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1. What is the "best" AAC device for this child/situation?

- An AAC system involves multiple communication techniques - a device is only one part of an AAC system.
- Different aspects of a system will be easier for different purposes and situations, and there is no single "best" answer.
  See: Beukelman, D.R. & Mirenda, P. (1992). *Augmentative and alternative communication: Management of severe communication disorders in children and adults.* Baltimore: Paul H. Brookes.
  Reichle, J., Mirenda, P., Locke, P., Piche, L., & Johnson, S. (1992). Beginning augmentative communication systems. In S.F. Warren & J. Reichle (eds). *Causes and Effects in Communication and Language Intervention.* Baltimore: Paul H. Brookes.

2. Won't the use of AAC interfere with a child's vocal development?

- Children will use the quickest, most effective, and most accessible means available to communicate: Speech beats any other AAC system, if it is available to the child.
- Since AAC includes all communication methods, intervention also addresses improving functional verbal skills.
- Available research indicates that AAC facilitates spoken language by increasing interaction, language skills, and/or providing a voice output model for speech.
  See: Romski, M.A., Sevcik., R.A., Reumann, R., & Pate, J.L. (1989). Youngsters with moderate or severe retardation and severe spoken language impairments. I: Extant communication patterns. *Journal of Speech and Hearing Disorders*, 54, 366-373.
  Bodine, C. & Beukelman, D.R. (1991). Prediction of future speech performance among potential users of AAC systems*: A survey. Augmentative and Alternative Communication*, 7 (1), 100-111.

3. Will my child talk?

- Talking isn't an either/or question, and labeling a child as "non speaking" does not indicate that they cannot use speech for any type of communication.
- The more severe a child's motor limitations, particularly in initiating and controlling fine movements, the more likely that children will experience continued difficulty in controlling the fine coordinated movements necessary for speech.
- Children's motor systems are still developing in ways that cannot be predicted, and early intervention is too early to give up on further improvement in speech skills.
- The ability to vocally imitate may play a role in a child's ongoing progress in speech development, and the rate at which children learn new sounds may help predict continued changes in children's vocal skills.
  See: Romski, M.A. & Sevcik, R.A. (1996). *Breaking the speech barrier: Language development through augmented means.* Baltimore: Paul H. Brookes Publishing.

4. What kind of cognitive skills do children need before you start AAC?

- Communication starts with interaction and the earliest behaviors of children - there are no prerequisites.
- Previous research that attempted to assign prerequisites to AAC were only considering symbolic forms of communication
- Basic AAC intervention includes behaviors, gestures, cooperative actions, and sounds. It does not depend upon controlling complex systems or devices. These early skills do facilitate the gradual development of more complex skills.
  See: Kangas, K.A. & Lloyd, L. (1988). Early cognitive skills as prerequisites to augmentative and alternative communication use: What are we waiting for? *Augmentative and Alternative Communication*, 4 (4), 211-221.

5. How do you know how much a child really understands if they can't talk?

- It's difficult to tell how much any child understands language, because all we can judge is their performance.
- Available research suggests that the language an AAC user understands and produces may be differently organized and context-related. The important question is how well AAC users can communicate across tasks, partners & contexts
  See: Nelson, N.W. (1992). Performance is the prize: Language competence and performance among AAC users. *Augmentative and alternative communication*. 8 (1), 3-18.
  Romski, M.A. & Sevcik, R.A. (1993). Language comprehension: Considerations for augmentative and alternative communication. *Augmentative & alternative communication 9.*

6. Don't you have to demonstrate that a child understands certain vocabulary or techniques before you start to use them?

- We should teach new concepts/words by using them, not by expecting a child to first demonstrate understanding of them.
- Waiting until a child demonstrates understanding of what we present to them tends to promote passive action & interaction.
  See: Goossens', C. (1989). Aided communication intervention before assessment: A case study of a child with cerebral palsy. *Augmentative & alternative communication*, 5, 14-26.
  Downing, J. (1988). Active versus passive programming: A critique of IEP objectives for students with the most severe disabilities. JASH, 13 (3), 197-201.

7. If a child can demonstrate that they know (i.e. can point to) words/symbols, why do we have to spend so much time practicing how to use the same things?

- Recognizing and pointing to symbols in response to questions is a very different skill from initiating a new idea with them in conversation.
- Children with cognitive disabilities have particular difficulty transferring what they learn for one purpose to a different purpose.
  See: Calculator, S.N. (1988). Promoting the acquisition and generalization of conversational skills by individuals with severe disabilities. *Augmentative and alternative communication, 4* , 94-103.

