ASSISTIVE TECHNOLOGY IN THE IEP





Pennsylvania Training and Technical Assistance Network (PaTTAN) *Pennsylvania Department of Education* Commonwealth of Pennsylvania Edward G. Rendell, Governor

Department of Education Vicki L. Phillips, Secretary Designee

Office of Elementary and Secondary Education Thomas P. Carey, Ed.D., Deputy Secretary

Bureau of Special Education Fran Warkomski, Ed.D., Director John J. Tommasini, Assistant Director

The Pennsylvania Department of Education (PDE) does not discriminate in its educational programs, activities, or employment practices, based on race, color, national origin, sex, sexual orientation, disability, age, religion, ancestry, union membership, or any other legally protected category. Announcement of this policy is in accordance with State law including the Pennsylvania Human Relations Act and with Federal law, including Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination in Employment Act of 1967, and the Americans with Disabilities Act of 1990.

The following persons have been designated to handle inquiries regarding the non-discrimination policies:

Complaints regarding discrimination in schools:

Human Relations Representative, Intake Division, Pennsylvania Human Relations Commission, Harrisburg Regional Office (717) 787-9784; Pittsburgh Regional Office (412) 565-5395; Philadelphia Regional Office (215) 560-2496

Complaints against a Pennsylvania Department of Education employee:

Pennsylvania Department of Education, Equal Employment Opportunity Representative, Bureau of Personnel, 11th Floor, 333 Market Street, Harrisburg, PA 17126-0333; Voice Telephone: (717) 787-4417; Fax: (717) 783-9348; Text Telephone TTY: (717) 783-8445

Information on accommodations within the Department of Education for persons with disabilities: Pennsylvania Department of Education, Americans with Disabilities Act Coordinator, Bureau of Management Services, 15th Floor, 333 Market Street, Harrisburg, PA 17126-0333; Voice Telephone: (717) 783-9791; Fax: (717) 772-2317; Text Telephone TTY: (717) 783-8445

General questions regarding educational law or issues:

Pennsylvania Department of Education, School Services Unit, Director, 5th Floor, 333 Market Street, Harrisburg PA 17126-0333; Voice Telephone: (717) 783-3750; Fax: (717) 783-6802; Text Telephone TTY: (717) 783-8445

PaTTAN – Harrisburg Office: 6340 Flank Drive, Suite 600, Harrisburg, PA 17112-2764; (800) 360-7282 (PA only), (717) 541-4960; Fax: (717) 541-4968

PaTTAN – King of Prussia Office: 200 Anderson Road, King of Prussia, PA 19406; (800) 441-3215 (PA only), (610) 265-7321; Fax: (610) 265-5737

PaTTAN – Pittsburgh Office: 5347 William Flynn Highway, Gibsonia, PA 15044; (800) 446-5607 (PA only), (724) 443-7821; Fax: (724) 443-1310

Website: www.pattan.k12.pa.us

TABLE OF CONTENTS

Introductionii
Purpose1
A Word About This Booklet2
Definitions of Assistive Technology (AT)
Members of the Team
I. Special Considerations
For Students who are Deaf or Hard of Hearing7 For Students who have Communication Needs
For Students who need Assistive Technology8 For Students who need Transition Planning9
II. Present Levels of Educational Performance
Education Curriculum
III. Goals and Objectives
IV. Special Education/Related Services
V. Participation in State- and District-Wide Assessments
Questions and Answers
Appendix

INTRODUCTION:

Assistive technology devices and/or services are often essential factors in meeting the educational needs of students with disabilities. The use of assistive technology has grown in educational settings in the last 20 years, allowing students with disabilities to participate more fully in the general education curriculum. It is imperative that we recognize the function of assistive technology—it is a tool that allows a student access to the general education curriculum and/or functional routines. This booklet has been developed to assist special educators in including meaningful assistive technology information, goals and objectives in the student's Individual Education Program (IEP).



PURPOSE:

The purpose of this booklet is to provide guidance to special educators, related service providers, and parents as they develop Individual Education Programs (IEP) for students using assistive technology. With the reauthorization of IDEA in 1997, the guidelines for the provision of special education services have included participation in the general education curriculum as the foundation of the IEP. Educators have found that students with disabilities are able to successfully be involved in, and make progress in, the general education curriculum. Inclusion of these students occurs through the use of accommodations and adaptations, including the use of assistive technology. These accommodations must be documented and described in the IEP so that they are used consistently and meaningfully to allow the student to make progress toward his/her educational goals.

This booklet provides practical information and examples on how to include assistive technology in the written plan for those who are developing IEPs. The information included in IEPs should be specific and measurable, with assistive technology used as a tool to accomplish goals and objectives.



A WORD ABOUT THIS BOOKLET:

The Pennsylvania Department of Education's IEP format, developed in response to IDEA '97, is used throughout this booklet, with the intention of making it easier to see where and how assistive technology can be included. Not all sections of the IEP are reproduced; only the sections of the IEP pertinent to assistive technology have been included.

In order to facilitate use of this booklet, symbols have been used to identify specific students appearing throughout. Those symbols begin in the *How the Student's Disability Affects Involvement and Progress in General Education Curriculum* section, and continue through the *Supports for School Personnel Related to Student's Needs* section, thus illustrating each student's use of assistive technology throughout several sections of the IEP.

The students included in these sections are:

Frank



a high school student who is blind.

Sharon

a middle school student who has a visual impairment.



Caitlin



an elementary school student who has a severe language disability.

Michael



a middle school student who is hard of hearing.

Alicia



a high school student who has fine motor disability.

