

The Inclusion Notebook

Problem solving in the classroom and community

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in Inclusive Education

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Supplementary Aids and Services in Inclusive Education

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This issue of The Inclusion Notebook presents an overview of supplementary aids and services used in the special education of students with disabilities. Supplementary aids and services can include a range of supports including related services, modifications, and accommodations, that enable a student with a disability to benefit from a free appropriate public education (FAPE). The issue contains several resources, including a case study describing how a range of supplementary aids and services were integrated into a student's IEP in an inclusive setting and a sample matrix illustrating how related services, accommodations and modifications were embedded into the IEP. There is also an article explaining the similarities and differences between accommodations and modifications used to support students with disabilities.

The pull-out section includes definitions of related services found in the Individuals with Disabilities Education Act (IDEA) along with an overview of how the focus and delivery of related services can and should change as a child progresses through the grades.



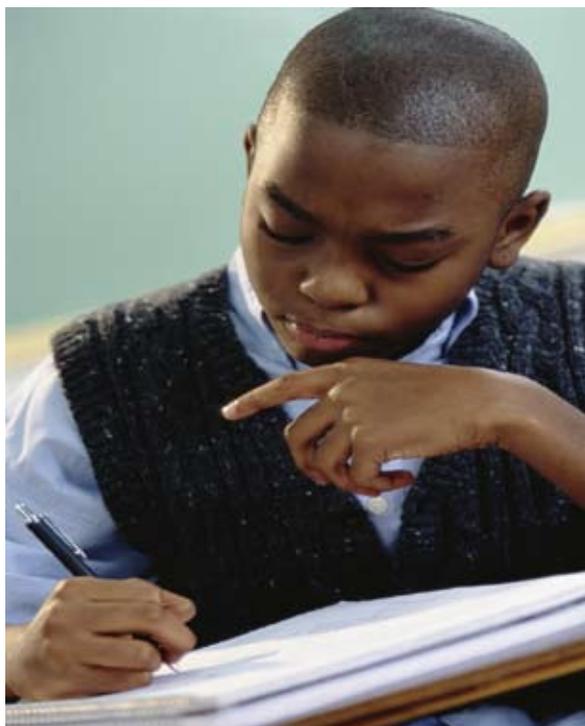
Supplementary Aids and Services: An Overview

Supplementary Aids

Supplementary aids and services are aids, services and other supports that enable a student with a disability to be educated together with children without disabilities to the maximum extent appropriate (34 CFR 300.42).

Related Services

Related services are those services required to assist a child with a disability to receive a free appropriate public education. A student who has been found to be eligible for special education under the Individuals with Disabilities Education Act (IDEA) can receive related services if it is found that the service is necessary for the child to make progress in the general education curriculum and to benefit from special education. Students who have a disability but who do not require special education as determined under IDEA may receive related services as a necessary accommodation to ensure equal access to the general education curriculum. These students are able to receive services under Section 504 of the Rehabilitation Act of 1973. Regardless of the circumstances under which a student qualifies to receive related services, the purpose of the services is to promote an educational benefit. While some types of related services are medically based (occupational therapy, physical therapy, speech therapy) the therapy provided in the school system must be directed toward assisting the student to access and participate in school related activities.



Integrating Related Services into the IEP: A Case Study

Thomas Smith is a 12 year-old 7th grade student at George Washington Middle School. When Thomas was 5 years-old he was diagnosed with a brain aneurysm that was operated on two months prior to the start of kindergarten. The aneurysm left him paralyzed (hemiplegia) on the right side of his body. Thomas has been fully included in regular education classes since kindergarten. Thomas struggles academically in the areas of reading, writing and math.

