECHNOLOGY (AT) (required)		
Consider AT device(s) and service(s) that are needed to increase, maintain or improve functional capabilities of a student with a disability.		
Decision(s):	Requires an AT device(s)	Requires an AT service(s)
<input type="radio"/> The student does not require AT device(s) or AT service(s).	No	No
<input type="radio"/> The student does not require AT device(s) but does require AT service(s).	No	Yes Additional data collection with trials is needed
<input type="radio"/> The student requires AT device(s) and requires AT service(s).	Yes	Yes Services may address the required device(s) or additional data collection with trials is needed
<input type="radio"/> The student requires AT device(s) but does not require AT service(s).	Yes	No
Document basis for decision(s) on AT device(s) including description of device(s): _____		
Document basis for decision(s) on AT service(s) including implementation of trials: _____		

Figure 1: A screenshot of the Maryland IEP form highlighting the AT Special Consideration process

The IEP team also documents any decisions about AT that are proposed, accepted, or rejected in the Prior Written Notice. IDEA and COMAR provide a clear mandate for IEP teams to consider the need for assistive technology on behalf of all students with disabilities who receive special education. [34 C.F.R. § 300.105; COMAR 13A.05.01.08A(3)(e)]

To promote the careful consideration of AT needs during the IEP process, the MSDE DEI/SES reviewed national practices and updated the 2019 Maryland Model IEP Form. These considerations are described in detail below. The collaborative team evaluates the need for and impact of AT devices and/or services on an ongoing basis, and the outcome selected by the IEP team at the annual IEP meeting represents the learner’s need at that point in time.

Consideration #1:

The student does not require AT device(s) or AT service(s).

IEP teams select this outcome if the student is making adequate progress toward IEP goals and objectives and/or the data examined does not indicate a specific barrier to progress that could be addressed with assistive technology.

Examples of documentation for a student who does not require AT devices or services are listed below.

Document basis for decision(s) on AT device(s) including description of device(s)

Example: Data collected and reviewed for development of the PLAAFP demonstrate that Angela is able to communicate, read, write, and type responses with minimal prompting during academic instruction in the general education setting. She is also able to navigate her school and community settings independently. Due to her strengths in these areas, Angela does not currently require any assistive technology devices to make accelerated progress in the curriculum or with functional skills.

Document basis for decision(s) on AT service(s) including implementation of trials

Example: Data collected and reviewed for development of the PLAAFP demonstrate that Angela is making accelerated progress in the areas of math and language arts. She is also able to independently navigate her school and community. Due her to strengths in these areas, Angela does not require assistive technology services currently.

Consideration #2:

The student does not require AT device(s) but does require AT service(s).

If the IEP team believes the learner may benefit from an AT solution but lacks data to identify what type of AT device and/or service is needed, they select the second statement. This outcome provides an opportunity for additional data collection with trials using multiple AT solutions, in order to find the right fit for the learner. The IEP team will revisit the consideration of AT devices and/or services once the data and necessary information has been collected.

Examples of documentation for a student who does not require AT devices but does require AT services are listed below.

Document basis for decision(s) on AT device(s) including description of device(s)

Example: Given adapted text in his sixth-grade ELA class, Kyle verbally answers comprehension questions and selects correct answers when presented with multiple choices at the fifth-grade level. Kyle requires significant supports to construct written responses, as his most recent probe indicated that he is spelling at the second-grade level. The team will explore multiple grammar/spelling tools to determine if an AT solution would increase his ability to construct accurate responses. Currently, no AT device is needed. This decision will be revisited once data from trials is collected.

Document basis for decision(s) on AT service(s) including implementation of trials

Example: The IEP team is exploring which grammar/spelling tools will best support Kyle with improved access to writing tasks. Kyle currently requires AT services to trial multiple grammar/spelling tools.
NOTE- the trials can be documented in supplementary aids and services.

Consideration #3:

The student requires AT device(s) and requires AT service(s).

If the IEP team reviews the PLAAFP and determines that an AT device is required, their next consideration is what type of service the student, educators, support staff, and family members will need to learn to use the AT device as effectively and independently as possible, across all classroom and natural settings. In this case, the IEP team selects the third outcome because the student requires both an AT device and an AT service.