Elaine



a middle school student who has multiple disabilities.

DEFINITIONS OF ASSISTIVE TECHNOLOGY (AT):

Assistive Technology Device: In educational terminology, the term 'assistive technology device' refers to 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 functional capabilities of a child with a disability.

Assistive Technology Service: In educational terminology, the term 'assistive technology service' refers to any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device.

Examples of Assistive Technology Services Include:

- The evaluation of the needs of a student with a disability, including a functional evaluation of the student in the student's customary environment.
- Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by such a student.
- The selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices.
- Coordinating and using 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 such a student, or, when appropriate, the family of such a student.
- Training or technical assistance for professionals (including individuals providing education and rehabilitation services) to employ, or otherwise be substantially involved in the major life functions of such a student.

MEMBERS OF THE TEAM:

IEP TEAM/SIGNATURES*

The Individualized Education Program (IEP) Team makes the decisions about the student's program and placement. The student's parent(s), the student's regular teacher and a representative from the local education agency are required members of this team. A regular education teacher must also be included if the student participates, or may be participating in regular education. Signature on this IEP documents attendance, not agreement.

NAME (typed or printed)	POSITION (typed or printed)	SIGNATURE
	Parent	
	Parent	
	Student*	
	Regular Education Teacher	
	Special Education Teacher	
	Local Ed. Agency Rep. (Chair)	
	Community Agency Rep.**	
	Vocational Teacher	
	(if appropriate)	

* The IEP team must invite the student if transition services are being planned or if the parents choose to have the student participate.

** As determined by the LEA as needed for transition services.

IEP Team Signatures –

Consistent with previous requirements, a single member of the IEP team may meet two or more of the qualifications, but the IEP team may not consist of fewer than two people in addition to the parents.

Each IEP team shall include individuals who meet the following qualifications:

- One or both of the student's parents.
- The student, if the purpose of the meeting will be to consider transition service needs, or if younger and the parent chooses to have the student participate.
- At least one special education teacher.
- At least one regular education teacher if the student does or may participate in the regular education environment.
- One or more of the student's current teachers. If the student is newly identified a regular education teacher who provides instruction to students of the same age.
- A local educational agency representative other than the student's teacher who:
 - is qualified to provide or supervise special education;
 - is knowledgeable about the general curriculum;
 - is knowledgeable about the availability of the resources of the LEA;
 - can insure that the services specified in the IEP will be provided; and,
 - will serve as the chairperson of the IEP team.

- An individual who is familiar with the placement options of the district.
- An individual who can interpret the instructional implications of the evaluation results.
- For a newly identified student, the person who initiated the screening or identification process of the student.
- For a transition age student, other public agencies shall be invited who are likely to be responsible for providing or paying for transition services.
- For a student who is suspected to have a specific learning disability, a person qualified to conduct a diagnostic evaluation.
- Other individuals at the discretion of the parent or agency who have an interest in the student and have knowledge or special expertise regarding the student.

The team section of the new IEP format has been moved to the front page to stress that signatures on the IEP only reflect attendance at the meeting; not agreement with the IEP. This section should be completed at the very beginning of the meeting. The chairperson should identify himself or herself as such on the format.



I. SPECIAL CONSIDERATIONS THE IEP TEAM MUST CONSIDER BEFORE DEVELOPING THE IEP. ANY FACTORS CHECKED MUST BE ADDRESSED IN THE IEP.
Is the Student Blind or Visually Impaired?
No
Yes - Team must provide for instruction in Braille and the use of Braille unless the IEP Team determines, after an evaluation of the child's reading and writing skills, needs and appropriate reading and writing media (including an evaluation of the child's future needs for instruction in Braille or the use of Braille), that instruction in Braille or the use of Braille is not appropriate.
Is the Student Deaf or Hearing Impaired?
No Yes - Team must consider the child's language and communication needs, opportunities for direct communications with peers and professional personnel in the child's language and communication mode, academic level, and full range of needs, including opportunities for direct instruction in the child's language and communication mode in the development of the IEP.
COMMUNICATION NEEDS.
ASSISTIVE TECHNOLOGY, Devices and /or Services
LIMITED ENGLISH PROFICENCY
BEHAVIORS THAT IMPEDE HIS/HER LEARNING or that of OTHERS
TRANSITION SERVICES
OTHER
(Specify)

For Students Who are Blind or Visually Impaired -

The IEP team must provide Braille/Braille instruction to any student who is identified as having visual impairment unless the team determines that Braille is not appropriate for the student. This provision is new to IDEA in that it requires the IEP to provide information on why Braille should <u>not</u> be taught to a student with visual impairment.

The IEP team should incorporate into the IEP; the results of a learning media assessment, the student's present need for Braille and the likelihood of future need. The learning media assessment should be an integral part of an assistive technology assessment for any student who has a visual impairment. It is not possible to determine what assistive technology is necessary for the student without a clear understanding of his/her identified primary literacy medium, as well as the student's repertoire of literacy tools and general learning media. Assistive technology may be recommended as an additional literacy tool or as a tool to ensure equal access to instruction and information.

Questions IEP Team May Ask:

- Did the student's learning media assessment include information related to assistive technology?
 - Is there a pattern of reliance on vision, touch or other senses to gather information?
- If an assistive technology assessment was conducted, did it consider the student's literacy needs?
 - Is the student able to read his/her own handwriting?
 - Does the student have a portable method of reading and writing?
 - Is the student's academic progress impeded by the current method (visual or tactual) of reading?
 - Is there a prognosis for continued vision loss or is the vision stable?
 - Is the student able to access the same technology-based curricular materials that are provided to his/her peers (e.g., access to the Internet, word processing and instructional software)?