Over the years Thomas has participated in speech and language therapy, occupational therapy and physical therapy. Initially, the focus of speech therapy was to help him regain some of his speech and language skills lost due to the injury; as he progressed through the grades the emphasis of intervention shifted to more cognitive and social skill areas due to deficits that persist with memory, inferential reasoning, distractibility, and his limited understanding of social nuances and non-verbal cues. Thomas has also participated in occupational therapy to improve his ability to complete activities of daily living using adaptive equipment designed for people with hemiplegia both at home and in school. OT has also focused on improving his upper extremity functioning, and has helped him to identify and use assistive technology to access and participate in the general education curriculum. Thomas uses assistive technology in school to read and write independently and to maintain academic organizational skills. Thomas receives physical therapy for mobility, seating and positioning, and accessing the environment.

Thomas' IEP has goals in reading, writing, and math. The reading and writing goals are carried out across the curriculum. Additionally, the IEP contains goals in the areas of social interaction, and safe, independent mobility. Thomas uses a variety of assistive technology throughout the day. He uses a program called Read and Write Gold for some reading and writing assignments; he uses speech to text software for longer writing assignments; he uses a program called Math Pad for math computation. Modifications to the curriculum include no penalties for spelling (unless spelling is the construct), and no penalty for handwriting when he does his own writing. Recently, Thomas began using a power wheelchair; he can maneuver it fairly well when the hallways are empty but he becomes distracted during the change of classes and has bumped a few of the kids, fortunately without any injuries. A goal for safe mobility in the school setting was added to his IEP.

Thomas, continued on page 4

Thomas, continued from page 3

Thomas' team was concerned about how to best embed his goals and objectives into the general education curriculum and to ensure that they were worked on across the day. The team also needed a way to implement the accommodations and modifications appropriately in all of his classes. Lastly, they wanted related service providers to support Thomas' participation in the general education setting, rather than through a "pull-out" model. In order to accomplish this, the team completed a matrix identifying each goal and subsequent objective (see p. 5); beside each objective was listed the need for a modification and/or an accommodation, the need for a specific type of assistive technology, along with the related service provider(s) who would provide additional support in order for Thomas to achieve the objective.

The first goal on Thomas' matrix is the goal for written expression, followed by two subsequent objectives. Since the goal is for Thomas to score within the "proficient" level on a standardized test, measurement will not take place across classes. When Thomas does take that test, accommodations will be provided as allowed under the provisions of the standardization of the assessment. The objectives of the goal, however, will be measured across classes and settings. The team has agreed that the objective for writing sentences with correct capitalization and punctuation will be measured in all academic classes as this is something that Thomas should be doing consistently. When this objective is being measured, his progress toward the goal will not be affected by spelling errors (that is not to say that Thomas will never be held accountable for spelling errors). Thomas will use a talking word processing program to compose the sentences (AT1); he will not use text to speech (AT3) as that program capitalizes automatically at the beginning of each new sentence. All related services will be involved in the implementation of this objective; speech therapy will focus on the cognitive process as Thomas strives to generate complete sentences; occupational therapy will address the use of the technology and physical therapy will address the seating and positioning requirements for Thomas to be able to complete this objective. Use of a matrix helps to ensure that the goals and objectives are addressed consistently across settings and to provide a structure for organized data collection.



Thomas' IEP Matrix

IEP #	Goal/Objective	L.A.	Sci.	Math	SS	PE	Res	Bldg	Mod	Acc	AT	Rel Svc
1	Improve writing skills to "Proficient" level on State Assessment.									1,2,3		
Obj 1	Write sentences with correct capitalization and punctuation.	X	X	X			X		2		1	1,2
Obj 2	Compose 3 paragraphs containing introduction, middle, and summary with transitions.	X			X		X			1	1,3	1,2,3
2	Improve reading to grade 6 level on State Assessment.									1,2		
Obj 1	Will increase reading comprehension by silently reading a 150 word passage at 5th grade level identifying main idea and 3 supporting facts.						X			1	1,3	1,2,3
Obj 2	Will comprehend grade level text read to him by identifying main idea and supporting facts.	X	X	X			X			3		3
3	Improve math computation to grade 5 level on ABC test.									1,2		
Obj 1	Will solve operations involving fractions and decimals using a calculator.			X			X		1		2	1,2
Obj 2	Will read word problems and write equations prior to solving.			X			X				1,2,3	1,2
4	Will demonstrate safe, independent mobility in the school setting with power wheelchair.											
Obj 1	Will move between classes without endangering other students in the hallway.							X		1		1,2

