

Lincoln Parish School System

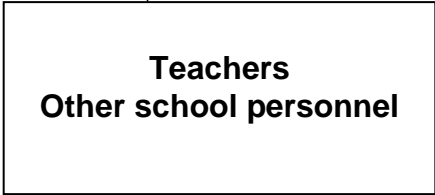
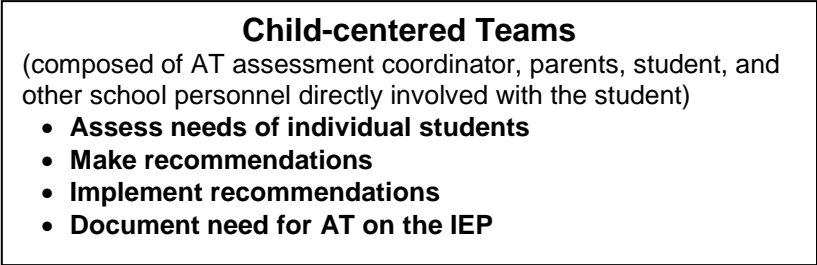
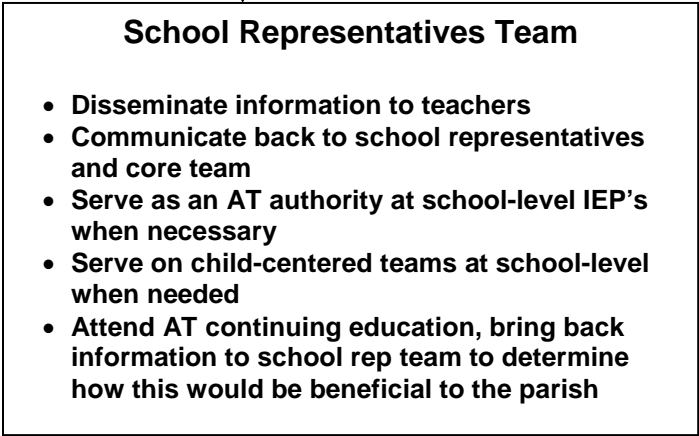
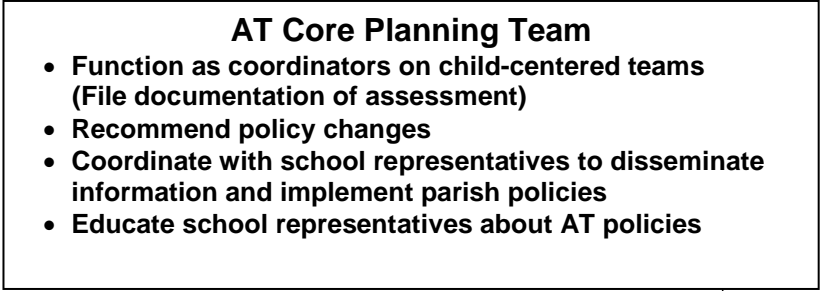
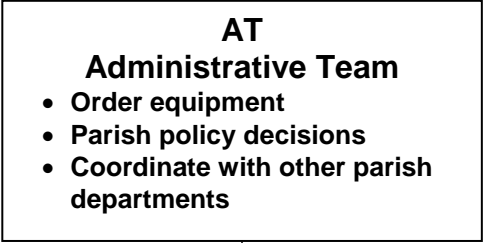


Assistive Technology Policy and Procedures Handbook

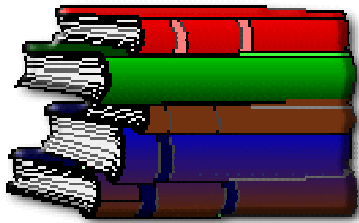
MISSION STATEMENT

Lincoln Parish has always been recognized for its excellent educational system. This excellence results from the efforts of the system's personnel to challenge **all students** to achieve their highest academic standards. Administrators, teachers, and staff are dedicated to overseeing that all students are encouraged to excel to their fullest potential and become productive members of our society.

In continuing our tradition of excellence, our mission is to raise expectations for **all students** to an even higher level through the use of technology. Technology can significantly impact learning, independence, self-esteem, and quality of life. For some students with disabilities, technology provides the only effective method for access to the general education curriculum and gives them the resources to actively participate with their peers and make progress toward their educational goals.



Legal Mandates



Legal Requirements

The Individuals with Disabilities Education Improvement Act of 2004 (IDEA) mandates that school systems address assistive technology when it is required as part of a student's special education services, related services, or supplementary aids and services. IDEA defines assistive technology as both a device and service.

Definitions

ASSISTIVE TECHNOLOGY DEVICE

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 child with a disability (P.L. 108-446, Part A, Section 602 (1) (A)).

This term does not include a medical device that is surgically implanted, or the replacement of such device (P.L. 108-446, Part A, Section 602 (1) (B)).

This is a broad definition which includes a wide variety of low tech to high tech items that might be considered as assistive technology devices. To make it easier for educators to identify tools and resources that a student may need, assistive technology is typically categorized into the following areas of need: physical, fine/gross motor, communication, sensory, academic, recreation/leisure, vocational, and self-help.



Definitions cont.

ASSISTIVE TECHNOLOGY SERVICE

Any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device.

The term includes-

Evaluation of needs in the child's customary environment;

Purchasing, leasing or otherwise providing for the acquisition of assistive technology devices;

Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices;

Coordinating with other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;

Training or technical assistance for a child with disabilities, or where appropriate that child's family; and

Training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers or others(s) who provide services to employ, or are otherwise substantially involved in the major life functions of children with disabilities (P.L. 108-446, Part A, Section 602 (2)).