For Students Who are Deaf or Hard of Hearing -

Considerations must be made of the communication and language needs of the student and the student's opportunities for direct interaction with peers and educational personnel in the student's own language and communication mode. Opportunities for direct interaction (without the need for an interpreter) in the student's own language and communication mode must also be considered. All students who use manual communication (American Sign Language, Manually Coded English, Total Communication or Cued Speech) as their primary method of communication should be given consideration for placement into a classroom or program in which the teacher, other students, and the ancillary support services providers understand and use the appropriate form of non-verbal communication. For additional information concerning the language needs of students who are deaf, see "Guidelines on the Education of Students with Hearing Loss."

Questions IEP Team May Ask:

- What is the student's typical mode of communication?
- Is an interpreter or translator needed for the student to participate in and benefit from classroom instruction and/or social interaction?
- What opportunities exist to foster communication with the general population?
- What opportunities exist for direct instruction (without interpreter support) in the student's language and communication mode?

- Does the student require assistive devices to assist in the development and use of meaningful language used in direct instruction?
- What other considerations (e.g., mode of communication used at home) should be addressed?

For Students Who Have Communication Needs -

The team must give special consideration to those communication and language needs of the student. This is determined following observations of a variety of daily interactions with a variety of communication partners (professionals and peers) in a variety of settings. Consideration should also be given to the mode(s) of communication used by the student to receive information and/or provide information (communicate) to others. Family input is critical to comprehensive communication considerations.

Questions IEP Team May Ask:

- What is the student's typical mode of communication?
- What opportunities exist to foster communication with the general population?
- Do the student's communication skills impact upon learning?
- Does the student require assistive devices to assist in the development and use of meaningful language used in direct instruction?
- What other considerations (e.g., mode of communication used at home) should be addressed?

For the Student Who Needs Assistive Technology -

This includes any special equipment or technology that students may need to help them participate in school, including state- and district-wide assessment and the services required for assessment and implementation of these devices. Please note that the consideration for AT should not emphasize the disability but what the student needs to do as part of their curriculum.

Questions IEP Team May Ask:

- Does the student need assistive technology:
- to be in the least restrictive environment?
- to access the general curriculum?
- to participate in activities?
- to access educational/print materials?
- to access auditory information?
- for written communication/computer access?
- for augmentative communication?
- to participate in state- and district-wide assessments?
- Does the student have no/low/high technology options available for use as a back-up system?



For the Student Who Needs Transition Planning -

The IEP must include a statement of the transition needs focusing on the student's course of study. This can be accomplished by completing the Transition Planning Section of the IEP.

NOTE: It will be difficult to determine the student's course of study without having determined the student's transition outcomes.

Questions IEP Team May Ask:

- What types of assistive technology does the student need to function as independently as possible in all post secondary settings?
- Does the student's need for instruction, including the use of assistive technology, impact on the graduation plan, (i.e., does the student need additional time in school in order to receive an appropriate educational program)?



- If the acquisition of daily living skills is an instructional area needed to support post-school outcomes, has the team considered the need for assistive technology such as electronic aids to daily living?
- Is there a coordinated effort between school and post-secondary settings to assure a smooth transition with current and any anticipated technology needs?

II. PRESENT LEVELS OF EDUCATIONAL PERFORMANCE

STUDENT'S PRESENT LEVELS OF EDUCATIONAL PERFORMANCE:

This section should provide a snapshot of the student's performance in his/her current educational program, including any and all assistive technology the student uses, and the student's instructional level. The information should come directly from assessment results and should be stated in clear, objective, concrete terminology.

If the student is currently using assistive technology in his/her educational program, summarize how it is being used and how it relates to the student's performance. It is also helpful to include a summary of the student's previous experiences related to assistive technology and whether the student has been successful or unsuccessful with those devices.

Sample Statements:

- Uses adapted pencil grip for all written work.
- Uses slant board for all written work.
- Uses typewriter for all written work.
- Can complete written work using a computer adapted with a mini keyboard.
- Completes written work using a word processing program with speech feedback and headphones.
- Completes ____% of written work compared to peers when using assistive technology and ____% if not using assistive technology.
- Uses adapted chair for toileting.
- Self-propels adapted wheel chair for mobility in school.
- Plays with other students in competitive games using assistive technology.
- Uses a voice output device to communicate within classroom.
- Uses a communication board to interact with peers.
 - Uses personal FM amplification system to comprehend classroom instruction.



- Uses a FM sound field system to improve his/her attention to spoken messages.
- Completes written assignments using a computer with a voice recognition program.
- Uses a closed circuit television (CCTV) to read printed material.
- Uses screen access software to utilize auditory visual and tactile cues to access a computer.
- Completes functional tasks using environmental controls.
- Participates in leisure activities using an environmental control unit.
- Accesses emergency evacuation information using visual, auditory, and tactile cues.



II. PRESENT LEVELS OF EDUCATIONAL PERFORMANCE

HOW THE STUDENT'S DISABILITY AFFECTS INVOLVEMENT AND PROGRESS IN GENERAL EDUCATION CURRICULUM (Include the child's strengths and needs which will effect the student's involvement and progress in the general curriculum.):

Strengths -

Include what the student does relatively well. This area should address skills and knowledge that the student demonstrates in relevant areas and subjects, including assistive technology.