Mod 1: No handwriting penalty; Mod 2: No spelling penalty; Mod 3: Extended time; Acc 1: Extended time; Acc 2: Quiet location for testing; Acc 3: Reader
 AT 1: Read and Write Gold; AT 2: Math Pad; AT 3: Speech to text. Rel Sv 1: OT; Rel Sv 2: PT; Rel Sv 3: SLP

Accommodation, Modification-What 's the Difference?

Often times the terms accommodation and modification are used interchangeably. There is a vast difference between the two terms and knowing how the terms differ is important for providing students with a free, appropriate public education.

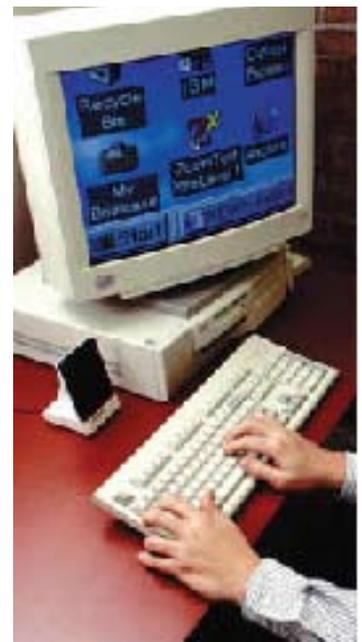
What are Accommodations?

Accommodations change the way a student with a disability accesses the curriculum. An accommodation does not change or alter the standard or expectation of the curriculum. Accommodations can be provided to any student with a disability, even those students who have a disability but do not require special education. Students who have been identified as requiring specific accommodations without requiring special education are entitled to these accommodations under Section 504 of the Rehabilitation Act. Accommodations necessary for students identified under this category are outlined in a 504 plan specific to the student. Students who only require accommodations do the exact same class work as non-disabled students, but in a different way. Taking the same test as everyone else in the class but in a different setting is an example of an accommodation.

Students who have been identified as requiring special education services are also entitled to accommodations that have been deemed necessary for accessing their individualized educational program and for making progress in the general education curriculum.

Examples of Accommodations in Regular Education

- Enlarged font/text.
- Extra time on tests.
- Sitting in an area of low distraction.
- Having a quiet work area available.
- Removal of extraneous/distracting information from work sheets.
- Raised line paper for writing.
- Using a word processor to complete written output.
- Curriculum presented in Braille.
- Verbal instruction translated through sign interpreter.
- Touch screen access vs. traditional mouse on computer.



Accommodation: Enlarged Screen Reader

What are Modifications?

Curriculum modifications are changes or adjustments made to instructional materials or curriculum content based on the needs of the individual student. Typically, it is the regular education curriculum that is modified for the student who has been identified as requiring special education services. The specific type of modifications that a student requires are spelled out in that student's IEP. Curriculum serves as the interface between the student and his or her learning objectives. Anytime the content of the curriculum is changed to meet the needs of an individual learner, a modification has taken place.

Examples of Modifications to the Regular Education Curriculum

- Having a student master a lesser amount of material i.e. identifying 3 animals that live in the rain forest while classmates identify 5.
- Eliminating or consolidating steps of a lesson or project i.e. providing student with a list of animals that live in the rainforest while classmates determine that information independently prior to working with the material.
- Providing a developmentally appropriate presentation of material being studied by peers i.e. text written at the students reading level relating to the same topic being studied by classmates.
- Providing an extra level of support such as providing a word bank or having the student take a multiple choice test instead of short answer or fill-in the blanks.

