Essential Speech Skills for School-Age Children Who Stutter

Presented by:

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Overview of the Presentation

- Stuttering Modification and Fluency-Enhancing Strategies
  - Stuttering Modification Strategies
  - Fluency-Enhancing Strategies
  - Importance of Integrating both Approaches
  - One Component of Stuttering Therapy
- General Description of the Therapy Process
  - Working with Stuttering: Rationales, Methods, and Practice
  - Working with Fluency: Rationales, Methods, and Practice

Stuttering Modification and Fluency-Enhancing Strategies

- Stuttering Modification Strategies
  - Work directly with stuttering behavior
  - Increase awareness, explore and decrease tension
  - Reduce struggle behaviors
  - Stutter in a more relaxed way
  - Decrease sensitivity, increase feelings of control

  (See Dell, 1993; Prins, 1997; Williams & Dugan, 2002; Van Riper, 1973)

Stuttering Modification and Fluency-Enhancing Strategies (cont.)

- Fluency-Enhancing Strategies
  - Change breath flow, speech rate, voice production, and articulation
  - Increased confidence can lead to greater fluency

  (See Cooper & Cooper, 2003; Runyan & Runyan, 1999; Shames & Florence, 1986; Webster, 1986)

Stuttering Modification and Fluency-Enhancing Strategies (cont.)

- Importance of Integrating both Strategies
  - One Component of Stuttering Therapy
    - These motor skills are one part of a multi-dimensional approach
    - Therapy must also address cognitive, affective, linguistic, and social factors
    - Family, friends, teachers, and others must be involved

  (See Chmela & Reardon, 2001; Gregory, 2003; Gutar, 1998; Yurka & Reardon, 2002)

Highlighted Students

- Jack (age 11) Evaluation Clip
- Alex (age 15) Evaluation Clip
- Ari (age 9) Evaluation Clip
- Pat (age 16) Evaluation Clip
- Aldyne (age 19) Evaluation Clip
Other Essential Components to School-Age Stuttering Therapy

- Learning about Speech Production and Stuttering
- Exploring Their Own Stuttering & Speaking Behavior
- Developing Healthy Attitudes towards Speaking & Stuttering
- Developing Problem-Solving Skills
- Transferring Learned Skills and Attitudes into Daily Life
- Taking Ownership of the Therapy Process

General Description of the School-Age Therapy Process

- Early Sessions: Learning about Speech and Stuttering
  - Learn about speech system
  - Identify and analyze how speech sounds are produced
  - Learn about and demystify stuttering
  - Explore student feelings and beliefs
  - Identify cognitive, affective, linguistic, and social factors
  - Promote openness and acceptance of stuttering

- Fluency-Enhancing Strategies
  - Relaxed Breath
  - Slow Stretched Speech
  - Smooth Movement, Easy Voice, Light Contact
  - Stretched Speech
  - Linked Relaxation Rhythm
  - Extra Intonation
  - Nearly Natural Speech
  - Natural Speech

General Description of the School-Age Therapy Process (cont.)

- Final Sessions: Carry-Over and Appropriate Expectations
  - Over-learn behaviors
  - Develop resistance to fluency disrupters
  - Systematic process of transfer
  - Realistic expectations

Video Clip: Stefan’s Concern

General Description of the School-Age Therapy Process (cont.)

- Stuttering Modification Strategies
  - Catching the Stutter
  - Relaxing the Stutter
  - Slide
  - Easy Stuttering
  - Cancellation

Working with Stuttering…

Description & Rationale

Teaching Method

Hands-On Practice
Working with Stuttering...

Catching the Stutter

**Rationale**

- Increases awareness
- Provides opportunity to modify stuttering
- Develops self-monitoring skills
- Encourages openness and acceptance
- Begins process of desensitization

**Description**

Students identify moments of stuttering as they occur. They signal instances of stuttering by closing their hand. They should try to match the tension level of the hand to the tension level of the disfluency.

(See Dell, 1993; Murphy, 2002; Price, 1997; Reardon-Reeves & Yaruss, 2004; Van Riper, 1973)

Teaching Method:

- Demonstration & Hands-On Practice

- Ari: Therapist Instruction
- Jack: Game Activity
- Alex: Words from Novel

Student Workbook

Working with Stuttering...

Relaxing the Stutter

**Rationale**

- Identify, analyze, and change stuttering
- Students see they can stutter more easily
- Reduces sensitivity
- Increases feelings of control
- Develops ability to work with stuttering

**Description**

Students purposefully stutter on a word with 100% tension, observe the disfluency, and then repeat the word with decreased tension. (50% - 25% - 12% etc.)

(See Gregory, 1989; Van Riper, 1973)

Teaching Method:

- Demonstration & Hands-On Practice

- Ari: Therapist Instruction
- Jack: Game Activity
- Alex: Words from Novel

Student Workbook

Working with Stuttering...