Sample Statements:

- Knowledgeable and independent in the use of assistive technology for written expression/spoken expression.
- Can give instructions to staff to set-up assistive technology, and is then independent in its use.
- Using assistive technology, student is able to complete __% of written work compared to peers.
- Using assistive technology, student is able to participate in classroom discussions.
- Using assistive technology, student is able to indicate basic survival needs.
- Using assistive technology, student can participate in cooperative game.
- Using assistive technology, student is able to read at the 3.2 grade level.
- Using assistive technology, student can perform mathematical computations at the 5.0 grade level.
- Using assistive technology, student can use direct selection on device to communicate needs.



Needs -

Include information about the needs, including assistive technology, the student is experiencing. The needs identified must be addressed in the rest of the IEP.

Sample Statements:

Access to assistive technology for...

- writing to carry out written language arts instructional tasks.
- speaking to participate in classroom routines and activities.
- enlarged print for reading; speech feedback for reading.
- FM system to comprehend spoken messages.
- environmental control to engage in leisure or self care activities.
- trials with assistive technology to determine if it will increase performance in educational tasks.
- continued use of assistive technology to carry out instructional tasks.
- instruction in use of assistive technology device to achieve educational goals.
- staff support to set-up assistive technology.
- emergency information provided visually.

Examples of Strengths and Corresponding Needs:

For example, a student may exhibit strength in Braille reading and writing and may benefit from having access to a Braille keyboard or electronic notetaker, if the student also has a need for computer access or a portable method of taking notes.

A student who learns best visually and has good keyboarding skills might benefit from screen enlargement software and a standard keyboard, if the student has an identified need for these tools.

A student may have strength in switch scanning and may benefit from having access to a computer with a switch interface, if the student has a need for computer access and/or access to written communication.

A student may use his/her residual hearing well and may benefit from using a personal FM system, if he/she has a need to improve comprehension of direct instruction.

A student who is able to communicate with classmates and is able to use direct selection may benefit from the use of a vocal output device, if there is a need to initiate and maintain communication.

In identifying needs for assistive technology, the team should review the answers to questions posed in the Special Considerations section and, when appropriate, the Transition section.



In order to ensure access to the general education curriculum and reforms, the IEP team must determine the extent to which the student can be involved in and make progress in the regular education curriculum. This determination should be based on assessments that have been made directly in the general education curriculum and programs, and should include information concerning assistive technology.

Examples:

Frank



In order to have access to the general education curriculum, Frank needs all textbooks available in Braille and needs a portable notetaking device to assist him in taking and editing notes as required in Social Studies.

Sharon



Because of her visual impairment, Sharon is unable to read the computer monitor without the assistance of screen access software that will provide enlargement. This tool is necessary in any course that requires computer access.

Caitlin



Because of her language impairment, Caitlin needs the use of a vocal output device to communicate. She is able to participate fully in the general education curriculum with additional time to generate responses.

Michael



Due to his hearing loss, Michael is unable to comprehend conversational speech without the use of a personal FM system to provide amplification. This system is necessary in all academic classes to allow him to benefit from instruction and discussion in the general education curriculum.

Alicia



Because of her fine motor impairment, Alicia needs the use of written input technologies, including voice recognition technology, to fully participate in general education curriculum.

Elaine



Due to Elaine's multiple disabilities, her educational program addresses functional activities that reference the general education curriculum. To successfully participate in these activities, she uses a variety of assistive technologies including a vocal output device with auditory scanning, a closed circuit television and an environmental control unit. She is able to participate in Music and Art with adapted computer access.

III. GOALS AND OBJECTIVES: (Use as many copies of this page as needed to plan appropriately).

MEASURABLE ANNUAL GOAL:

SHORT TERM OBJECTIVE/BI	ENCHMARK	EXPECT OF ACH	ED LEVEL IEVEMENT	METHOD OF EVALUATION
REPORT OF PROGRESS ON ANNUAL GOALS How goals will be measured:				
1 st	2 nd	3 rd	4 th	OTHER IF APPLICABLE

	APPLICABLE

NOTE: Specially designed instruction may be listed with each goal/objective and/or listed in Section IV.

Measurable Annual Goal -

Annual goals are statements in measurable terms that describe what reasonable expectations can be accomplished within a twelve-month period. There must be a direct relationship between the annual goals and the present levels of performance. It is required that annual goals included relate to:

- 1. Meeting the needs that result from the disability to enable the student to be involved in and progress in the general curriculum, and
- 2. Meeting each of the student's other educational needs that result from the student's disability.

Goals should relate to the general education curriculum with assistive technology used as a tool to reach the curriculum goals.

Examples:

Frank



Sharon



Frank will write poems, plays and multi-paragraph stories using a computer and word processing software, screen reading software, a print printer and a Braille embosser achieving satisfactory performance as determined for each assignment by teacher made rubrics and tests, weekly.

Sharon will complete a research paper, meeting teacher timelines, using appropriate sources and strategies, using an electronic notetaker to organize information and edit text, to be measured by student made rubrics.

Caitlin



Caitlin will participate appropriately in conversation with peers, including initiating and maintaining communication, with satisfactory performance measured by performance based assessment and checklists.

Michael



Michael will comprehend direct instruction and classroom discussion with 80% accuracy in quiet and noisy listening environments, to be measured by teacher observation and completion of checklists.

Alicia



Alicia will complete written assignments, including paragraphs and onetwo page research assignments, in American History, English, Biology, Algebra and Art using a computer with voice recognition software, with appropriate content and 85% accuracy in spelling, punctuation and grammar to be measured by teacher made rubrics.

Elaine



Elaine will participate in functional tasks for daily living using environmental controls, single switches and a low-tech communication device. Checklists and teacher observation of student engagement and interaction with peers will measure successful participation.