Definitions for IEP Teams

LOW, MID, AND HIGH TECHNOLOGY

The definition of AT in the law is broad and includes almost any type of device used to support the education of a student with a disability. Because IDEA is very broad this gives IEP teams the flexibility that they need to make decisions about appropriate assistive technology devices for individual students. Although the IDEA uses the term “device”, IEP teams should remember that assistive technology also includes assistive technology hardware and software. A classroom computer with a word processing program, for example, can be considered assistive technology for a student who demonstrates difficulty in writing and spelling if the IEP team has determined that it is educationally necessary.

As used in this document, *assistive technology device* includes devices, hardware, and software that are required by a student with a disability. Assistive technology devices can be purchased from a local store or a vendor that specializes in the production and sale of assistive technology devices. Assistive technology devices often need to be modified or customized to meet the individual needs of a student with a disability. A computer keyboard, for example, may need to be adapted through the addition of tactile locator dots for a student with a visual impairment. When determining assistive technology needs, IEP teams should consider commercially available solutions that may be used “as is” or that can be modified to meet the student’s needs. In some situations, however, it may even be necessary to construct a device to meet the student’s unique needs.



A range of assistive technology devices is available. Some are relatively “low tech” and inexpensive. A pencil grip, for example, is an assistive technology device that may be used by students with a physical disability to improve handwritten communication through increasing their grasp of and control over their pencil. An adapted cup with enlarged handles may be used by a student who has difficulty holding a standard cup. Other devices are more “high tech” tools and are often more expensive. An example of a “high tech” tool is an augmentative

communication device in which a student types in messages on a communication display and they are spoken aloud.

Once an assistive technology device has been determined to be educationally necessary, the student's IEP team **should describe the required device(s) in the IEP without naming a specific brand name (e.g. text to speech, not Kurzweil).**

LOW TECH	MID TECH	HIGH TECH
Color filters	AT Notebook	Text-To-Speech Program
Transparency files	Digital Recorder	Writing with Symbols
Magnifiers	Fraction Calculator	Write OutLoud
Highlighters	Talking Calculator	IntelliTalk II
Highlighter Tape	Portable Word Processor	Word Processor Program
Math Tables	Reading Pen	Spell Catcher
Tape Flags	Note taking pen	Kidspiration
Hefty Tabs	Hand - Held PDA	Draft Builder
Color Coding Dots	Audio book tape player	Braille Writer
Post It Notes	Tape recorder	Word Predication
Assistive Pens	Start-to-Finish Books	Math Pad
Colored Pens	Calculator	Alternative keyboard
Lighted Pens	Music (tapes/CDs)	Alternative cursor control
Raised Line Paper	Mini-book lights	Spell checker
Pencil Grips	Switch operated toys	Voice output device with dynamic display
Rubber Stamps(Alpha)	Amplification System	Voice output device with speech synthesis
Rubber Stamps (Math)	Magnetic Sheets	
Graphic Organizers Eye gaze frame Communication board with pictures/words/objects	Simple voice output device	

Instructional Technology and Assistive Technology

AT is not educational/instructional technology. The Association for Educational Communications and Technology (AECT) defines instructional technology as “the theory and practice of design, utilization, management, and evaluation of processes and resources for learning” (AECT, 2005). This definition includes the wide range of materials, practices, and evaluations that are used in schools for teaching and learning. Educational technology (hardware and software) functions as a supplement to the curriculum. It reinforces concepts taught and is one of the many instructional tools available to a teacher. Educational technology should not be specified in the IEP.

Instructional technology includes any type of technology or strategy that is used in the teaching and learning process.



Assistive technology is technology that is specifically identified for persons with a disability who requires a device or service **in order to receive a Free and Appropriate Public Education (FAPE)**. Some of the technology items may be the same as those used for instructional technology, but AT is specified on a student’s IEP as being necessary for that specific student.



Universal Design for Learning

<http://bit.ly/tesbook>

Instructional technology is part of a larger concept called Universal Design for Learning. Follow the above to learn more. Educational environments that provide a variety of instructional tools (including instructional technology) offer flexible alternatives that promote access to the curriculum by all students. Universal design is a concept originally used in architecture for the construction of buildings and materials that provide access for a variety of users, including those with disabilities—like speaker-phones and curb cuts, imbedded features that benefit everyone. This term has been expanded into accessibility for learning environments and information technology. In the newly reauthorized IDEA, Section 602 (36), and the Assistive Technology Act of 1998, the term “universal design” means:

a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities, which include products and services that are directly usable (without requiring assistive technologies) and products and services that are made usable with assistive technologies.

When the concept of UDL is used effectively and the curriculum is designed to respond to individual learner differences, assistive technology (specific technology for one particular student) may not be necessary, because access to the curriculum is ensured through the instructional technology already in use.



<http://www1.center.k12.mo.us/edtECH/SB/templates.htm>

Providing Services



Gayle Browser and Penny Reed reminded us of 6 **Tech Points** we need to remember when referring a student for assistive technology.

- ✓ **Tech Point #1** – Initial Referral Question
 1. Does the student experience any deficits in performance that might be remediated or compensated for by the use of assistive technology?

- ✓ **Tech Point #2** – Evaluation Question
 1. Can the student be accurately evaluated with standard assessment procedures?
 2. What accommodations should be provided during the evaluation?
 3. Could the use of assistive technology as an accommodation during testing enhance the student's performance?
 4. Are the services of a specialist needed?
 5. Is an extended evaluation needed?

- ✓ **Tech Point #3** – Extended Assessment Questions
 1. Does the type of technology we are trying do what we thought it would do for the student?
 2. What specific device among the options we have tried is the best one?

- ✓ **Tech Point #4** – Plan Development questions
 1. Is the assistive technology that is being considered necessary for the child to meet one or more of the goals on the IEP?
 2. Are assistive technology services needed to enable the child to use the device?
 3. Was a specific assistive technology device identified in the IEP?
 4. Has periodic review been included in the IEP to identify unanticipated problems and review them?

- ✓ **Tech Point #5** – Implementation Questions
 1. What actions need to be taken to assure that the assistive technology identified by the IEP team is used effectively?
 2. Who is responsible for each of these actions?
 3. Who is responsible for monitoring each aspect of the implementation of assistive technology goals and objectives?