Examples of documentation for a student who requires AT device(s) and AT service(s) are listed below.

Document basis for decision(s) on AT device(s) including description of devices.

First, the team documents the specific requirements and purpose of the AT device (without including brand names).

Example: Given adapted text in his sixth-grade ELA class, Kyle verbally answers comprehension questions and selects correct answers when presented with multiple choices at the fifth-grade level.

Kyle requires significant supports to construct written responses, as his most recent probe indicated that he is spelling at the second-grade level. The team trialed multiple grammar/spelling tools and identified that a word processor with grammar/spell check improved Kyle's ability to construct accurate answers from the second-grade level to the fourth-grade level.

Document basis for decision(s) on AT services including implementation of trials

Next, the IEP team determines and documents what type of AT services are required to support the use of the identified AT device. Specific details regarding AT service delivery, including service category, nature of service, frequency, and provider responsible should be documented in the Supplementary Aids and Services, Program Modifications and Supports section of the IEP.

Example: Ongoing maintenance of the word processing device will be monitored by the student's IEP team and case manager as needed. Initial training for Kyle and his educational team will be provided by the local assistive technology team representative. The LSS AT representative will teach Kyle, his case manager, and supporting adults how to use the word processor with minimal prompts. Monthly check-ins between the case manager and LSS will take place to determine if additional support is required.

Consideration # 4:

The student requires AT device(s) but does not require AT service(s).

IEP teams may encounter students who have learned to use their AT devices and are functioning completely independently. If the student, educational support team, and/or family/guardians do not need support or training to use the AT device, the IEP team should select the fourth outcome. In the **Document basis for decisions(s) on AT device(s) including description of devices** section of the form, the team lists the specific requirements of the AT device(s) and the reason or purpose of the device(s), but should not list the actual brand name of the device. For more information, see page --- for *Guidance on Specificity and Using Name Brands*. In this case, the IEP team would document that assistive technology services are not needed.

Examples of documentation for a student who requires AT device(s) but does not require AT service(s) are listed below.

Document basis for decision(s) on AT device(s) including description of devices

Example: Kyle has used a word processing device to construct accurate answers, responses, opinions, and write reports for all academic subjects. The team determines that Kyle continues to benefit from the use of the word processing device with grammar and spell check support. AT devices continue to be required for Kyle to make accelerated progress.

Document basis for decision(s) on AT services including implementation of trials

Example: Kyle has been using his word processing device with spelling and grammar supports for the past two academic years. Historic progress data indicate that he is currently using the device independently and with success in both academic and natural settings. Due to his independence with using and caring for the device, AT services are not required.

Once the team has considered AT and documented their decisions, and developed a comprehensive PLAAFP, they are ready to write annual goals and objectives.

Goals and Objectives

As defined in the MSDE DEI/SES *Guide for Implementing Specially Designed Instruction within an Integrated Tiered System of Supports*, an IEP goal is “an individualized statement of what a student will be able to do at the end of a set time period.” IEP goals describe the most important skills required to achieve multiple standards at grade level and/or the adaptation of a grade level standard. AT solutions are used during instruction and assessment, and therefore should be clearly documented within the five components of an IEP goal, as defined by the MSDE.

AT integrated into IEP goals and objectives must be in alignment with the information in the PLAAFP and Supplementary Aids, Services, Program Modifications and Supports. Goals and objectives contain five components:

- (1) **Conditions:** The IEP goal conditions describe the circumstances in which the skill will be measured, including materials, prompt levels, etc. AT solutions may be listed as a condition of an IEP goal. In the example below, the speech generating device is identified as a condition of the IEP goal.

Example: Given a speech-generating device, Jessie will provide at least three on-topic responses or comments to peers during a small group activity on at least 3 separate occasions, as measured by observational data, by June 30, 2021.

(2) **Behavior:** The behavior component of the IEP goal illustrates the observable, measurable action that the student will demonstrate in order to master the skill. AT solutions may also be incorporated into the behavior component of an IEP goal. In the IEP goal below, the student's behavior is identified as looking at the correct answer or question using the eye gaze device, which is an AT solution.