Short Term Objective/Benchmark -

Once the IEP team has developed measurable annual goals, the team must develop strategies that will be most effective in realizing each annual goal by developing short-term objectives or benchmarks. Short-term objectives are sub skills that lead to annual goals or measurable, intermediate steps between the present level of performance and the annual goals. Benchmarks are major milestones between the present levels and the annual goals.

Short-term objectives and benchmarks serve as a plan for reaching annual goals and a means for measuring progress toward meeting the annual goals. They provide a mechanism for determining whether the student is progressing during the year, to ensure that the IEP is consistent with the student's instructional needs, and if appropriate, to revise the IEP.

Short-term objectives and benchmarks must be written in measurable terms, and each must include the expected level of achievement, when or how often evaluation will occur, and how evaluation will occur.

Examples:

Frank



- Frank will independently use screen access software to read and edit short reading selections, correcting all errors of spelling, formatting, grammar and punctuation, achieving a satisfactory level determined by a teachermade rubric, at least once per week.
- Frank will independently use a print printer to provide the classroom teacher with copies of all daily assignments completed through the use of a word processing program.
- Frank will demonstrate the ability to correctly link both a print printer and Braille embosser to his computer and correctly choose the appropriate printer from file menu 100% of the time.

Sharon



- Sharon will demonstrate the ability to create and delete files, and cut, copy and paste text from one file to another, without teacher assistance, weekly. Teacher-made rubric or checklist will determine satisfactory performance.
- Sharon will print Braille notes and develop an outline of her paper using her notetaker. She will score a "satisfactorily" or better on teacher made criteria and will meet the timeline provided to all students prior to the assignment.

• Sharon will locate at least five appropriate references in the school library and use her electronic notetaker to take notes on each reference, meeting assigned timelines. Notes will be organized in one file and will include name of source, date of publication, publisher and pages where notes were located.

Caitlin



- Caitlin will comment and respond to her classmates' conversation at least 10 times per day during structured activities, using a synthesized speech output device, to be measured weekly by teacher observation and performance based assessment.
- Caitlin will initiate conversation with her peers while engaging in free play activities at least five times/day as evidenced by weekly teacher/paraeducator observation and performance based assessment.
- Caitlin will use appropriate strategies to repair communication breakdowns 80% of the time as she communicates with her classmates, to be measured by checklists and an hour of teacher/paraeducator observation weekly.

Michael



- Michael will follow three step directions given in noisy situations with 85% accuracy, to be evaluated weekly through the use of worksheets and teacher observation.
- Michael will comprehend six-eight sentences spoken by the teacher in the classroom with 80% accuracy to be measured weekly by teacher observation, class notes and completion of worksheets.
- Michael will participate in small group discussions (three-five people) on a specific topic, making at least four comments/questions relevant to the discussed topic; to be evaluated weekly using teacher observation and performance based assessment.

Alicia



- Alicia will format a single page document on the computer using voice commands to make corrections with 90% accuracy, as indicated by a teacher made checklist and work samples, evaluated weekly.
- Alicia will dictate 15-20 sentence passages on a topic related to her academic subjects, using voice recognition software, with 90% accuracy in grammar, spelling and punctuation, to be evaluated weekly by teacher-made rubrics.
- Alicia will research a topic by finding sources, taking notes, organizing and composing the information into a cohesive report, achieving a score of "proficient" or better on student or teacher made rubrics, evaluated weekly.

Elaine



- Elaine will participate with a peer in leisure activities (including computer activities, books, board games, etc.) by initiating interaction or responding to requests at least five times/activity, to be measured weekly using performance based assessment and checklists.
- Elaine will complete personal grooming and self-care tasks by accomplishing all steps of the task (up to 10 steps/task) without assistance; to be evaluated daily using checklists and performance based assessment.
- Elaine will participate in cooking activities by following a recipe, adding ingredients and accessing electronic appliances using an environmental control and a single switch, completing at least nine out of 10 steps of each task correctly, to be measured weekly by teacher observation and checklists.

Report Of Progress On Annual Goals -

In the revised IEP format, the Progress Reporting section has been moved to the Goals and Objectives section. Gathering data and using it to drive instruction is an extremely important, on-going process. It must be noted in the IEP how the child's progress toward the annual goals will be measured, and how it will be reported. Of course, this is true for all IEP goals, including those involving the use of assistive technology to achieve curricular goals.

Examples:

Frank



- **How goals will be measured:** Teacher-made rubrics will be completed weekly by the classroom teacher.
- How progress will be reported: Monthly phone conference between teacher of the visually impaired and parent with dates of the calls recorded on the grid below. Performance as measured by the rubrics will be summarized and attached to Frank's report card. A copy of the rubric will be sent home so parent is aware of the expectations for written assignments.

Sharon

nInI	nInI	
	hInI	
F	nTnT	

- **How goals will be measured**: Teacher made rubrics and assessment checklists will be used to measure performance. They will be completed bi-weekly by the classroom teacher and shared with the student.
- **How progress will be reported:** Rubric and assessment information will be sent home with Sharon's report card.

Caitlin



- **How goals will be measured:** Frequency counts of number and type of communication attempts will be done weekly by the paraeducator using data collection forms developed by the speech/language pathologist.
- How progress will be reported: A narrative summary of Caitlin's progress, with graphs depicting her performance, will be sent home biweekly by the teacher. An anecdotal progress report will be exchanged daily between classroom teacher and parents. Team meetings to analyze progress toward IEP goals will be held monthly.