What are Essential Features of Effective Curriculum Modification?

Effective modifications will ensure that students' needs are met in the following manner:

- **Compensation:** When appropriate, modifications will assist in compensating for intellectual, physical, sensory or behavioral challenges.
- **Skill development:** All modifications will utilize the student's present level of skill and academic development to promote the acquisition of new skills.
- **Bridges the gap:** An appropriately designed modification will bridge the gap between the student's current level of performance and the curriculum content. A well designed modification will ensure that this bridge supports utilizing the student's capabilities to promote skill development while respecting the integrity of the student.

*An appropriate modification makes it possible for a student
with a disability to **learn something new.***

A curriculum that has been appropriately modified creates a learning opportunity!

Modification How To's:

Using a 3 Step Approach to Generating Modifications: When approaching the task of modifying a curriculum to meet a variety of learning styles and learning objectives, it can be helpful to determine 3 outcome measures of the curriculum content and the overall learning experience.

1. **What will all students' learn?** At the conclusion of the instruction, what will ALL students know about the topic? Typically, this will be the most important, essential information contained in the curriculum.
2. **What will most students' learn?** At the conclusion of the instruction, what will MOST students know about the topic? This level of learning will expand upon the basic fundamental information about the topic. It may require a level of inferential thinking integrating concrete and abstract principles to learn the projected outcome.
3. **What will some students' learn?** Typically students may use a greater degree of critical thinking to complete advanced learning. Often students' complete work independently to achieve a more advanced learning level of the topic.

Adapted from Pyramid Power for Collaborative Planning; Schumm, J. (1997).

Do Not Assume That These Learning Levels are Exclusive To Students' Current Level of Academic Achievement!

While it may be the expected outcome to have a student master information in the "All Students" category, a child can still benefit from exposure to the other levels of expected learning outcomes. Often students will express/develop an extraordinary interest in a particular topic (i.e. transportation, dinosaurs, historic events) that leads to learning information presented at all levels. This is the philosophical basis for inclusion and is indicative of a successful experience.

Similarly, students expected to master outcomes of general or basic information can be successfully included in cooperative learning activities designed to promote a higher-level outcome.

Helpful Links:

American Occupational Therapy Association.

www.aota.org

American Physical Therapy Association

www.apta.org

American Speech Language Hearing Association.

www.asha.org

Accommodations, continued from page 7

Modification Do's and Don'ts

Do:

- Present appropriate, useful information based on the regular education curriculum.
- Challenge students.
- Develop modifications in a manner that matches a student's learning style.
- Design modifications that optimize a student's strengths: academic, physical, behavioral.
- Monitor the efficacy of the modification for: skill development, motivation and interest.
- Vary the type/approach to modification to prevent boredom, repetition.
- Start with the end in mind; what will the student learn (master) AND what will the student have exposure to?
- Provide material, activities and presentations that are appropriate for the student's age regardless of their developmental stage.

Don't:

- Busy a student with the pursuit of useless information.
- Make modifications that offer no possibility of generating new learning.
- Design modifications that utilize only one method of learning.
- Continue to use modifications that have proven unsuccessful, waiting for the student to become "ready".
- Assume that a student will gain nothing from exposure to a topic that may not seem developmentally appropriate.
- Present materials, activities or modifications that are not age appropriate.

Helpful Links:

Individuals with Disabilities Education Improvement Act of 2004.

<http://.idea.ed.gov/>

National Information Center for Children & Youth with Disabilities (NICHCY).

www.nichcy.org

Office of Special Education Programs (OSEP).

www.ed.gov/about/offices/list/osers/osep

theTIN Pull-out Pages

Related Service Definitions

From IDEA 2004

Related services means transportation and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education and includes speech-language pathology and audiology services, interpreting services, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, orientation and mobility services, and medical services for diagnostic and evaluation purposes. Related services also include school health services and school nurse services, social work services in schools, and parent counseling and training.