Example: Using an eye-gaze device containing pre-stored messages, Zulema will accurately respond to 8 out of 10 teacher-generated prompts by looking at the correct answer, across multiple settings for 10 consecutive days, as measured by a teacher-generated checklist, by June 30, 2021

(3) **Criteria:** This element of the IEP goal clearly states the expected level of performance and how many times the student must demonstrate the level of performance for the goal/objective to be achieved. IEP teams consider both mastery and retention criteria. In the example goal below, the AT device is integrated as the mechanism for the student to meet mastery.

Example: Given an equation with a missing number or operation and an augmentative communication device, five word cards with written numbers zero through nine and/or written operation words, Violet will identify the correct number or operation symbol using their AAC device to solve the equation with 80% accuracy over three consecutive trials, as measured by classroom-based assessments by June 30, 2021.

(4) **Method of Measurement:** The method of measurement refers to a specific reliable or valid tool appropriate for repeated use and informative to the team. In the example below, the measurement states that the goal will be achieved when the student supports claims using valid reasoning and relevant evidence in 8 out of 10 trials, across six writing assignments.

Example: Given a writing prompt, a word processor with spelling and grammar check, and a graphic organizer, Terry will write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence in 8 out of 10 trials, across six writing assignments by June 30, 2021.

(5) Timeframe: This portion of the IEP goal indicates the date by which the goal/objective will be accomplished (up to but not exceeding one year). The team may select a timeframe that is shorter than an academic year for an objective that could be achieved within a semester. The example IEP goal below lists a clear timeframe of mastery by June 30, 2021.

Example: Given an equation with a missing number or operation and an augmentative communication device, five word cards with written numbers zero through nine and/or written operation words, Franklin will identify the correct number or operation symbol using their AAC device to solve the equation with 80% accuracy over three consecutive trials, as measured by classroom-based assessments by June 30, 2021.

AT may be integrated, as appropriate into goals aligned to grade level skills, goals aligned to below grade level skills and/or functional goals which target non-academic skills. For more information about the three types of IEP goals, please see ***“A Guide for Implementing Specially Designed Instruction within an Integrated Tiered System of Supports.”***

Xavier’s IEP goals and corresponding objectives are written below.

Reading Comprehension Example

Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by independently answering questions requiring inferencing or drawing conclusions with 80% accuracy as demonstrated on teacher-made assessments, on 3 consecutive assessments, by June, X, XXXX.

Objective 1: Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by answering questions requiring inferencing or drawing conclusions with 80% accuracy and no more than 5 verbal prompts, on 3 consecutive assessments by November, X, XXX.

Objective 2: Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by answering questions requiring inferencing or drawing conclusions with 80% accuracy and no more than 2 verbal prompts on 3 consecutive assessments by January, X, XXXX.

Objective 3: Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by answering questions requiring inferencing or drawing conclusions with 80% accuracy and no more than 1 verbal prompt, on 3 consecutive assessments by April, X, XXXX.

Objective 4: Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by answering questions requiring inferencing or drawing conclusions with 80% accuracy and no prompts, on 3 consecutive assessments by June, X, XXXX.

Functional Goal Example:

Given a task to copy written text from any source, Xavier will use his word processor to accurately copy 60 characters per minute from the whiteboard or a textbook with 95% accuracy (fewer than 5 copying errors per 100 characters) across all settings by June X, XXXX.

Objective 1: Given a task to copy written text from any source, Xavier will use his word processor to accurately copy 30 characters per minute from the whiteboard or a textbook with 95% accuracy (fewer than 5 copying errors per 100 characters) and no more than 2 gestural prompts, across all settings by November X, XXXX.

Objective 2: Given a task to copy written text from any source, Xavier will use his word processor to accurately copy 30 characters per minute from the whiteboard or a textbook with 95% accuracy (fewer than 5 copying errors per 100 characters) and no more than 1 gestural prompts, across all settings by January X, XXXX.

Objective 3: Given a task to copy written text from any source, Xavier will use his word processor to accurately copy 30 characters per minute from the whiteboard or a textbook with 95% accuracy (fewer than 5 copying errors per 100 characters) and no prompts, across all settings by June X, XXXX.