- ✓ **Tech Point #6** – Periodic Review Questions
 1. Are the assistive technology devices and/or services that were provided being utilized?
 2. Are the assistive technology devices and/or services functioning as expected?
 3. Have long range plans (including transition) for the student's assistive technology use been made?

REFERRAL

When the need for assessment has been indicated as a result of IEP/re-evaluation/parental concerns or SBLC screening, the IEP team should submit a referral using the Consideration Checklist, located on the IEP. Referral is the process for requesting an assessment by individuals with expertise in the area of assistive technology. These individuals are typically members of Lincoln Parish assistive technology team or consultants requested through Lincoln Parish Special Education Office. The point of entry for a referral is to send the Consideration Checklist to the Special Education Office ATT: Head of Technology Team. At that point a team will be put together on case by case basis depending on the student's individual needs.

The referral provides valuable information to the assessment team about the student's current needs and issues regarding why the assessment is needed. A referral typically follows the IEP consideration or SBLC screening determinations. It is completed when any of the following determinations have been made:

- The student cannot independently perform a task within his/her curriculum.
- Accommodations or assistive technology currently in place are not effective.
- Decisions about the assistive technology needs are beyond the scope of knowledge of the IEP team.

Referral information will assist the assessment team in focusing on what is to be assessed. The IEP team must agree on the issues being addressed and focus the referral on the functional capabilities of a student and the barriers created by the student's disability. The referral form (found on the IEP is the **Assistive Technology Consideration Checklist**) was developed to help the IEP team frame assessment questions about the student, the environment, the task, and the educational strategies or technology.

The referral includes the following information:

- The specific task the student needs to do.
- The student's current level of performance on that task.
- The affect of the student's disability on his/her performance.
- The environments in which the task needs to be done.
- Any environmental concerns or other issues that the assessment team needs to know about.
- Specific tools or strategies that someone on the team thinks should be considered.
- Assistive technology or accommodations that are currently in place.



ASSESSMENT

Following delivery of a completed referral, the AT team will schedule an assessment. Members of the team will conduct the assessment in consultation with the student's IEP team. If this is not an initial the assessment will include a consultation with the student, the regular education teacher, the special education teacher and the parent. The AT team, in collaboration with the student's IEP team, may determine that an extended trial use period of a particular device is needed prior to finalizing the assessment process. When the assessment has been completed, a summary of the results, including recommendations, will be sent to the teacher, parent, pupil appraisal and special education office. After review of the results, the IEP team will make a decision regarding assistive technology, and the special education teacher will document this decision on the IEP.



The Assistive Technology Team

Assistive technology assessments should be conducted by a multidisciplinary team comprised of people who collectively have knowledge about the abilities and needs of the student, the demands of the customary environments, the educational objectives, and assistive technology devices and services. **At least one member of the team should have knowledge of the assistive technology needed in the student's deficit area.** Various team members bring different information and strengths to the assessment process. The members of an assistive technology team for a student are usually determined by the educational needs of that student and may vary depending on the components of assessment required for a student. An assistive technology assessment should actively involve the student's parents, and when appropriate, the student. The following team members represent a list of individuals who may be involved in the assessment process:

- A person knowledgeable about assistive technology devices and services (such as an Assistive Technology Specialist).
- A person knowledgeable in the area of language, usually a speech/language pathologist.
- A person knowledgeable in the area of motor, often an occupational or physical therapist.
- A person who is familiar with the parish curriculum (such as an Inclusion Strategist.)
- A person who has knowledge about transition services (such as the Transition Coordinator).
- A person who can commit the district's resources, not only for purchase of devices, but also to authorize staff training and guarantee implementation in various education settings, usually an administrator.

Input may be obtained from any of the following:

<ul style="list-style-type: none"> • Special education teacher • Regular education teacher • Paraprofessional 	<ul style="list-style-type: none"> • Student • Parent • School nurse
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The above is not an exhaustive list and should be customized for each student. Any staff member who is part of the decision-making process or is involved in the implementation of the assistive technology recommendations may be included in the assessment process. The team may be selected based on a student observation conducted by the team leader or the assistive technology professional assigned by the school district.

The IEP team decides whether assistive technology is required, may be required, or that more information is needed in order to make a decision. If the team determines that the student requires assistive technology and is aware of technology that meets the student's needs, such as technology that is already available in the student's educational environment, they record the assistive technology decision on the IEP. In a case in which the team is unsure of the need, appropriateness, or the availability of assistive technology during the consideration discussion, the team will need to **refer** the student for an assistive technology assessment. To document this referral, the IEP team completes the Assistive Technology Consideration Checklist found on the IEP

See **Assistive Technology Consideration Checklist (follow this link)**

<http://www.alpha-tech.com/lpsb/specialed.htm>

Find this form on each IEP and use at every IEP to consider AT on a yearly basis

STEPS FOR IEP TEAM TO FOLLOW:

Step 1: Complete the Consideration Checklist

Each IEP team in Lincoln Parish school system will consider assistive technology as a part of the development, review, and revision of the student's annual IEP. Consideration for eligibility must be given for every student with a disability who is eligible for an IEP. The IEP team will complete the Assistive Technology Consideration Checklist at each IEP meeting, and this will become part of the IEP. If a referral is being made at that time send a copy of the Consideration Checklist to the Special Education Office: Head of Technology Department.

Frame the Question

When IEP teams begin to look at the assistive technology needs of an individual student, they sometimes ask questions that are too general such as "Does this student need assistive technology?" They sometimes ask questions that are too specific, like "how can this student use a computer to communicate?" A poorly framed question can cause an IEP team a lot of trouble.