Michael



- **How goals will be measured**: Curriculum-based assessment will be used bi-weekly to monitor comprehension of classroom instruction. Graphic organizers will be completed weekly by the student to measure understanding of lecture and discussion topics. A frequency count of on-topic communication during group discussions will be done weekly by the classroom teacher.
- How progress will be reported: A summary of curriculum-based assessment data and graphic organize information will be included in a quarterly narrative progress report to be written by the hearing therapist. Frequency count information will be graphed and sent home monthly by the classroom teacher.

Alicia



- How goals will be measured: Teacher-made rubrics and checklists will be completed bi-weekly by Alicia's classroom teachers.
- How progress will be reported: Teacher/parent phone conferences concerning progress in using the speech recognition software, will occur monthly. Performance data from rubrics and checklists will be summarized and sent home with Alicia's report card each quarter.

Elaine



- How goals will be measured: Teacher observation and frequency counts of communication attempts will be completed bi-weekly and checklists will be completed weekly by the classroom teacher or paraeducator.
- **How progress will be reported:** Narrative progress report sent home quarterly, frequency count and checklist data will be charted and sent home with monthly progress report.

IV. SPECIAL EDUCATION/RELATED SERVICES:

A. PROGRAM MODIFICATIONS AND SPECIALLY DESIGNED INSTRUCTION: (Specially designed instruction may be listed with each goal/objectives.)

Program Modifications and Specially Designed Instruction -

These are the specific programs and services that make this student's program special and unique to meet his needs and what makes it different from the programs and services provided in general education.

Examples:

Frank



• Screen access software will be installed on one computer in the school library and one computer in Frank's English class. The district AT consultant and the teacher of the visually impaired will provide technical support to Frank when requested. Earphones will be available in both settings and will be used at any time when other students are working in that area. Teacher of the visually impaired will provide specific instruction in keyboard commands, prior to beginning the assignment. Frank will be given the opportunity to practice using the screen access software during scheduled study hall two times per week.

Sharon



• The teacher of the visually impaired will adapt the rubric created by the classroom teacher for all students to assess their editing skills in order to include criteria that relate specifically to the notetaker. The orientation and mobility instructor will assist Sharon in orienting herself to the school library and reference material. The teacher of the visually impaired will label frequently used references in Braille. Sharon will be provided with a reader when requested to access printed material that is not accessible. Sharon will be provided access to the Internet to conduct appropriate research.



Michael



- Caitlin will have a synthesized speech output device available to communicate throughout the school day, with sufficient time (up to two minutes for novel interactions and up to 30 seconds for routine interactions) allowed to generate responses. Environmental Communication Teaching cues and prompts will be used by communication partners to encourage communication.
- Michael will receive preferential seating and will use a personal FM system in all academic classes. Unfamiliar vocabulary will be pretaught. Closed captioning or the option to view at home will be available for all videotaped materials. A peer will provide copies of class notes and assignments in all academic classes, and written copies of public address system announcements will be provided.

Alicia



Voice recognition software will be available for Alicia, and instruction on its use will be provided individually during keyboarding class daily. Alicia will have an extra day to complete written assignments of less than one page, and will have two extra days to complete longer written assignments. She will have a quiet area and computer available throughout the school day as needed to compose her assignments using the voice recognition software.

Elaine



• Elaine will have a daily schedule available, using symbols to depict each activity in her day. Task charts will be placed within view at each task area to provide visual structure. Adapted utensils, an environmental control unit and light pressure switches will be available for all cooking and grooming activities. Switch software, a switch interface, adapted game pieces and a switch activated game spinner will be provided for leisure activities.

B. RELATED SERVICES: List the services that the student needs in order to benefit from or access his/her special education program: Service Location Projected* Beginning Frequency Anticipated* Duration

*Include only if differs from IEP beginning and/or duration dates.

Related Services -

Related services (including supplementary aids and services) refer to transportation and any developmental, corrective or supportive service needed to assist a student in benefiting from special education. Related services must be considered as a tool for maintaining a student in the least restrictive environment.



C. SUPPORTS FOR	SCHOOL	PERSONNEL	RELATED	ТО	STUDENT'S NEEDS:	

Supports for School Personnel Related to Student's Needs -

This section of the IEP deals with supports for school personnel as opposed to specially designed instruction provided for the student. This section should be viewed in concert with specially designed instruction and if school personnel need any supports to implement the specially designed instruction it should be noted in this section. This section provides an opportunity for the team to discuss and articulate what specific modifications or supports are necessary for school personnel in order to provide FAPE.

Example:

Frank



Prior to the beginning of the school year, the itinerant teacher of the visually impaired will meet with the district technology specialist; classroom teacher, paraprofessional and Frank to orient staff to the screen access software and hardware. The district technology specialist will act as a liaison between school staff and the software vendor for ongoing technical support.

Sharon



The school librarian at Sharon's school will visit the school librarian in the Centerville School District who has had a similar student with visual impairment, for the purpose of learning some library research techniques that have been used successfully in that district. The itinerant teacher of the visually impaired will organize an orientation to all of Sharon's equipment.

Caitlin



Training in programming the communication device will be provided by a manufacturer's representative for the teachers, the speech/language pathologist and the paraeducator working with Caitlin. The special education director will schedule this training.

A consultant from the IU will provide on-going support with the communication device. A team consisting of the teacher, paraeducator and the SLP will attend Environmental Communication Teaching Training offered through the IU to learn strategies to encourage development of Caitlin's communication skills.