Consider the following guiding questions when incorporating AT into IEP goals:

- Is the purpose of the IEP goal to measure the use of the AT device/tool? If so, does the IEP goal contain both mastery and retention criteria that promotes AT device use across multiple settings?
- Is the purpose of the IEP goal to measure academic progress? If so, is the expectation for AT device use embedded clearly into the IEP goal?
- Is the IEP goal relevant to the student's life and address a barrier that impacts accelerated progress in the general education, community, and home settings?
- Is the IEP goal written with the least number of prompts to decrease dependence upon adults? Has a fade plan been developed to support the student's independent use of the AT device?
- Are all implementation team members trained able to support the AT identified in the IEP goal?

In addition to annual goals and objectives, AT is integrated as appropriate in other areas of the IEP, this may include Instructional and Assessment Accommodations, Supplementary Aids, Services, Program Modifications and Supports, Extended School Year, and Transition.

Instructional and Assessment Accommodations

The Instructional and Assessment Accommodations section of the IEP provides a list of accommodations intended to reduce or even eliminate the effects of a student's disability. Selections must match the identified AT devices and/or services specified under the Special Considerations and Accommodations section of the IEP. AT devices and/or services identified in the **Instructional and Assessment Accommodations** section of the IEP include the AT devices and/or services used for all instruction and assessments.

Tip: Some students require explicit instruction on how to use AT solutions and ample time to practice in low-risk environments in order to achieve their potential when taking an assessment.

Due to assessment requirements, it is possible that certain accommodations are not allowed during standardized or state mandated assessments. Follow all procedures identified in the specific assessment Test Administrators Manual. Assessments in Maryland may have specific eligibility criteria for some accommodations. For those accommodations marked with an asterisk, such as human reader

or text-to-speech software, the IEP team consults assessment-specific guidelines for detailed information and documents the basis for their decision.

Xavier's Accommodations:

After constructing a detailed PLAAFP and annual goals, the team considers and documents Xavier's Instructional and Assessment Accommodations. The team reviews Features for All Students, and selects the following accommodations and documents the basis for their decision based upon Xavier's unique learning needs:

Features for All Students:

- 1f: Eliminate Answer Choice
- 1g: General Administration Directions Clarified
- 1h: General Administration Directions Read Aloud and Repeated as Needed
- 1i: Highlight Tool
- 1n: Pop-up Glossary
- 1o: Redirect Student
- 1p: Spell Check or External Spell Check Device
- 1t: Writing Tools
- 1u: Graphic Organizer

Supplementary Aids and Services

Supplementary aids and services include a description of the support(s) provided to students with disabilities in all educational, nonacademic, and extracurricular settings, allowing for students with disabilities to make progress and participate in general education with their peers, to the maximum extent possible.

When determining supplementary aids and services specific to AT, information regarding the student's historical performance listed in the PLAAFP and annual IEP goals are considered. IEP teams may integrate supports for AT in any service category area, including: Instructional Supports, Program Modifications, Social Behavioral Supports, Physical/Environmental Supports, and School Personnel/Parent Supports.

Consider the following guiding questions when considering AT supports in Instructional and Assessment Accommodations and Supplementary Aids and Services:

- What specific AT support(s) are necessary to:
 - use the AT device/tool as independently as possible;
 - bridge the gap between their present levels and their annual IEP goals;
 - promote accelerated progress to narrow the gap in the general education curriculum;
 - increase and improve social interactions with same-aged peers;
 - improve quality of life for the student across academic, community, and home settings; and
 - provide necessary training to school personnel and parents in order to promote AT use across all settings and minimize over-prompting?

AT Documentation Tip!

Use Specificity

When documenting AT in the IEP, devices and tools should be described specifically around their functionality, but without brand names. Most devices and software have multiple features, not all of which may be required by the student to achieve targeted goals. Using specificity can help educators select the appropriate functions and features of a device to address unique student needs. Describing AT solutions with specificity will help to increase accessibility, learner independence, and replicability of practice in the event that a student moves into a different LSS.

Examples:

- Instead of “tablet,” write “keyboarding on a touchscreen device.”
- Instead of “Accent 1000” write “a dynamic display speech generating device with a 10-inch screen”

Xavier’s selected instructional and assessment accommodations, supplementary aids and services appear on the implementation matrix below. Though not required, this type of organization allows for a clear understanding of how AT supports will be implemented throughout his day and is an important step in co-development.

