Integrating AAC into the School Curriculum

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Integration into the School

- Least restrictive environment (LRE) mandated by IDEA
- Importance of effective integration

Children Who Use AAC

- Children with severe speech or language impairments, temporary or permanent
  - cerebral palsy, learning disabilities, fine motor impairments, cognitive impairments, autism spectrum disorders (ASD), visual impairments, and hearing impairments
- Used as a supplement for existing speech or to replace speech that is not functional

The Role of the School-Based SLP in AAC Intervention

- Responsibilities of the SLP, according to ASHA (2005):
  - assess, intervene, and evaluate progress associated with AAC interventions
  - Collaborate with team members, students with AAC needs, and their families in developing functional and meaningful goals and objectives
- Provide access to the core curriculum and create classroom structures to educate heterogeneous groups of students (Soto, Müller, Hunt, & Goetz, 2001)

How can AAC be used in classrooms?

- AAC can be used in the context of all academic subject areas to assist with assessment, instruction, and/or creative expression.
- Specific ways teachers and paraprofessionals can facilitate participation within the classroom setting (Beukelman & Mirenda, 2005):
  - visual schedules
  - “talking switch” techniques
  - providing opportunities for choice-making, requesting, rejecting, and yes/no responses

Types of AAC Intervention Used in Schools

- Vary with individual student needs
- All types of AAC fall into two general categories: aided and unaided.
Types of AAC Intervention: Unaided AAC

- Manual sign
- Gestures
- Vocalizations

Types of AAC Intervention: Aided AAC

- Picture Exchange Communication System (PECS)
- Speech generating devices (SGDs)
- Communication boards

Videos

- PECS
  - https://www.youtube.com/watch?v=mUQg0WNLQuA&feature=PL&index=18&playnext=2&playnext_from=PL
- DynaVox
  - http://www.youtube.com/watch?v=kGVQY95G4nM

Literacy

- the ability to read and write in a desired language (Beukelman & Mirenda, 2005)
- provides a means of educational learning and assessment, promote vocational opportunities, boost self-expression and facilitate independent living (Light & Kent-Wash, 2003).
- most users of AAC experience difficulties in literacy development and problems may persist into adulthood

Literacy Development and AAC

- The knowledge, attitudes, and beliefs of parents and teachers have a significant impact on literacy learning opportunities.
- The greatest challenge of learning literacy for individuals with SSPIs may be that children have "reduced opportunities to engage in authentic reading and writing opportunities and erroneous beliefs that individuals with SSPIs are not capable of learning to read and write" (Beukelman & Mirenda, 2005)

Literacy: Instructional Content

- Read interesting texts to the student
- Build language skills
- Phonological awareness skills
- Letter–sound correspondences
- Early reading skills
  - Decoding
  - Shared reading
- Early writing skills

(Light & McNaughton, 2006)
Creating a Literacy-Rich Environment

- Model use of the child’s AAC systems while reading the text
- Pause and wait expectantly for the child to participate
- Ask appropriate open-ended questions that are related to the book and the child’s experiences while modeling use of the AAC system
- Always respond to the communication attempts made by the child

(Light & Kent-Walsh, 2003)

Literacy: Writing Instruction

- Writing activities that promote early literacy development
  - Patterned story writing
  - Writing with familiar story schema

(Light & Kent-Walsh, 2003)

Literacy: Patterned Story Writing

- Read familiar stories with a repeated pattern
- Following the familiar pattern, create a new story and provide blanks for the child to write his or her version
- Publish the story and scan it into the child’s AAC device
- Provide opportunities for repeated readings

(Light & Kent-Walsh, 2003)

Literacy: Writing with a Familiar Story Schema

- Read familiar storybooks with the student
- Assist child in creating a new story following the familiar story schema
- Encourage the child to chose the content of the new story
- Model writing and provide scaffolding support
- Publish the story and scan it into the child’s device
- Provide opportunities for repeated readings

(Light & Kent-Walsh, 2003)

Inclusion of Students Who Use AAC: Integration

- Defined as the amount of time each day a student is physically present in a general education classroom with his or her same-age peers (Beukelman & Mirenda, 2005)
- A necessary but not sufficient component of inclusion
- Three levels:
  - Full integration
  - Selective integration
  - No integration

(Beukelman & Mirenda, 2005)

Inclusion of Students Who Use AAC: Educational Participation

- Important for students who use AAC to be exposed to the educational curriculum and learning culture designed for all students
- Four levels:
  - Competitive educational participation
  - Active educational participation
  - Involved educational participation
  - No educational participation

(Beukelman & Mirenda, 2005)
Inclusion of Students Who Use AAC: Educational Participation

- Examples of use of AAC in various subject areas:
  - Sequencing of picture symbols to represent historical events in social studies
  - Use of a switch-activated spinner to select numerals to create math calculation problems
  - Answering yes/no questions or using live voice scan to demonstrate proficiency of reading skills or listening comprehension
  - Use of an aided language stimulation approach to identify and discuss repetitive topics or vocabulary within a book
  - Dictating words on a spelling test to the rest of the class
  - Use of various adaptive technologies for artistic expression (music, drawing, painting, etc.)

(Downey, Daugherty, Helt, & Daugherty, 2004)

Inclusion of Students Who Use AAC: Social Participation

- Extensive interaction with a variety of partners is not automatically guaranteed by inclusive education; school environments must be engineered to ensure explicit opportunities for communication!
- Supportive classroom communities
  - Beneficial for the SLP to provide sensitivity training or in-services to the classmates of the AAC user

Inclusion of Students Who Use AAC: Support

- Any student who uses AAC will most likely require additional support in order to participate in meaningful ways in classroom activities.
- Support can and should be provided not only by adults but by peers as well.

- Three levels, depending on activity and student:
  - No support
  - Setup assistance
  - Full assistance

(Beukelman & Mirenda, 2005)

Programming Devices

- Choosing appropriate vocabulary (Dark & Balandin, 2007)
  - Extensive
  - Easily accessible
  - Appropriate to age and gender
  - Appropriate to the context

Common Mistake

- Using adult vocabulary rather than the student’s vocabulary
- Observation of student in classroom can help prevent this
- Goal is for the student to have meaningful interactions

(Beukelman & Mirenda, 2005)
Collaborative Team Building

- Team members vary, but typically...
  - General education teacher, special education teacher, OT, PT, student, and family
  - SLPs are often thought of as team leader because the main concern is communication

- Successful teaming consists of...
  - Regular team meetings where all members contribute to the development of strategies for achieving mutually defined goals
  - Positive interdependence
  - Practicing, monitoring, and processing interpersonal skills
  - Individual accountability

References