Michael



The hearing support teacher will provide an hour in-service, at the September Sixth Grade Team meeting, to Michael's teachers on orientation to hearing loss and use and care of the FM system. The building principal will schedule this with the hearing support teacher.

The hearing support teacher will provide training on effectively working with an interpreter in an educational setting. The building principal will coordinate this with the hearing support teacher and will follow-up to see if further training is needed.

Alicia



The district computer specialist, keyboarding teacher and learning support teacher will attend a two-day training on voice recognition software provided by a manufacturer's representative and an IU consultant. The school district computer specialist and the IU consultant will provide follow-up training and support. Alicia's learning support teacher will make arrangements for training and follow-up.

The district computer specialist for all 9th and 10th grade teachers will present an overview of voice recognition software. This will be done on the August in-service day and will be arranged by the guidance counselor, who will then follow-up to see if more in-depth training is needed.

Elaine



Next year's special education teacher will visit Elaine's current special education classroom to learn more about the visual strategies and communication boards she is now using, and to observe Elaine in her current environment. The SLP will arrange the visit and contact the principal if follow-up is needed.

The speech /language pathologist will provide instruction in the use of the Boardmaker software program during the teacher's planning period on Tuesday. The teacher will contact the head teacher in the building if follow-up is needed.

V. PARTICIPATION IN STATE AND DISTRICT-WIDE ASSESSMENT	S
STUDENT PARTICIPATION – STATE ASSESSMENTS	
This section applies to student's age/grade eligible for the PSSA/PA	SA
(Reading, Math-grades 5, 8, 11; Writing-grades 6, 9, 11)	

____Student will participate in the PSSA without accommodations.

OR

____Student will participate in the PSSA with the following accommodations:

PSSA Reading (grades 5, 8, 11)_____

PSSA Math (grades 5, 8, 11)_____

PSSA Writing (grades 6,9, 11)

OR

Student will participate in the Pennsylvania Alternate System of Assessment (Effective beginning the 2000-01 school year, the alternate assessment in Pennsylvania is PASA).

If the IEP Team has determined it is not appropriate for the student to participate in the PSSA, the team must explain why the PSSA is not appropriate:

Choose how the student's performance on the PASA will be documented:

_____Videotape (which will be kept confidential as all other school records) _____Written Narrative (which will be kept confidential as all other school records)

STUDENT PARTICIPATION – DISTRICT ASSESSMENTS

_Student will participate in the District assessments without accommodations.

OR

Student will participate in the District assessments with the following accommodations:

OR

If the IEP Team has determined that it is not appropriate for the student to participate in the district-wide assessment they must explain why the assessment is not appropriate for the student and how the student will be assessed.

The use of assistive technology should be considered as an accommodation for the PSSA if the student's IEP indicates a need for the AT in order to participate in the curriculum.

Example:

If a student uses a closed circuit television to read in the instructional program, the team should consider whether this technology would be needed for the PSSA. Certain types of devices, especially those with memory, <u>may</u> not be allowed.

QUESTIONS AND ANSWERS

Question: I sometimes find that there is no mention of assistive technology in the current IEP even though the student uses a device. It may be because the student has used it for years and it is no longer new information. Is this a good practice?

Answer: It is not at all helpful to omit that kind of important information from an IEP. The IEP should be a snapshot containing all the information needed to meet the student's unique educational needs. The student's use of assistive technology and all other pertinent information should be included each time a new IEP is written.

Question: When I include information in the IEP about assistive technology should I list the name of the device (e.g., Dynavox, AlphaSmart, or BrailleLite 40)?

Answer: It is best to not be that specific about the assistive technology in the IEP. The device may break down or not be appropriate in some environments and that may cause confusion and require revisions to the IEP. Many people choose to use generic terminology for assistive technology that would be appropriate for the student's needs but would not limit them to a specific device (see appendix for suggestions).

Question: Is it adequate to list use of the assistive technology device as a goal on the IEP (e.g., Brandon will learn to use the AlphaSmart)?

Answer: It is generally not adequate to list use of the device as an IEP goal. The assistive technology is being used as a tool to enable the student to access the general curriculum. The IEP goals should focus on what the student will be accomplishing with the assistive technology, not on using the technology itself.

Question: Should we wait until age 16 to begin transition services for students with assistive technology

Answer: There are often many more hurdles to overcome for students with assistive technology than for a student who is transitioning without assistive technology. Begin planning earlier than age 16 for the move from school to adult life so the student will have the necessary technology on hand to function successfully in his/her post-secondary environment. Thorough planning is needed to explore the environments the student may be functioning in to discover what AT is needed. There should be planning and coordination with agency personnel to insure that all necessary AT is available to the student as he/she transitions.

Question: Where should I mention assistive technology in the IEP?

Answer: The assistive technology used by the student can and should be mentioned throughout the IEP. In the strengths and needs section, the skills the student has or needs in order to use the AT should be mentioned. The type of AT should be listed generically, probably in the Present Levels of Educational Performance and/or Specially Designed Instruction, although it may also be referred to in the goals and objectives. The goals and objectives, however, should generally focus on what the student is doing with the AT in relation to the general education curriculum, not on the technology itself.

APPENDIX

IEP TABLE OF GENERIC DEVICE NAMES

This table may be used as a resource to find a generic name of a device so that the brand name is not listed on the IEP (see question 2 in Question and Answer section). The heading is the generic name - locate the device brand name and then use the heading of that section as you include AT information in the IEP.