Example of Xavier’s Supplementary Aids and Services related to Grade Level annual IEP goal:

Area of Need: Reading Comprehension at 5th Grade Level						
Annual IEP Goal: Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by answering questions requiring inferencing or drawing conclusions with 80% accuracy as demonstrated on teacher-made assessments, on 3 consecutive assessments, by June, X, XXXX.						
Service Category	Nature of Service	Frequency	Begin/End Date	Weeks	Primary Provider/ Other Service Provider	Personnel/Parent Support Training
Instructional Supports	Other: Graphic Organizer	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Model use of graphic organizer, including prompting levels, and use during homework assignments
Program Modifications	Chunking of text	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Clearly articulate amount of grade-level text appropriate when working on this goal during homework
Physical/ Environmental Supports	Reduce paper/pencil responses	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Limit paper/pencil responses (appropriate for math computation, completing scanned assessments, 1-2 word responses)
Physical/ Environment Supports	Other: Word processor with spell check	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Use for responses involving construction of full sentences and/or paragraphs across all settings

Extended School Year

Students with disabilities who are at risk of regression and loss of academic and/or functional skills may qualify for Extended School Year (ESY) services. Students who qualify for ESY will receive special education and related services, as documented in their IEP. After determining eligibility for ESY, IEP teams select which goals and related services should be carried throughout the summer. Teams and family members collaborate to determine which AT devices and/or services should be included in the student's ESY services.

Transition

The goal of transition planning services is to prepare students to exit high school and successfully integrate into their college, career, and communities, obtain and maintain jobs, and live independently. AT devices and/or services can provide the additional support necessary to promote independence, self-sufficiency, and self-advocacy for engagement in post-secondary experiences.

Transition services are defined as a coordinated set of activities for a student with a disability that is designed to be within a results-oriented process that facilitates progress from the school to post-school activities, including postsecondary education, career and technical education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, and community participation.

When addressing transition services for a student who uses AT, IEP teams must carefully review and discuss the student's PLAAFP, current technology use, and their postsecondary goals to determine how to prepare for the devices and/or services he/she may need in the postsecondary setting. Appropriate assessments should be used to help the IEP team determine AT needs that will support their postsecondary goals after the student finishes school.

IEP meetings for students who use AT should include representatives from outside agencies, which may provide training, funding, or support for AT use after the student transitions to postsecondary life. Coordinated planning will enable students to transition seamlessly to adult life with the necessary technology in place to meet success.

CO-IMPLEMENTATION OF SPECIALLY DESIGNED INSTRUCTION WITH INTEGRATED ASSISTIVE TECHNOLOGY

Collaborative IEP teams work together, using information from the IEP, to integrate AT into SDI to access the general education curriculum during daily instruction, intervention and other school activities. AT is incorporated into a student's unique SDI plan and should be clearly articulated so that the implementation team is able to effectively execute the SDI as intended.

Collaborative Planning for Effective AT Implementation

The key to effective implementation of AT devices and/or services is to seamlessly integrate AT into already existing structures. The collaborative implementation team comprises **all** of the people involved in the student's educational program, including (but not limited) to special educators, general educators, para-professionals, related service providers, cafeteria workers, office staff, janitors, the school nurse, and sometimes other peers. Opportunities to plan together are essential in order to clearly understand each person's role in the use of AT during the school day. Below are some simple, yet effective implementation tips and questions for teams to consider.

Implementation Tips and Questions to Consider:

- **Develop shared goals** to leverage your district or school's resources for AT integration that will benefit many students. LSSs and schools may become overwhelmed by multiple initiatives, including the successful integration of AT. How can you configure staff, organize resources, and utilize already existing structures (such as collaborative grade-level planning time) to seamlessly integrate AT into the fabric of your community?
- **Include family members in conversations** to understand the full story and gain critical insights regarding the learner's AT experience. How is the student using the AT solution at home? Is the family experiencing success or additional stress? Was their input solicited when designing the SDI implementation plan?
- **Find time to plan** in order to develop a cohesive and detailed SDI plan that clearly maps out the use of the AT solution. What collaborative planning times are already scheduled, and how can discussions regarding AT solutions be embedded into already existing meetings?
- **Discuss concerns proactively** by identifying potential road bumps that might impact implementation ahead of time, in order to identify solutions before implementation begins.