Halle, J., Alpert, C., & Anderson, S. (1984). Natural environment language assessment and intervention with severely impaired preschoolers. Topics in Early Childhood Special Education, 4 (2), 36-56.

8. Why should we introduce AAC if the child doesn't seem to communicate about much?

- "Without participation, there is no one to talk to, nothing to talk about, and no reason to communicate" (Beukelman & Mirenda, 1992).
- Providing a means to communicate needs to coincide with adaptations in the environment to present and respond to realistic and meaningful activities.
  See: Calculator, S.N. & Jorgensen, C.M. (1992). A technical assistance model for promoting integrated communication supports and services for students with severe disabilities. *Seminars in Speech and Language*, 13 (2), 99-110.
  Houghton, J., Bronicki, G.J.B., & Guess, D. (1987). Opportunities to express preferences and make choices among students with severe disabilities in classroom settings. *JASH*, 12 (1), 18-27.

9. How can you adapt classroom activities for a child who only has a few communicative behaviors?

- Since most activities involve many different tasks or steps, children with less complex communication can control portions of the activity that are within their capability.
- A child can direct someone else in completing portions of an activity through choice making, eye pointing, and/or yes/no.
  See: Ostrosky, M., & Kaiser, A. (1991). Preschool classroom environments that promote communication. *Teaching Exceptional Children*, 23 (4), 6-10.
  Goossens', C., Crain, S., & Elder, P. (1994) *Engineering training environments for interactive symbolic communication.* Birmingham, AL: Southeast Augmentative Communication Conference.

10. Isn't voice output inherently better for a child's communication development?

- Voice output has some advantages in gaining attention, communicating across distances, being generally understandable, and providing information to the user.
- Many skilled adult AAC users prefer to use low-tech systems because of the directness of interaction with listeners, flexibility, simplicity, reliability, and portability/accessibility.
  See: Gorenflo, C. & Gorenflo, D. (1991). The effects of information and augmentative communication technique on attitudes towards non speaking individuals. *Journal of Speech & Hearing Research*, 34, 19-26.
  Crabtree, M., Mirenda, P., Beukelman, D.R. (1990). Age and gender preferences for synthetic and natural speech. *Augmentative and alternative communication*, 6 (4), 256-261.

11. Why isn't this child using the device that we bought for them - should we buy a new one to fix the situation?

- The device isn't the first place to look when evaluating problems in effective use of a communication system.
- Providing communicative opportunities, interaction training, support from the people in the child's environment is more likely to increase effectiveness than a device change.

- If you do plan to replace a child's AAC device, consider how to transition the goals & methods from their previous one.
  See: Smith-Lewis, M.R. (1994). Discontinuity in the development of aided augmentative and alternative communication systems. *Augmentative and alternative communication*, 10 (1), 14-26.
  McNaughton, D. & Light, J. (1989). Teaching facilitators to support the communication skills of an adult with severe cognitive disabilities: A case study. *Augmentative and alternative communication*, 5 (1), 35-48.

12. Why do I always seem to be asking these children questions, and how do we provide more ways to initiate communication and interaction for themselves?

- Interaction with AAC users tends to involve more direction and turns by the speaking partner, who can communicate faster.
- Promoting initiating with children using AAC includes more waiting and anticipating possible communicative situations.
  See: Light, J. (1988). Interaction involving individuals using augmentative and alternative communication systems: State of the art and future directions. *Augmentative and alternative communication*, 4 (2), 66-82.
  Buzolich, M.J. & Lunger, J. (1995). Empowering system users in peer training. *Augmentative and alternative communication*, 11 (1), 37-48.

13. Where do you start teaching communication - isn't yes/no the most basic communication skill?

- Yes/no tends to be a later-developing skill, since those words can have a wide variety of meanings and results.
- Also, yes/no tends to reinforce passive responding rather than active functional communicating.
- Earlier functions may include greetings, protests, requests for attention or objects, more/all done.
  See: Reichle, J., Halle, J. & Johnson, S. (1993). Developing an initial communicative repertoire: Applications and issues for persons with severe disabilities. In A.P. Kaiser & D.B. Gray (eds.) *Enhancing Children's Communication: Research Foundations for Intervention*. Baltimore: Brookes
  Mirenda, P., Iacono, T., & Williams, R. (1990) Communication options for persons with severe and profound disabilities: State of the art and future directions. JASH, 15, (1) 3-21.

