Chat with Me:  
Pragmatic Skill Intervention in AAC  
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Pragmatics

- “Being a skilled language user means knowing how to use one’s language appropriately and strategically in social situations” (Becker Bryant, 2005, p. 191). Language use or pragmatics (Owens, 2005) is a term referring to the use of language to “express one’s intentions and get things done in the world” (Berko Gleason, 2005, p. 23). In essence, pragmatics refers to language use in social contexts.

Importance of Social Skills

- Social skills are important for:
  - Individuals with disabilities to live and be educated in the least restrictive environment (Cutts & Sigafoos, 2001; Fussell et al., 2003)
  - Competitive employment (Butterworth & Strauch, 1994)
  - Long-term psychological and social adjustment (Gresham et al., 2001)
  - Successful functioning in life and academic performance (Preston, 2015)
- There can be significant negative consequences of poor social skills including:
  - Peer rejection (Hall, 1994)
  - Job loss (Butterworth & Strauch, 1994)
  - Reduced quality of life (Fussell et al., 2002)

Communicative Competence

- Light (1989)
  - Operational Competence
  - Social Competence
  - Strategic Competence
  - Linguistic Competence

Social Competence

- Social competence refers to the use of social rules of communication and includes both sociolinguistic aspects such as understanding discourse strategies, interaction functions, and communicative functions as well as sociorelational aspects (Light, 1989).
Social Competence in AAC

- In a study done on children with physical disabilities without accompanying cognitive impairments (Light, Collier, & Parnes, 1985), general patterns were noted:
  1. Inequity in conversational participation, with communication partners tending to dominate
  2. Individuals who use AAC tending to act as respondents versus initiators; and
  3. Communicative functions tending to be restricted during interactions (Light et al., 1985).

- CELF-5 Pragmatics Profile is a 50-item checklist that provides normed scores on verbal and nonverbal social communication skills.
- Completed by an informant familiar with the student such as teacher or parent.
- Each item on the questionnaire is rated on a 4-point Likert-type scale. The number checked is related to the frequency of occurrence of each skill: Never or Almost Never (1), Sometimes (2), Often (3), and Always or Almost Always (4).

Pragmatics Assessment

- Social Competence in AAC

Begin with Assessment

- The first step in intervention is to identify areas of need to help set appropriate goals.

Item Analysis

- As per the CELF-5 Examiner’s Manual (Wiig, Semel, & Secord, 2013), an item analysis can be done to identify student strengths and needs:
  - 4 (Always or Almost Always) indicates appropriate development and use of a targeted skill,
  - 3 (Often) indicates that the targeted skill is emerging and that the only requirement may be to monitor the student to ensure that development continues. Skills rated 3 are likely targets for monitoring and rechecking for continued development;
  - 2 (Sometimes) also indicates that the skill is emerging but is not observed as consistently as those skills that are rated 3 points. These skills are likely targets for either direct or indirect intervention.
  - 1 (Never or Almost Never) indicates the targeted skill has not been observed and is likely not developed. These skills are likely targets for direct intervention.

Rituals and Conversational Skills

The student demonstrates culturally appropriate use of language when

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Descriptive analysis of results from the Rituals and Conversational Skills section was conducted for all participants. Of the 22 items from that section, 17 were rated as sometimes or never (i.e., requiring intervention) by the majority of parents, suggesting that many teens and young adults using AAC have pragmatic skills in need of intervention.
Social Competence in AAC

- **Senner (2011)**
  - Only 6 of 21 (28.6%) of parents reported their children as having taken a social skills class.
  - General parent comments yielded further insight into perceptions regarding social skills and included themes of **appropriateness of vocabulary**, the need for social skills instruction, and the influence of communication partner skills.

Next Examine Vocabulary

- **If an individual is not performing a given skill, examine vocabulary.**
- “Providing access to the right vocabulary is critical to ensuring the success of communication” (Light & Binger, 1998).

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[www.talcaac.com](http://www.talcaac.com)
- LINKS AND DOWNLOADS
- SOCIAL PAGES

Customization

- **Vocabulary Varies by Region**
  - How groups of people are addressed:
    - You guys,
    - Yoose,
    - You all
- **Language Evolves Over Time**
  - Golly
  - Gee Whiz
- **Selecting Words/Phrases**
  - Listen to what peers are saying in the lunchroom & hallways
  - Interview peers and the individual using AAC
Use of Add-On Social Pages

Intervention Strategies

• Partner-augmented input can and should be provided in the natural environment to model when and how to use targeted pragmatic skills.
• However, other intervention strategies have been determined to be beneficial additions.

Intervention Strategies

• Several strategies have been proven to be effective in teaching social skills to individuals with autism spectrum disorders (Crozier & Tincani, 2006, Delano, 2007; Gray & Garand, 1993; Krantz & McClannahan, 1998; Sansosti & Powell-Smith, 2008):
  – Social Stories
  – (Video) Modeling
  – Script Training (Script Fading)

Social Stories

• Social stories are individualized short stories written from a child’s perspective that explain challenging social situations through visual supports and text (Gray & Garand, 1993).
• Social stories have been found to increase appropriate behavior and decrease inappropriate behavior for preschoolers with autism (Crozier & Tincani, 2007).