Assistive technology should be implemented in order to promote independence. So, assistive technology questions should be framed around the barrier that keeps a student from meeting IEP goals or from having access to the general curriculum. The definition of assistive technology specifies that it is used to "improve, increase, or maintain the functional capabilities of a student with disabilities." A good question is "**What task(s) is this student unable to do that may be improved by assistive technology?**"

A good referral question should be crafted so that everyone on the team knows what is going to be assessed. A good initial assistive technology question should include the following information:

1. What is the task the student needs to accomplish?
2. What is the student's present level of performance on the task?
3. How is the student's disability affecting his/her performance?
4. Where (in what environment/setting) does this task need to be done?
5. Are there environmental concerns or other issues that the AT team needs to know about?
6. Are there specific tools/strategies that should be considered?

Procedures at the IEP meeting

The IEP team discusses whether assistive technology is required, may be required, or that more information is needed in order to make a decision. If the team determines that the student requires assistive technology and is aware of technology that meets the student's needs, such as technology that is already available in the student's educational environment, they record the assistive technology decision on the IEP. In a case in which the team is unsure of the need, appropriateness, or the availability of assistive technology during the consideration discussion, the team will need to refer the student for an assistive technology assessment.

See Assistive Technology Consideration Checklist (*this form is found on IEP form*)

Use this form at every IEP to consider AT on a yearly basis

The Assistive Technology Consideration Checklist will be completed at each IEP meeting. This becomes a part of this student's IEP, and should be filed in the teacher's green folder in the evaluation section; sent to the IEP facilitator with the IEP; and given to the parent with a copy of the IEP. If a referral is being made with the Consideration Checklist, a copy of the Consideration Checklist should also be sent to Special Education Office: Att: Head of the technology team.

Procedures For an Initial Evaluation

Following Bulletin 1508 procedures, assistive technology must be considered by the SBLC as part of pre-referral activities. Screening may include results of previous trials with technology and/or other interventions and strategies. Anyone who works closely with the student may complete an AT screening; however, it is the primary responsibility of the student's teacher (with assistance from other service providers) to complete the **Assistive Technology Consideration Checklist**. Screenings must be conducted on all students referred for an initial evaluation and will be documented in the Pupil Appraisal Evaluation.

Possible conclusions of the consideration process:

<p>The student independently accomplishes required tasks within the school environment using standard classroom tools.</p>	<p>Assistive technology is not required.</p> <p>Document this on the IEP.</p>
<p>The student accomplishes the required tasks within the school environment using standard classroom accommodations that are currently in place.</p>	<p>Assistive technology is not required.</p> <p>Document this on the IEP.</p>
<p>The student accomplishes the required tasks within the school environment with assistive technology that is currently in place.</p>	<p>Assistive technology is required.</p> <p>Document the required assistive technology devices and services on the IEP.</p> <p>Monitor the use of the assistive technology and make changes as needed.</p>
<p>The student <u>cannot</u> accomplish the required tasks within the school environment with accommodations and/or assistive technology that are currently in place.</p>	<p>Assistive technology is required.</p> <p>Make a referral, use the Consideration Checklist</p> <p>Send to Special Education Office: Head of Tech Team</p>

STEP 2: Document Assistive Technology on the IEP

Assistive technology devices and services that have been determined to be educationally necessary by the IEP team will be described/documented in the student's IEP. It is important to contact the Special Education Department: Head of Technology Team to assist in documentation.

ALSO NOTE IF THE IEP TEAM DECIDES A DEVICE IS NOT WORKING FOR A STUDENT, CONTACT THE PARENT BEFORE REMOVING TECHNOLOGY FROM IEP, CONTACT THE SPECIAL EDUCATION DEPARTMENT: HEAD OF TECHNOLOGY TEAM AND REPORT THIS STUDENT IS BEING REMOVED FROM TECHNOLOGY.

DOCUMENT THIS IN THE ASSISTIVE TECHNOLOGY BOX ON GSI PAGE ON IEP. PARENTS MUST INITIAL THIS IEP. THIS IS AN AMENDMENT.

Send copy to Special Ed. office: IEP Fascinator

Procedures:

The IEP team will document consideration of assistive technology devices and services in the following components of the IEP:

1. General Student Information

Document the decision, from the Consideration Checklist, in the AT section in the General Student Information (GSI). Examples of appropriate documentation:

AT needs were considered but are not applicable at this time.
Current strategies and accommodations are sufficient in meeting the student's needs, thus AT is not warranted.
Additional information is needed to determine if this student needs AT to meet his/her goals. A referral to the AT Team will be made.

For students with AT needs, document pertinent information in other components of GSI.

Academic, Developmental and Functional Needs:

John demonstrates deficits in reading decoding, comprehension, as well as writing, spelling, grammar, and punctuation.

Assistive Technology Devices/Services:

John should have access, within the classroom setting, to a computer word processing program with text-to-speech capabilities, built-in spell check, grammar and punctuation check (such as Kurzweil).

2. Instructional Plan

Present Levels of Academic Achievement and Functional Performance:

This component of the IEP includes statements regarding the student's current level of functioning across curricular areas, as well as the information about strengths and weakness (what can he/she do well, what he/she can not do well). This is an appropriate place to discuss how assistive technology will be used to remediate deficits and enhance access to the classroom curriculum.

Example:

John has difficulty decoding words and with reading comprehension skills. He demonstrates difficulty completing all writing assignments using standard classroom tools such as pencil and paper. His writing samples are characterized by spelling, grammar, and punctuation errors. He comprehends better when he is able to hear the material read aloud and have the words highlighted for him. He also demonstrates proficiency in manipulative devices such as a keyboard.

Annual Goals: If a student is using assistive technology, it should be addressed in the goals. Typically, a separate goal is not necessary because the assistive technology is simply a tool that assists the student in accomplishing the objective. (A separate goal may need to be written when it is expected that the student will require extended time to learn to use the technology.) The IEP team should determine the educational goals first and then decide how technology will be used to help accomplish them.

Example:

John will pass (75% or above) 2 out of 6 comprehension tests when given within his regular classroom using a text-to-speech program such as Kurzweil.