Alternate Keyboard

Access NOW! BAT **Big Keys Braille in Keyboard** Concept **Discover:Board Dual Handed Ergonomic Dvorak One Handed Expanded Ergonomic** Intellikevs **Key Largo** MacKing MacMini **Mouth/Headstick Ergonomic** QuickPAD **Single Handed Ergonomic** WinMini WinKing

Alternative Mouse Gus! Dwell Cursor Headmaster JOUSE Mouse Mover TRACKER

Braille Embosser Basic-D, Basic-S Braille Blazer Everest Braille Printer Juliet Paragon Porta-Thiel Romeo Theil Impacto Thomas Versapoint

Braille Translation Hardware/Software

Bex Braille 'n Print Braillemaster 6 Duxbury Easy Braille Translator GOODFEEL Braille Music Megadots

<u>Braillewriters</u> Perkins Braillewriter Mountbatten Brailler Perkins Electric or Large Cell Brailler

Closed Circuit Television (CCTV)

(Video Magnifier or Electronic Magnifier) 20/20Aladdin Atlas ClearView Colibri **MagniCam Magnilink Autofocus Magnisight Systems** Outlook **Passport** Penguin Seagull Spectrum Viewpoint Vision Excel

Electronic Notetakers

Aria Braille Palm Top Computer Braille Companion Braille Desk Braille Lite Braille 'n Speak

<u>Electronic Notetakers (con't)</u> Braille Pad ERGO Braille Keynote Companion Sqwert TransType 2000 Type 'n Speak Type Lite

<u>Electronic Aids for Daily Living</u> (<u>Environmental Control Units</u>) AirLink Cordless Control System Mini Relax Powerlink PROXi Sicare Pilot U-Control II Ultra 4

Keyboard Emulators DARCI Discover:Switch

Discover: Ke:nx ScreenDoors II T-TAM

Personal FM Systems

Comtek Personal FM System Extend Ear Free Ear Easy Listener Hearing Helper MicroLink MicroVox Phonic Ear 471 Solaris Sprite Williams Sound PPA Receiver

Portable Amplification System Hearit Trainer Portable Voice Amplifier System Portable Wireless Amplification System Speechmaker Personal Speech Amplification System Toteable FM System

<u>Refreshable Braille Display</u> ALVA Braille Terminal Braille Window Navigator Papenmeier Braille Display PowerBraille

<u>Rotary Scanning Communication Aid</u> Dial Scan Clock Communicator

Scan and Read Software

Aladdin Ambassador and Reading Edge Galileo Kurzweil 1000 and 3000 O.B.R. Optical Braille Recognition Open Book PortSet Reading Machine Rainbow Reading Machine Reading AdvantEdge VERA VIP: Versatile Image Processing Software WYNN

Screen Magnification Software

Dolphin Lumar Screen Reader & Magnifier InLarge MAGic Magnum Deluxe SuperVista VisAbility Zoomtext

Screen Readers Dolphin Hal Screen Reader Dolphin Supernova JAWS OutSPOKEN WinDots Braille Screen Reading Window Bridge WindowEyes Winvision97 Zoomtext Xtra

Sound Fiel	d Amplification Systems	Vocal output devices with digitized speech
Bag of Soul	id Personal Sound Field System	$\frac{(con't)}{t}$
BOOK OF SOL	ind Personal Sound Field System	
Desktop Sp	eaker Personal Sound Field	Holly.Com
System		Light Hawk
Easy Listen	er Sound Field System	Macaw
Omni		Message Box
Sound Field	Classroom Amplification System	MessageMate
Soundfocus	Classroom FM System	MicroVoice
	a •	One Step Communicator
Speech Syn	<u>thesizers</u>	Parakeet
Hardware:	Declaik	Pocket l'alker
	Doubletalk	Rocking Plate Talker
	Keynote Gold	Shadow Talker
	Litelalk	Sidekick
	Spirit	Speak Easy
	TransPort 11	Step Talk
Software:	DECaccess 32	Step by Step Communicator
	Eloquence	SuperHawk
		Talk Back 24
<u>Tactile Gra</u>	<u>phics Software</u>	Talking Box
Tactile Ima	ge Enhancer	Talking Buddy
		Talking Switch Plate
<u>Vocal outpu</u>	ut devices with digitized speech:	Tech/Four
2 (or 6) Lev	el Communicator	Tech/Speak
32 Message	Communicator	Tech/Talk
Action Voic	e	Tuff Talker
AlphaTalke	er	Twin Talk
Attainment	Talker	Ultimate
Big Mack		Voca Flex
Blackhawk		Voice-in-a-Box
Chatbox		VoicePal
Cheaptalk		
Chipper		Vocal output devices with synthesized
Clip Talk		speech:
DigiCom 20	000	AXS 1600
Digivox		Chat PC
Dynamo		Computer with communication software
Easy Talk		(e.g., Talk: About, Speaking Dynamically, etc.
Fifteen Tall	ker	DeltaTalker
Five Talker		Dubby
Grooved Pl	atform Communicator	Dynavox
Hand Held	Voice	Dynamyte
Hawk		DynaWrite
		Freedom 2000
		Freestvle

Vocal output devices with synthesized speech: (con't) Gemini Liberator LightWriter Link **Micro Comm Pac Optimist** Pathfinder **Pegasus Lite** Scan-It-All Say-It-All Vanguard Vantage **Voice Recognition Software Dragon Naturally Speaking** Via Voice

Word Prediction Software Aurora Co-Writer EZ Keys GUS! Word Prediction KeyRep Telepathic

<u>Word Processing Software/Speech Output</u> Intellitalk II Write:Outloud

Word Processor AlphaSmart Dreamwriter GeoBook Laser PC Link Starwriter Typestar