Common barriers to AT implementation may include (but are not limited to) finding time for effective training for every member of the collaborative team, supporting adults to stick to the prompt fading schedules and NOT over prompt, utilizing the AT device across all environments in the school/community, and confusion around the purpose of the AT device. What concerns do your collaborative team members have, and is there an opportunity to address these concerns prior to implementation?

- **Prepare a back-up plan** because mid- high tech AT solutions may break! The collaborative team should consider additional low-tech AT solutions and have them available for use in the event of an accident. Lack of access to an AT solution can lead to frustration, cessation of progress, and impacts the student’s access to FAPE. Does your team have a low-tech back-up plan for each student identified as needing AT?
- **Create Opportunities and Routine** – embed the use of the AT solution into as many routines in school and at home as possible. Routines provide students with the chance to practice the use of their AT consistently and in a low-risk environment. Increased opportunities promote success, which builds momentum and confidence.
- **Know your prompt levels** and fade supports as quickly as possible to prevent dependence upon adults. Provide training to all collaborative team members on prompting hierarchies and how to effectively fade prompts.
- **Listen to the student** to gain their perspective on the effectiveness of the AT. Find opportunities to ask the student about their opinion, and whether the AT solution is helping to improve outcomes.
- **Celebrate AT** and pay attention when students use their devices. Look for opportunities to integrate AT use during school-wide activities, events, special days, and assemblies.

The table below of an implementation plan based on the IEP to support fidelity of implementation across all service providers. Notice the providers and manner of support(s) are clearly defined for consistency in implementation.

Implementation Plan Example

Service Category	Nature of Service	Anticipated Frequency	Primary Provider	Other Provider(s)	Clarify Location and Manner
Instructional Supports	Other: Use of word processor	Weekly 11/1/19 – 10/31/20	General Educator	Special Education Classroom Teacher Instructional Assistant	Use of word processor for all assignments, homework, and assessments for writing assignments longer than one paragraph
Instructional Supports	Other: Audiobooks	Weekly 11/1/19 – 10/31/20	General Educator	Special Education Classroom Teacher Instructional Assistant	Use of audio books in all class settings when reading novels at or above instructional grade level
Instructional Supports	Other: Digital text	Weekly 11/1/19 – 10/31/20	General Educator	Special Education Classroom Teacher Instructional Assistant	Use of digital text in all class settings when reading textbooks
Physical / Environmental Supports	Other: Dynamic display speech generating device	Daily 11/1/19 – 10/31/20	Speech / Language Pathologist	General Educator Special Education Classroom Teacher Instructional Assistant	Use of dynamic display speech generating device for communication across all settings at school and home
School Personnel / Parental Supports	Other: AT Consult	Weekly 11/1/19 – 1/15/20	Speech / Language Pathologist	N/A	AT consultant to assist staff with conducting trials to determine the need for AT to support written expression in all school contexts
School Personnel / Parental Supports	Other: AT Consult	Quarterly 11/1/19 – 10/31/20	Speech / Language Pathologist	N/A	AT consultant to provide training and modeling using the student’s AAC device to IEP teams

Xavier’s implementation team reviews the Special Considerations and Accommodations and Goals sections of his IEP to develop a detailed implementation plan.

Example of Xavier’s Implementation Plan for AT

Area of Need: Reading Comprehension at 5th Grade Level			
Annual IEP Goal: Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by independently answering questions requiring inferencing or drawing conclusions with 80% accuracy as demonstrated on teacher-made assessments, on 3 consecutive assessments, by June, X, XXXX.			
Location of Services: Xavier will receive these services throughout all classes, when engaging in reading text at his grade level.			
Training Plan: The Special and General Education ELA Teacher will co-plan and co-train the implementation team members.			
Team Members	Date of Initial Training	Mid-Year Implementation Fidelity Check	End of Year Implementation Fidelity Check
Parents			
Music Teacher			
Librarian			
Math Teacher			
Art Teacher			
Science Teacher			
Social Studies Teacher			
Additional Adult Support Team			
PE Teacher			

Area of Need: Reading Comprehension at 5th Grade Level

Prompt Levels: The team will decrease verbal prompts to promote Xavier’s ability to independently answer comprehension questions using his AT supports.