Exception: services that apply to children with surgically implanted devices, including cochlear implants. Related services do not include a medical device that is surgically implanted, the optimization of that device's functioning, maintenance or replacement of the device.

School must be responsible to appropriately monitor and maintain medical devices that are needed to maintain the health and safety of the child including breathing, nutrition, or operation of other bodily functions, while the child is transported to and from school and is at school. Schools must routinely check an external component of a surgically implanted device to make sure it is functioning properly.

Definitions:

Assistive technology devices and services: An assistive technology device is 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. Assistive technology services means any service that directly assists a child with a disability in the selection, acquisition, or use on an assistive technology device.

Audiology: Refers to the identification, assessment, and delivery of services for children with hearing loss and associated communication problems.

Counseling: Refers to services provided by qualified social workers, psychologists, guidance counselors, or other qualified personnel.

Early identification and assessment: Means the implementation of a formal plan for identifying a disability as early as possible in a child's life.

Medical and health-related services: Medical services are those provided by a licensed physician for diagnostic purposes.

Related Service Definitions

From IDEA 2004

School health services: Services provided by the school nurse or other qualified individual to support the health requirements of students with disabilities while in school. These services may include: tube feedings, catheterization, suctioning, management of ventilation systems, administering medications, etc.

Occupational therapy services: Provided by a qualified individual, occupational therapy services can include intervention designed to increase or maintain function in areas of self-help skills, functional mobility, positioning, sensory-motor processing, fine motor, gross motor, visual motor, life skills, vocational skills, psychosocial adaptation.

Orientation and mobility services: Originally provided to individuals with vision impairment, O&M services were added to the list of related services in 1997 and is defined as enabling students to safely orient to and move within school, home and community.

Parent counseling and training: Three areas are specified in IDEA; 1) assisting parents in understanding their child's disability and needs; 2) providing parents with information about child development; 3) helping parents to acquire the skills necessary to support the implementation of the IEP.

Physical therapy services: Provided by a qualified individual, physical therapy services can include intervention designed to address issues of muscle strength, mobility and posture. Treatment may include increasing joint function, strength, mobility, endurance, range of motion, gross motor function, gait, posture, balance as well as monitor the fit and proper use of mobility aids.

Psychological services: Includes administering and interpreting psychological and educational tests; obtaining, integrating and interpreting information about child behavior and conditions related to learning; consulting with staff in program development for students based on test results, behavioral evaluations, interviews; planning and managing a program of psychological services, including psychological counseling for students and parents; assisting in developing positive behavioral intervention strategies.

Recreation: Includes assessment of leisure function, therapeutic recreation services, recreation programs in schools and community agencies and leisure education.

Rehabilitation counseling: Services provided by qualified personnel in individual or group sessions focusing on career development, employment preparation, achieving independence and integration in the workplace and community of a student with a disability. Also included are services provided to a student with a disability by vocational rehabilitation programs funded under the Rehabilitation Act of 1973.

Related Service Definitions

From IDEA 2004

Social work services: Includes preparing a social or developmental history on a child with a disability; group or individual counseling with the child and family; working with parents and others on those problems in a child's living situation that affect the child's adjustment in school; mobilizing school and community resources to enable the child to learn as effectively as possible in the educational program; assisting in developing positive behavioral intervention strategies.

Speech-language pathology services: Includes identification of children with speech or language impairments; diagnosis and appraisal of specific speech or language impairments; referral for medical or other professional attention necessary for the habilitation of speech or language impairments; counseling and guidance of parents, children and teacher regarding speech and language impairments.

Transportation: Travel to and from and between schools; travel in and around school buildings; specialized equipment if required (adapted buses, lifts, ramps) to provide special transportation for a child with a disability.