14. How do you respond to AAC communication that is inappropriate, confusing, annoying, or probably a random action?

- AAC children need to experience the same kinds of feedback and alternatives that verbal children receive for equally annoying or inappropriate communication.
- Sometimes communication that begins as "random" helps a child learn the meaning of different messages within their life.
  See: Mirenda, P. & Santogrossi, J. (1985). A prompt-free strategy to teach pictorial communication system use. *Augmentative and alternative communication*, 1 (4), 143-150.
  Doss, L.S. & Reichle, J. (1991). Replacing excess behavior with an initial communicative repertoire. In J. Reichle, J. York, & J. Sigafoos, *Implementing AAC: Strategies for*

learners with severe disabilities. Baltimore: Paul H. Brookes.

15. How can I possibly have any time to work on communication skills when I already have a full curriculum (particularly with lots of behavior problems)?

- It's best if you incorporate communication into all of the rest of your current classroom activities. You don't have to make a special "communication time" in your busy schedule.
- Responding to behavior problems as communication and adapting situations can actually reduce your workload, by reducing the times when a student signals using behaviors.
  See: Calculator, S.N. & Jorgensen, C.M. (1991). Integrating AAC instruction into regular education settings: Expounding on best practices. *Augmentative and Alternative Communication*, 7, 204-214.
  Durand, V.M. (1993). Functional communication training using assistive devices: Effects on challenging behavior and affect. *Augmentative and Alternative Communication*, 9 (3) 168-176.

16. How do you handle teachers/parents/administrators who disagree with or don't carry out your recommendations?

- Usually working towards positive change in a few mutually agreeable areas is more effective than insisting on "best" solutions, and can lead to more consensus down the road.
- The parents and clients are always right in expressing their wishes, and we need to adapt our advice to meet those needs.
  See: Locke, P.A. & Mirenda, P. (1992). Roles and responsibilities of special education teachers serving on teams delivering AAC services. Augmentative and alternative communication, 8 (3), 200-214.
  Huer, M.B. & Lloyd, L.L. (1990). AAC users' perspectives on augmentative and alternative communication. Augmentative and alternative communication, 6 (4), 242-249.

17. How do I select the vocabulary on a child's communication system?

- *Vocabulary selection is very different for children who can spell vs. those who rely on complete words & messages.*
- *Words in an AAC system should be biased towards what the child wants to communicate over what we want them to say.*
- *It's more important to start using a system and adapt the vocabulary than wait until it is "perfect."*
  See: Beukelman, D.R., McGinnis, J., & Morrow, D. (1991) Vocabulary selection in augmentative and alternative communication. *Augmentative and alternative communication*, 7, 171-185.
  Yorkston, K.M., Honsinger, M.J., Dowden, P.A., & Marriner, N. (1989). Vocabulary selection: A case report. *Augmentative and alternative communication*, 5 (2), 101-108.

18. How do you arrange the symbols, words, and other controls on a communication system?

- Physical limitations, cognitive style, efficiency, and language concerns may all affect the arrangement differently.

- A general principle for effective interaction is to put together vocabulary that apply to the same purpose or activity.
  See: Mirenda, P. (1985). Designing pictorial communication systems for physically able-bodied students with severe handicaps. *Augmentative and alternative communication*, 1 (2), 58-64.

19. How do you choose activities to sample a child's communication skills, and how do you know if you have enough information to make a decision?

- Activities that allow participation and multiple communication turns around a topic tend to be more useful than activities with only one correct answer (e.g. tests).
- Intervention naturally involves reassessing a child's skills, so you don't have to have all of the answers before starting to use AAC techniques, particularly low-tech.
- Trial therapy and/or simulations with devices can be helpful with tough decisions about funding priorities.
  See: Reichle, J., & Karlan, G. (1985). The selection of an augmentative system in communication intervention: A critique of decision rules. *JASH*, 10, 146-156.

20. How do you fund AAC devices and services, and who is responsible for getting the funding?

- Funding is managed differently for educational needs, vocational needs, and individual communication needs.
- Remember that the cost of a device is only a small part of the resources that go into staff, training, and support.
- There are no "magic answers" - funding is a matter of justifying a need to sources committed to meeting that need.
  See: *Assistive technology: A funding workbook.* (1992). Washington, DC: RESNA.
  DePape, D. (1988). *Guidelines for seeking funding for communication aids.* Madison, WI: Trace R & D Center.
  Beukelman, D.R. Magic and cost of communicative competence. *Augmentative and alternative communication*, 7 (1), 2-10.