Social Stories

• Four Basic Sentence Types (Gray, 1994, 2000)
  – Descriptive Sentences
    • Descriptive sentences are truthful, opinion-and-assumption-free statements of fact. They identify the most relevant factors in a situation or the most important aspects of the topic.
    • Only required sentence type.
  – Perspective Sentences
    • Perspective sentences are statements that refer to, or describe a person’s internal state, their knowledge/thoughts, feelings, beliefs, options, motivation, or physical condition or health. Most frequently they are used to refer to the internal status of OTHER people.
  – Directive Sentences
    • Directive sentences identify a suggested response or choice to a situation or concept, gently directing the behavior of the person.
  – Affirmative Sentences
    • Affirmative sentences enhance the meaning of surrounding statements, often expressing a commonly shared value or opinion within a given culture.

Social Stories

• Additional Sentence Types (Gray, 1994, 2000)
  – Partial sentences
    • Encourage the individual to make a guess regarding the next word, the response to another person or his own response.
    • A descriptive, perspective, directive or affirmative sentence may be written as a partial statement, with a portion of the sentence replaced with a blank space.
  – Control Sentences
    • Statements that are written by a person to identify personal strategies to use to recall and apply the information.
  – Cooperative Sentences
    • A cooperative sentence may be written as a partial statement to help a person identify others who may assist him or her as he or she learns a new skill, and how they can help.
Social Story – Making a Phone Call

Making a Phone Call

Social Story – Making a Phone Call

Modeling

- Research has shown modeling, learning by imitation, is an effective technique with children and adolescents.
- “Video modeling interventions involve a child watching videotapes of positive examples of adults, peers, or him- or herself engaging in a behavior that is being taught” (Delano, 2007).
- In a review of research done over a 20 year period, video modeling interventions have been found to be effective in teaching a variety of social-communicative skills to children with autism (Delano, 2007). Most research has focused on improving social-communicative skills.

Video Model – Making a Phone Call

Script Training

- Script training may be used to teach a variety of social interactions (Terpstra, Higgins & Pierce, 2002).
- Scripts include roles for all who will participate.
- Scripts should include statements or questions related to the activities.
- Scripts can be an audiotape, written word, phrase, or sentence that enables the individual to start and continue conversations (Krantz & McClannahan, 1998; Stevenson, Krantz & McClannahan, 2000).
- Script “fading” can be done in which visual supports are gradually reduced.
- Research has demonstrated that during script training, target behaviors increase and unrelated behaviors decrease.

Generalization

- Generalization is facilitated when the setting in which the teaching occurs closely resembles the natural setting where the skill will be used (McGinnis & Goldstein, 1990). Script-fading is one such “naturalistic teaching approach” that addresses the issue of generalization (Cowan & Allen, 2007).
- The actual use of a skill is facilitated by teaching the skill in a variety of settings and in response to a variety of persons.
- Using naturally occurring social reinforcers (e.g., smile, “thank you”) will increase the chance that individuals will be responsive to reinforcement by others outside of the teaching setting (McGinnis & Goldstein, 1990).
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Pragmatic Intervention

Evidence Behind the Practice

• Subjects
  – Participants ranged in age from 15 years 3 months to 22 years 1 month with a mean of 19.44 years (SD=1.95). 4 males, 5 females. All were unable to meet communication needs with natural communication methods (i.e., speech) alone. All teens and young adults used direct selection to access a SGD. All participants utilized a speech generating device with dynamic display and synthesized speech. Length of current system use ranged from 6 months-14 years with a mean of 4.72 years (SD=4.2).

Procedure

• The four-week social skills class required four 15-30 minute online sessions per week for both individuals who use AAC and their parents. The targeted pragmatic skill was interrupting.
  – During the first week, participants were required to read an asocial story, complete a partial sentence within the social story, and also to write (or co-create) a control statement to help him/herself recall and apply the information.
  – During the second and third weeks, in addition to reviewing materials from week 1, participants were asked to view the video models.
  – Finally, in week four, in addition to reviewing materials from weeks 1-3, participants were asked to complete a role-play using the script provided.

Results

• Interrupting Pre & Post Test
  1. Recognizing parent was busy
  2. Saying “excuse me”
  3. Waiting 3-5 seconds when told “just a minute”
  4. Tapping parent on shoulder to gain attention
  5. Only interrupting about an important topic (e.g., to gain the item the parent was holding).
• Pre & Post Rating “My child uses appropriate strategies for responding to interruptions and interrupting others.” Pragmatics Profile, CELF 4.

• Eight participants had higher interrupting post-test scores than pre-test scores. One participant showed no improvement. Results were statistically significant (Z=-2.588, P=.010).
• On the Pragmatics Profile question, 5 participants showed improvement and 4 remained the same. The difference was statistically significant (Z=-2.121, P=.034).
She even showed this in a real life situation with the nurse. The nurse was on the phone… [Child] did not interrupt her with her normal greeting. She waited until [the nurse] was finished talking.

“Child patiently waited, at least five minutes, for needed item.”

“Others noticed that [Name] seemed more patient and willing to wait. This is good.”

“[Name] just kept waiting… and waited patiently.”

“I think she is more aware of interrupting skills as a result of this class.”

References