Continuum of Service Delivery in Related Services

The contributions that related services can make to a student's progress in the general education curriculum can and should change as a student grows and progresses through the grades. For a young child, the emphasis may be on developmental skill building with intervention centering on meeting the developmental milestones experienced by children without disabilities as part of natural maturation. As a child gets older, the emphasis may shift to helping that child to meet the social and emotional demands experienced by all children as they develop relationships, make choices and develop a sense of autonomy. This is also a time when the focus of intervention may move away from skill building in favor of learning ways to compensate for the impact that a disability may have on learning. For students who receive related services as part of their special education through graduation or age 21, the focus of the intervention changes once again, shifting toward preparing a child with a disability for adult life.

The need for related services may change over the course of a child's education. It would not be unusual for a child to require and receive a related service in pre-school and no longer need that particular service in upper elementary grades. That same child may need to have the service resume a few years later as he or she enters adolescence and begins to participate to a greater extent in extracurricular and community based activities. In considering this, the need for related services should be considered annually for all students regardless of whether or not they have received the service in the past. See the "Continuum of Service Delivery in Related Services" on p. 13 for a summary of the ways in which related services can be used to address the changing needs of children across the school years.

Continuum of Service Delivery in Related Services

	SW/Psych/Counseling	Occupational Therapy	Physical Therapy	Speech Therapy
<i>Preschool Ages 3-5</i>	<ul style="list-style-type: none"> * Social development * Play skills * Group participation * Separation from parents * Transition to elementary school 	<ul style="list-style-type: none"> * Play skills * Self-help/adaptive skills * Feeding skills * Fine/visual motor skills * Sensory motor skills * Assistive technology 	<ul style="list-style-type: none"> * Gross motor skills * Balance, strength, coordination * Mobility skills * Seating/positioning * Environmental access * Assistive technology 	<ul style="list-style-type: none"> * Communication skills * Speech/language skills * Cognitive skills * Social skills * Feeding skills * Assistive technology
<i>Grades K-3</i>	<ul style="list-style-type: none"> * Understanding differences/diversity * Promoting social awareness * Social skill building * Autonomy/independence building * Character building 	<ul style="list-style-type: none"> * Play skills * Self-help/adaptive skills * Feeding skills * Fine/visual motor skills * Sensory motor skills * Assistive technology * Organizational skills 	<ul style="list-style-type: none"> * Gross motor skills * Balance, strength, coordination * Mobility skills * Seating/positioning * Environmental access * Assistive technology 	<ul style="list-style-type: none"> * Communication skills * Speech/language skills * Cognitive skills * Social skills * Feeding skills * Assistive technology * Organizational skills
<i>Grades 4-8</i>	<ul style="list-style-type: none"> * Drug /alcohol prevention * Peer relationships/pressure * Conflict resolution * Developing values * Transition to middle school * Transition to high school 	<ul style="list-style-type: none"> * Self-help/adaptive skills * Fine/visual motor skills * Sensory motor skills * Assistive technology * Organizational skills * Extracurricular activities 	<ul style="list-style-type: none"> * Gross motor skills * Balance, strength, coordination * Mobility skills * Seating/positioning * Environmental access * Assistive technology 	<ul style="list-style-type: none"> * Communication skills * Speech/language skills * Cognitive skills * Social skills * Assistive technology * Organizational skills
<i>Grades 9-12; Age 18-21</i>	<ul style="list-style-type: none"> * Healthy lifestyle choices * Self-advocacy * Self-determination * Postsecondary education preparation * Transition to adulthood * Adult service agency linkage 	<ul style="list-style-type: none"> * Organizational skills * Extracurricular activities * Assistive technology * Transition planning * Independent living skills * Vocational skills * Community participation 	<ul style="list-style-type: none"> * Endurance * Mobility skills * Seating/positioning * Environmental access * Assistive technology * Community access 	<ul style="list-style-type: none"> * Communication skills * Speech/language skills * Cognitive skills * Social skills * Assistive technology * Organizational skills

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