John will write a 150 word 2 paragraph essay using word prediction, spell check, and text-to-speech software.

3. Accommodations for LEAP:

Assistive technology that the student requires to participate in state-wide and district-wide assessments should be documented in this component of the IEP. The type of technology that is used by the student may determine that additional LEAP accommodations are needed.

Example for a student, who uses portable word processor:

Portable word processor and Transferred Answers would both be indicated in addition to any other accommodations needed.

4. Accommodations Needed Page:

Assistive Technology must be documented in this section of the IEP if the student is using the technology in the school setting. This technology accommodation must agree with documentation in General Student Information and with LEAP accommodations on the Program/Service page.

Unless the IEP team has determined that a particular make and model of a device is required, it is best to describe features of the required technology; for example, the IEP team may use the description of a “talking word processing application with a built-in spell check” rather than the name of a particular program. If the IEP team determines that only one particular model will meet the student’s need, then the specific model should be listed by name.

Example:

Not Kurzweil, but text-to-speech program with spell check,
grammar check and word prediction

Not Alpha Smart, but portable word processor

Not Alpha Smart with co-writer, but portable word processor with
word prediction.

5. Transition:

IDEA requires that, beginning at age 16, a student's IEP must have a statement of the transition service needs of the student that focuses on the student's courses of study, including a statement of interagency responsibilities. Equipment provided for a student enrolled in Lincoln Parish Schools is returned to the school district upon exiting the school system. If assistive technology and services have been provided as part of the student's school program, a determination regarding continued need after exiting the school system must be made by the IEP team. Provisions for interagency support for assistive technology devices and services should be specified as part of the transition plan, when appropriate

In some cases, the IEP team consideration may lead to a recommendation for a short-term trial with new strategies or devices. The IEP team would then address this under **special factors** section in the IEP, and contact the AT team using the **Equipment Request Form** to obtain the necessary assistive technology if it is not readily available.

When appropriate, especially following completion of an initial AT assessment, an **Action Plan** will need to be completed to document the roles and responsibilities of team members in implementing the assistive technology.

Implementation and Integration

The student's IEP team (special education teacher, regular education teacher, paraprofessional, ODR, student, parent and others) will implement the student's assistive technology intervention program as outlined in the student's IEP

Device Training and Support:

The school staff (special education teacher, regular education teacher, paraprofessional, student and other key individuals) parent/family and student will participate in training and in-services as needed to obtain the skills and expertise necessary to implement the assistive technology intervention program. It will be the responsibility of the AT team to provide or arrange for trainings.

The school staff (the special education teacher, regular education teacher, paraprofessional, student and other key individuals) are the ones that will implement the needed services. After being trained, they will ensure that the assistive technology is integrated in all relevant environments. They will maintain, or customize the assistive technology to meet the student's individual needs. Sometimes, when AT devices fail to meet the needs of a student, the lack of success are related more to the lack of AT services than to a problem with the assistive technology device itself.

When the IEP team considers students' need for AT, they must think not only about devices that the student might need, but also the associated services that will be required. For example, providing a communication aid for a student without providing adequate training for the special education teacher, regular education teacher, paraprofessional, student, parent and other key individuals fails to provide a needed service.

The school staff (special education teacher, regular education teacher, paraprofessional, ODR) parent/family and student will ensure that the available assistive technology is integrated into all appropriate curricular activities and accommodated as needed to meet students' needs.

Device Maintenance and Repair:

When equipment is not in working order, the local school staff will contact the special education department. The office secretary will take the message and deliver it to the appropriate personnel.



Policy For Transfer of Equipment

When the student is no longer eligible for special education services in Lincoln Parish Schools, or moves to another school district, the assistive technology devices will be returned to Lincoln Parish Schools Special Education Department.

Monitoring the Use and Effectiveness of Assistive Technology

The IEP team IEP teams are required to review the student's educational plan at least annually to make sure that the student is able to meet the educational goals that were set during the IEP meeting. When a team meets to review a child's progress toward meeting goals, they should also review the student's progress in learning and using assistive technology. If, at the time the IEP team decides this is the wrong Assistive Technology for this student the special education teacher needs to call the special education office and let the head of the technology team know that this student will no longer be participating in the program. Pulling a student off of technology and putting the student back on over and over does not give us a good look at the progress of the student or the effect of the device.

The School Representation Team is selected professionals from each school level with additional training in technology. They are responsible for collecting data on the student's use of assistive technology as outlined in the IEP; within their school. It is important to ensure that data is collected, evaluated, and interpreted by capable and credible team members for each student in that building. If a school does not have a school representative on the technology team one will be appointed to the school. Data should be collected on specific student behaviors that have been identified by the team and are related to one or more goals. This data can be based upon the method of measurements identified on the IEP, (e.g. grades, work samples, checklist). Evaluation of progress should reflect objective measurement of changes in the student's performance and independence (e.g., strategic competence, social competence, function competence, operational competence,.) The student's IEP team will analyze the data to determine the continued appropriateness of the assistive technology intervention and to make changes in programming as needed. It will be important that teachers are implementing the use of the assistive technology.

The AT team Effectiveness of technology should be evaluated across environments, including naturally occurring opportunities as well as structured activities. This evaluation of effectiveness is a dynamic, responsive, ongoing process that should be reviewed periodically. Just one look may not be enough. A student's AT competence can be considered from four different perspectives: (Adapted from Light, & Binger, p.2) these perspectives are described on the following pages. The form which follows the descriptions may be used by the school representation team as they review the student's progress in learning to use AT to overcome barriers in real world settings. This information can be used to revise the AT plan or to add new goals as the student is ready to gain additional

competence. Keep in mind; some type of data will need to be collected to show progress in the use of assistive technology

Operational Competence Operational competence describes whether the student has learned to make the device work. Can the student turn it on? Can the student make it do the things that it was designed to do? How well can the student operate the device?