Timeframe	Prompt Level	Mastery Criteria
September X - November X	Use no more than 5 verbal prompts	Xavier uses AT solution(s) with no more than 5 verbal prompts for 3 days in a row
November X - January X	Decrease from 5 verbal prompts to 2 verbal prompts	Xavier uses AT solution(s) with no more than 2 verbal prompts for 3 days in a row
January X - April X	Decrease from 2 verbal prompts to 1 verbal prompt	Xavier uses AT solution(s) with no more than 1 verbal prompt for 3 days in a row
April X - June X	Decrease from 1 verbal prompts to no verbal prompts	Xavier independently uses AT solution(s) for 3 days in a row

Service Category	Nature of Service	Frequency	Begin/End Date	Weeks	Primary Provider/ Other Service Provider	Personnel/Parent Support Training
Instructional Supports	Other: Graphic Organizer	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Model use of graphic organizer, including prompting levels, and use during homework assignments
Program Modifications	Chunking of text	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Clearly articulate amount of grade-level text appropriate when working on this goal during homework
Physical/ Environmental Supports	Reduce paper/pencil responses	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Limit paper/pencil responses (appropriate for math computation, completing scanned

Area of Need: Reading Comprehension at 5th Grade Level						
						assessments, 1-2 word responses)
Physical/ Environment Supports	Other: Word processor with spell check	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Use for responses involving construction of full sentences and/or paragraphs across all settings
Physical/ Environment Supports	Other: Proofreadin g Guide	Daily	6/10/20 - 6/09/21	36	General Educators, Special Educator	Have available in all subjects, use when proofreading and editing sample paragraphs and Xavier's own work

CO-EVALUATION OF SPECIALLY DESIGNED INSTRUCTION WITH INTEGRATED ASSISTIVE TECHNOLOGY

As outlined in *A Guide for Implementing Specially Designed Instruction within an Integrated Tiered System of Supports*, collaborative evaluation of SDI is a recursive, ongoing process that yields information in two critical areas:

- The implementation of the IEP and SDI with fidelity and,
- Student outcomes.

AT is collaboratively evaluated in the same manner, to determine if the identified supports are being implemented with fidelity, and if they are having the intended impact on student progress. Data collection may occur at different times throughout the year and may include anecdotal notes, trials and formal data collection relative to IEP goals and objectives and the impact of AT on progress.

The use of AT effectively aligned to learner needs will yield greater access to the general education curriculum. Reflect upon the following three questions when evaluating AT:

- Is the student progressing?
- Are we narrowing the gap?
- Is the AT Implemented with fidelity?

Co-evaluating the Impact of AT Solutions

Fidelity of Implementation

To determine that AT is resulting in improved outcomes for students, data must be collected to confirm that it is being implemented as planned. Co-evaluating fidelity ensures that the AT solution was actually used as intended so that teams can accurately attribute student outcomes (successful or unsuccessful) to the designated AT solution. If learner outcomes are not successful and the team knows the solution has been implemented with fidelity, then adjustments should be made to the SDI and AT support(s) as appropriate.

Collaborative teams may use fidelity checks to collect this information. Fidelity checks are simple checklists that identify the intended elements of delivery and provide space for collection of this data.

Fidelity checks can be developed by the team if a pre-made fidelity check does not already exist for the AT solution.

A Guide for Implementing Specially Designed Instruction within an Integrated Tiered System of Supports provides teams with a **Fidelity of Implementation Review Tool** (pg. 84) to use while co-evaluating the fidelity of SDI. This tool can also be used to document fidelity of the AT solution.

Co-Evaluation: Student Outcomes

If the student is making progress, then the current IEP and SDI, including the AT solution, should proceed with continuous progress monitoring. The team should review and discuss progress monitoring data to determine if any additional changes to the SDI could be made to further accelerate progress.

If the student is not making progress, the IEP team convenes to determine why and revise the IEP if necessary. Implementation data and the student's response to AT should be included in this data review to determine if new or different AT solutions may enable the student to make progress.