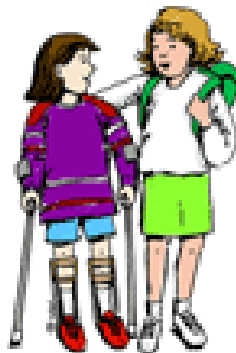
Functional Competence Functional competence describes how well the student is able to use the device to overcome educational barriers. If the student uses a portable word processor for writing, has the student's writing improved? If the student uses an augmentative communication device to talk to friends, are friends better able to understand what the student has to say? How does the assistive technology device help the student with functional life skills?



Strategic Competence Strategic competence describes whether the student understands when to use the AT device. Is the device used for all writing or only for longer written assignments? Does the student actually use a text-to-speech device to get attention or to understand written material that he/she is unable to decode? Does the student know when the device will be helpful and when some other approach to eliminating the barrier should be applied?



Social Competence Social Competence describes how a student uses the assistive technology device around other people. Is the student able to explain how the device makes mobility possible? Does the device restrict social interaction in any way? If it does, what does the student do to overcome this AT-imposed barrier? How does the device help the student in social and real-world contexts?



Aspects of Assistive Technology Competence

Operational Competence: Does the student know how to work the technology

Functional Competence: Does the student know what to do with the technology?

Strategic Competence: Does the student know when/when not to use the technology? Is the student becoming more independent?

Social Competence: Can the student use it in a social or real-world context?

ROLES AND RESPONSIBILITIES

Roles and Responsibilities of Administrative Team Assistive Technology Team

1. Point of entry for need (receives Consideration Checklist)
2. Screening and evaluation team identification
3. Providing equipment
4. Monitoring IEP's
5. Providing Training & on-going support
6. Parish policy decisions
7. Coordinate with other parish departments

Roles and Responsibilities of AT Core Planning Team

1. Function as coordinators on child-centered teams
(File documentation of assessment)
2. Recommend policy changes
3. Coordinate with school representatives to disseminate information and implement parish policies

School Representatives Team

1. Monitor competence of students in your building to use AT equipment
2. Disseminate information back to representatives and core team
3. Serve as an AT authority at school-level IEP's when necessary
4. Serve on child-centered teams at school-level when needed.
5. Attend AT continuing education, bring back information to school rep team to determine how to move forward.

The IEP



Part 1: Complete the Consideration Checklist

Part 2: Document Assistive Technology on the IEP

Part 3: Monitor progress in the classroom

Job Description



Description of Job Requirements

Assistive Technology Specialist

Position: Assistive Technology Specialist

Responsible To: Director of Special Education

1. Bachelors degree with major in Special Education, Speech and Language Therapy, Occupational Therapy or related field.
2. Five or more years of experience providing direct services in the area of assistive technology. Preference is given to individuals who have an AT credential from a college or university.
3. Recent experience performing functional assistive technology assessments in a school setting and knowledge of how to integrate assistive technology use into curriculum and functional life skills.
4. Knowledge of a wide range of assistive technology devices such as computer software, augmentative communication devices, low tech assistive technology tools, and technology for hearing and vision disabilities as well as hands-on experience with these devices.
5. Computer skills including the ability to complete basic troubleshooting.
6. Demonstrated skill in consultation and collaboration with a variety of IEP teams.
7. Demonstrated skill in written and oral communication.
8. Experience designing and delivering professional development opportunities.

Assistive Technology Specialist Responsibilities:

1. Assemble and lead the Assistive technology team; core team and school representation teams.
2. Serve as point of entry for referral for assistive technology.
3. Gather an AT assessment team appropriate for individual students' referral.
4. Support IEP teams in completing assistive technology assessments.
5. Provide or arrange for training and support for school personnel in integrating assistive technology.
6. Provide or arrange for training and support for families and care providers in integrating assistive technology.
7. Provide or assign personnel to troubleshoot technical difficulties and provide technical assistance and basic maintenance for assistive technology devices.

Participate as a team member or assign appropriate personnel when IEP teams need additional expertise to consider and implement assistive technology programs.

List of possible assistive technology devices

This list is provided to assist in the consideration of assistive technology for the development, review or revision of a student's educational program. It provides some tools and strategies that teams may want to investigate as possible technology solutions. This is not a complete list of assistive technology resources and strategies. The educational team should consider additional resources when making decisions for a student's needs.

<p>A. Motor Aspects of Writing</p> <ul style="list-style-type: none">▪ Pencil or pen with adaptive grip▪ Adapted paper (raised, highlighted lines)▪ Slantboard▪ Typewriter▪ Portable word processor▪ Computer	<p>B. Computer Access</p> <ul style="list-style-type: none">▪ Keyboard using accessibility options▪ Keyguard▪ Arm support▪ Track ball, track pad, joystick with onscreen keyboard▪ Alternate keyboard▪ Mouth stick or head pointer▪ Switch with Morse code▪ Switch with scanning▪ Voice recognition software▪ Word prediction software▪ Head mouse with onscreen keyboard▪
<p>C. Composing Written Material</p> <ul style="list-style-type: none">▪ Word cards, word book, word wall▪ Pocket dictionary or thesaurus▪ Electronic or talking dictionary, spell checker▪ Word processor with spell, grammar check and graphic organizers▪ Talking word processor▪ Multimedia software▪ Concept mapping and outlining software▪ Word processor with word prediction▪ Voice recognition software	<p>D. Communication</p> <ul style="list-style-type: none">▪ Communication board or book with pictures or words▪ Eye gaze board▪ Simple voice output device▪ Voice output device with levels▪ Dynamic display voice output device▪ Voice output device with icon sequencing▪ Device with speech synthesis for typing

E. Reading

- Changes in text size, spacing, color or background color
- Use of pictures with text
- Book adapted for page turning (3-ring binder, page “fluffers”, cardboard in page protector)
- Talking electronic dictionary to pronounce challenging words
- Flatbed scanner with talking word processor
- Books on tape or disc
- Electronic books
- Text-to-speech software
- Concept mapping and outlining software

F. Learning and Studying

- Print or picture schedule
- Low-tech aids to find and organize materials (index tabs, color folders, pocket notebooks)
- Highlighted text (markers, ruler, tape)
- Software for manipulation of objects or concept development
- Software for organization of ideas and studying
- Recorded material (books on tape, taped lectures)

G. Math

- Abacus or math line
- Calculator (with print out)
- Talking calculator
- Calculator with large keys/large readout
- On-screen calculator
- Software with templates for calculation
- Tactile or voice output measuring device (clock, watch, ruler)
- Electronic math/concept manipulatives

H. Recreation

- Adapted toys, games (with handles)
- Use of battery interrupter and switch to operate toy
- Adaptive sporting equipment (lighted or bell ball, Velcro mitt)
- Universal cuff/adapted handles to hold crayons, markers or paintbrush
- Modified utensils (stampers, scissors)
- Arm support for drawing, painting
- Music on electronic players
- Drawing or graphic software programs
- Recreational computer/electronic games
- Music software

<p>I. Activities of Daily Living</p> <ul style="list-style-type: none"> ▪ Adapted eating utensils/devices ▪ Adapted drinking devices ▪ Adapted dressing devices (zipper pull, button hook) ▪ Adapted devices for toileting 	<p>J. Mobility</p> <ul style="list-style-type: none"> ▪ Cane or Walker ▪ Grab rails ▪ Strollers ▪ Manual wheelchair ▪ Powered wheelchair
<p>K. Environmental Control</p> <ul style="list-style-type: none"> ▪ Light switch extensions ▪ Adapted door pulls ▪ Electronic control units/switches to operate electrical devices (radio, tape players) ▪ Radio or ultrasound remotes to control electrical devices 	<p>L. Positioning and Seating</p> <ul style="list-style-type: none"> ▪ Nonslip surfaces on chairs ▪ Bolsters and blocks for feet ▪ Adapted chairs, standers ▪ Custom fitted wheelchair or seat insert
<p>M. Vision</p> <ul style="list-style-type: none"> ▪ Magnifiers ▪ Large print books ▪ Screen magnifier ▪ Screen color contrast ▪ Screen magnification software ▪ Closed circuit TV ▪ Screen reader ▪ Braille keyboard and note taker ▪ Braille translation software 	<p>N. Hearing</p> <ul style="list-style-type: none"> ▪ Hearing aids ▪ FM system ▪ Classroom amplification ▪ Captioning ▪ Signaling devices (vibrating pager) ▪ Screen flash for alert signal on computer



The Accessible Instructional Materials (AIM) Consortium

What is the AIM Consortium?

As part of a US Department of Education grant for the provision of Accessible Instructional Materials (AIM) the Louisiana Department of Education (LDE) entered into a consortium project with the Center of Applied Special Technologies (CAST) and the states of Delaware, Georgia, Iowa, Maine, Massachusetts, Michigan, Minnesota, Missouri, New York, Pennsylvania, Utah, Vermont, Wisconsin and Wyoming. Parts 1 and 3 of the consortium project provided for integrated activities with all members of the consortium and CAST. Part 2 of the consortium project allowed each state to develop focused state activities.

What are the focused state activities for LA?

Louisiana will focus on 3 areas:

1. Develop data management and tracking systems for administering NIMAS files and delivering instructional materials in accessible formats.
2. Develop and implement a plan for providing professional development designed to improve the capacity of LEAs to understand the provisions of Section 300.172 of Part B of IDEA 2004, identify students with print disabilities, determine which specialized formats and technology tools are appropriate for students with print disabilities, and acquire specialized formats and supporting tools to students with print disabilities.
3. Improve LDE communications regarding accessible instructional materials and NIMAS by developing talking points and a core message for sharing with others.

Who benefits from AIM?

1. Students who have difficulty reading and may need supports such as text-to-speech.
2. Students who need text transferred into alternate formats such as large print, Braille or another language.
3. Students with visual difficulties who may require larger text, colored text, contrasting background or larger spacing between text

Timeline

March 2010

- Local textbook adoptions finalized
- Local coordination between Special Education Directors and Textbook Supervisors
- LEAs Opt in or out to coordinate with NIMAC
- March 1: Deadline for Textbook Supervisor to receive *Alternate Format Order Form*
- Textbook Supervisors pre-order all materials March – August 2010
- School Book Supply Company receives orders and routes non-print orders to LIMC
- LIMC secures LEAs *Assurance Forms* and *Verification of Student Eligibility Forms*
- to confirm and authorize orders
- LIMC/LATI fulfill textbook orders
- AMPs deliver materials as instructed

August 2010

- Districts provide teachers with all appropriate formats for all students at the same time

Sorting through Features: Using Accessible Instructional Materials In the Classroom

Key questions to guide Decision-making about Accessible Instructional Materials

- Does this **STUDENT** need instructional materials in specialized formats to access the curriculum and receive a free, appropriate, public education?
- In which **ENVIRONMENTS** will specialized materials be used?

- For which TASKS will the student require materials in which specialized format?
- What TOOLS will the student and others need?
- ✚ *Formats? Teaching? Technology? Training? Accommodations? Modifications?*

What tools will the student and others use in the classroom?