AT Evaluation Resources

Experts in the field of AT have developed resources to support the ongoing co-evaluation of AT. These evaluation tools are appropriate to use during the co-development process, when considering AT, and the co-evaluation process. Three influential resources include:

- [SETT Framework](http://joyzabala.com/Documents.html), developed by Joy Zaballa - <http://joyzabala.com/Documents.html>
- [ABC's of Effective AT Consideration](https://educationtechpoints.org/product/the-abcs-of-effective-at-consideration/), developed by Gayl Bowser and Penny Reed of the Coalition for AT in Oregon - <https://educationtechpoints.org/product/the-abcs-of-effective-at-consideration/>
- [JHU AT Cycle](https://marylandlearninglinks.org/the-jhu-at-assistive-technology-cycle/), developed by Jeanne Dwyer at the Johns Hopkins University School of Education, Center for Technology in Education - <https://marylandlearninglinks.org/the-jhu-at-assistive-technology-cycle/>

Xavier’s team reviews the criteria listed in his IEP goals and develops data collection sheets to assess both fidelity of implementation and his progress towards mastery of IEP goals.

Data Collection Example

Student Name: Xavier Teacher Name: Mr. Hall Subject Area: Social Studies		Marking Period: Qtr. 1 Week of: 9/1/XX - 9/5/XX	Prompt Level: No more than 5 verbal Mastery Level: 3 consecutive assessments
<p>Annual Goal: Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by independently answering questions requiring inferencing or drawing conclusions with 80% accuracy as demonstrated on teacher-made assessments, on 3 consecutive assessments, by June, X, XXXX.</p> <p>First Quarter Objective: Given graphic organizers and literary text at the 5th grade reading level, Xavier will improve his reading comprehension by answering questions requiring inferencing or drawing conclusions with 80% accuracy and no more than 5 verbal prompts, on 3 consecutive assessments by November, X, XXX.</p>			
Date	Task	% accuracy	Prompts
Monday, 9/1/XX Supplementary Aids: <input type="checkbox"/> Graphic Organizer <input type="checkbox"/> Chunking of Text <input type="checkbox"/> Word Processor	Read pages 9 -10 from “Our Place in the World”, use graphic organizer, and answer 5 inference questions	___/ 5	___/ 5 verbal
Wednesday, 9/3/XX Supplementary Aids: <input type="checkbox"/> Graphic Organizer <input type="checkbox"/> Chunking of Text <input type="checkbox"/> Word Processor	Read pages 11-12 from “Our Place in the World”, use graphic organizer, and answer 5 inference questions	___/ 5	___/ 5 verbal
Friday, 9/5/XX Supplementary Aids: <input type="checkbox"/> Graphic Organizer <input type="checkbox"/> Chunking of Text <input type="checkbox"/> Word Processor	Read pages 12-13 from “Our Place in the World”, use graphic organizer, and answer 5 inference questions	___/ 5	___/ 5 verbal

Data Collection Example

Student Name: Xavier Teacher Name: Ms. Hammond Subject Area: Science	Marking Period: Qtr. 1 Week of: 9/1/XX - 9/5/XX	Prompt Level: No more than 2 gestures Mastery Level: 30 characters copied 95% accuracy
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Annual Goal: Given a task to copy written text from any source, Xavier will use his word processor to accurately copy 60 characters per minute from the whiteboard or a textbook with 95% accuracy (fewer than 5 copying errors per 100 characters) across all settings by June X, XXXX.

First Quarter Objective: Given a task to copy written text from any source, Xavier will use his word processor to accurately copy 30 characters per minute from the whiteboard or a textbook with 95% accuracy (fewer than 5 copying errors per 100 characters) and no more than 2 gestural prompts, across all settings by November X, XXXX.

Target skill: Xavier will copy 30 characters per min with 95% accuracy and no more than 2 g prompts,

Yes = target met

No= target not met

NA = did not work on the goal

Subject	Monday	Tuesday	Wednesday	Thursday	Friday
ELA					
Math					
Social Studies					
Science					

CONCLUSION

AT is a powerful element of SDI that is considered for all students with disabilities as part of the IEP process. When AT is required to support access to and progress in general education for a student with a disability, the AT supports are thoughtfully and collaboratively developed, implemented and evaluated as a seamless part of the student's overall SDI. This natural integration will support the accelerated progress of students with disabilities. For additional information about the integration of AT within SDI, the following resources are available:

- [Maryland Assistive Technology Network](#)
- [Supporting the use of Assistive Technology in a Virtual and/or Distance Learning Environment Technical Assistance Bulletin](#)