Barriers to Student Achievement:

Barriers can exist in each of the four components: Goals, Methods, Materials, Assessment

Five Components of Reading

- Phonemic Awareness
- Phonics
- Fluency
- Vocabulary
- Comprehension

Comprehension

- Comprehension is the essence of reading
- It's the goal of reading instruction
- Comprehension strategies should be present in everyday teaching across the curriculum
- As a strategic process, it enables readers to make connections and move beyond literal recall
- Needs to be taught explicitly and strategically
- Knowing students' reading abilities is essential for teachers

Students with a Learning Differences may present difficulties:

- Word recognition/decoding skills
- Fluency
- Language processing/ linguistic ability
- Vocabulary
- Life experience /background knowledge
- Attention
- Memory
- Meta-comprehension & application of strategies
- Expressive language weakness
- Visualizing & creating mental images
- Acquiring information from print

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Textbooks

Narrative Text Expository Text

“**Alice in Wonderland**”

Beginning, middle, and end

Plot

Characters

Structures

Setting

Science

Listing

Cause/effect

Compare/contrast

Social Studies

Problem/solutions

Compare/contrast

Time ordering

Ciborowski, J. (1999). Textbooks and the Students Who Can't Read Them: A Guide to Teaching Content

Learning Styles/Strengths

- Gifts and strengths are often overlooked
- Assessment process does not identify strengths
- Moves from deficit-oriented, remediation model of service delivery to student-centered, resource-oriented and compensatory model
- Less emphasis on passive learning, more emphasis on alternative ways of learning

Learning through Listening <http://learningthroughlistening.org/> (follow link for more information)

- Supported reading
- Allows students to focus on content
- Makes learning possible, not easier
- Levels the playing field
- Provides a model of fluent readings

Benefits of Supported Listening

- Improve listening skills
- Increase vocabulary
- Improve word recognition skills
- Teach the proper pronunciation of words

- Previewing a textbook
- Reviewing materials
- Conducting research from multiple sources

Steps to Improving Comprehension

- Identify where difficulty occurs
- Identify what the difficulty is
- Restate the difficult sentence or passage in their own words
- Look back through the text
- Look forward in the text for information that might help them to resolve the difficulty.
- Students should monitor their own comprehension
 - be aware of what they do understand
 - identify what they do not understand
 - use appropriate "fix-up" strategies to resolve problems in comprehension
- Using graphic and semantic organizers
- Answering questions
- Generating questions
- Recognizing story structure
- Setting, initiating events, internal reactions, goals, attempts, outcomes
- Summarizing
 - identify or generate main ideas
 - connect the main or central ideas
 - eliminate redundant and unnecessary information
 - remember what they read

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Accessible Instructional Materials: Braille, Audio, Digital text, Large print Implementation Ideas...

- Introduce Listening to Text in one reading environment at a time
- Only add reading output features as needed rather than starting with all features turned on & fade
- Increase reading speed over time
- Use lists of synonyms in place of long dictionary definitions
- Use pre-reading strategies of highlighting, skimming & vocabulary review
- Prepare read-along outlines, reading guides
- Use during-reading strategies of highlighting/noting main ideas, answering prepared questions,
- Predicting ahead, restating the information, story mapping

- Use after-reading strategies of bookmarking sections for test preparation, paraphrase information,
- Reflect upon reading, add notes to prepared outline

Features of Electronic Reading Systems

Functionality Version

- Scan & Read
- Read Only
- Single User
- Multiple User
- Color/Black & White
- Portability

Input (of Text) Features

- Text Source input options (type in, scanner, Internet, text files, PDF files, Daisy files)
- Navigation between pages/documents
- (Go directly to a page, Skim chapter by heading, Bookmark where they left off)

Output Features

Reading Features – Visual Feedback

- Highlight as Read (Unit - sentence, paragraph, word)
- Color (of text, of background, of highlight, of selection)
- Size (of image, of text, enlargement of words as read)
- Formatting (of image, of text)
- Masking (text, similar words, parts within words)

Reading Features – Auditory Feedback

- Unit read (sentence, paragraph, word, highlight, heading)
- Synthesizer/Digitized
- Synthesizer Language
- Digitized Recording capacity (voice notes, read over)
- Reading Speed, Pace, Pausing
- Unit read (sentence, paragraph, word, highlight, heading)
- Speech Access (talking menus, dialog boxes)
- Word Prediction List

Study Skill Features - (Supports for Understanding Unknown Words & Reading Comprehension)

- Highlighting
- Color options
- Listing/extraction
- Create new file with highlights
- Word Features
- Dictionary
- Syllabication
- Spelling
- Thesaurus
- Homonyms
- Annotations (Adding information to Reading Materials)
- Text notes (Text to Speech)
- Voice notes (Digitized Speech)
- Bookmarking

Writing Features

- Word Prediction based upon...
- As Letters are typed
- Frequency of Use
- Grammar
- Phonetic
- Custom Vocabulary
- Outlining
- Outline formatting within text
- Outline created from highlighted/extracted text
- Writing Supports
- Spell Checker (talking, definition linked to dictionary)
- Homonym Checker (examples, word wizard, used in a sentence)

Assessment Considerations when Exploring Scan and Read Systems

Assessment - Feature Match

- Individual
- Needs
- Abilities
- Expectations
- Technology
- Interface/Input
- Processing
- Output
- Properties

Assessment of the Individual – Abilities & Needs to Assess

- Motor
- Cognition
- Language/ Processing
- Sensory

Match Student Abilities & Needs to Product Features

- Visual Presentation Options
- Auditory Presentation Options
- Scanning Options
- Others: Study Skills, Writing

Remediation and Accommodation

During the past fifteen years, the focus of Special Education has expanded from its previous emphasis on remediation to include a parallel emphasis on accommodation: the provision of alternate strategies, approaches, materials, and settings that help facilitate and sustain the academic achievement of students with learning needs, especially those with disabilities. While Special Education in the 1970's predominantly concentrated on diagnosis and remediation—identify the problem and correct it—a number of practitioners and researchers expressed concern that some circumstances (blindness, for example) were not "correctable," regardless of how much remediation was available. That concern evolved into an initially subtle shift in Special Education—identify the problem and address it. That slight modification in emphasis has, twenty years later, resulted in a seismic shift in orientation. Even the term "accessible" is now contextualized in relation to disability: accessible stores, mass transit, web sites, classrooms, software—textbooks.