Slide

**Rationale**

- Stabilizes and decreases tension
- Increases speech control
- Keeps speech moving forward
- Helps manage moments of stuttering

**Description**

Students catch themselves during a moment of stuttering and then gradually "slide out" of the disfluency by identifying and stabilizing the tension, slowing down their articulation, and stretching out transitions between sounds.

(See Murphy, 2002; Ramig & Dodge, 2005; Van Riper, 1973)

Teaching Method:

- Demonstration & Hands-On Practice

- Ari: Therapist Instruction
- Jack: Conversation

Student Workbook
Working with Stuttering...

**Easy Stuttering**

**Teaching Method:**
Demonstration & Hands-On Practice

- Alex: Therapist Instruction
- Ari: Therapist Instruction
- Alex: Conversation
- Student Workbook

**Rationale**
- Reduces tension
- Helps manage moments of stuttering
- Counter conditions struggle behaviors
- Facilitates self-disclosure
- Promotes greater openness/acceptance

(See Dell, 1993; Gregory, 2002; Murphy, 1999; Ramig & Bennet, 1997; Reardon-Reeves & Yaruss, 2004; Williams & Dugan, 2002; Van Riper, 1982)

**Description**
Students intentionally produce relaxed, controlled repetitions of sounds, syllables, or words. This strategy can be used before a moment of stuttering, during a moment of stuttering, or at times when stuttering is not anticipated or occurring.

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Working with Stuttering...

**Cancellation**

**Teaching Method:**
Demonstration & Hands-On Practice

- Jack: Oral Reading
- Alex: Conversation
- Student Workbook

**Description**
Students pause for a couple of seconds after a moment of stuttering (to acknowledge and analyze the disfluency), and then say the stuttered word again with less tension.

**Rationale**
- Increases feelings of control
- Desensitizes concerns about stuttering
- Reduces tension
- Helps to “center” the speaker

(See Guttler, 1998; Van Riper, 1973; Williams & Dugan, 2002)

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Working with Fluency...

**Description & Rationale**

**Teaching Method**
Hands-On Practice
Working with Fluency…

Relaxed Breath
Slow Stretched Speech
Smooth Movement
Easy Voice
Light Contact
Stretched Speech

Additional Fluency-Enhancing Strategies

Linked Relaxation Rhythm
Extra Intonation
Nearly Natural Speech
Natural Speech

Working with Fluency…

Relaxed Breath

Teaching Method:
Demonstration & Hands-On Practice

- Alex: Rationale
- Ari: Relaxed Breath with Voice

Student Workbook

Working with Fluency…

Slow Stretched Speech

Description
Students prolong individual syllables to approximately ten times their normal duration. All vowels and certain consonants (m, n, l, r, w, y, v, Th [voiced], z and j) are stretched. One syllable is spoken at a time.

Rationale
- Increases coordination of speech system
- Improves timing of articulation
- Reduces force/acceleration of muscles
- "Grounds" speech production
- Fosters improvements in speech fluency

(See Kully & Bolinger, 1991; Perkins, 1992; Ramig & Dodge, 2005; Runyan & Runyan, 1993; Wall & Myers, 1993)

Teaching Method:
Demonstration & Hands-On Practice

- Alex: Therapist Instruction
- Jack: Rationale Review
- Ari: Word Level

Student Workbook
## Smooth Movement

### Rationale
- Abrupt movements may lead to stuttering
- Stutterers may have difficulty producing transitional movements between sounds
- Helps students gain greater speech control

(See Bloodstein, 1995; Gregory, 1991; Wall & Meyers, 1995)

### Description
Smooth Movement helps students to produce gentle transitions between sounds. It is achieved by slowing, exaggerating, and blending transitional articulatory movements.

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## Light Contact

### Rationale
- Certain consonants involve constriction
- Constriction naturally involves tension
- Tension may build and lead to stuttering
- Light Contact reduces articulatory tension

(See Conture, 2001; Healey & Scott, 1995; Peters & Guitar, 1991; Ramey & Dodge, 1995; Roarden Reaves & Yaruss, 2004; Runyan & Runyan, 1999; Wall & Meyers, 1995)

### Description
When producing stops (b, p, d, t, g, k) and voiceless fricatives and affricates (f, voiceless th, s, sh, h, ch), students touch their speech articulators together lightly in order to decrease articulatory pressure.

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## Easy Voice

### Rationale
- Decreases tension in the phonatory system
- Facilitates initiation of voice production
- Reduces laryngeal blocks & glottal attacks

(See Cooper & Cooper, 2003; Healey & Scott, 1995; Guitar, 1998; Runyan & Runyan, 1999)

### Description
Students initiate phonation of vowel sounds in an extremely relaxed and gentle manner.

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### Teaching Method:
Demonstration & Hands-On Practice

- Alex: Therapist Instruction
- Jack: Therapist Instruction
- Peter: Workbook Words and Phrases
- Student Workbook
### Stretched Speech

**Description**
Like Slow Stretched Speech, Stretched Speech involves prolonging syllables. However, Stretched Speech doubles the previous speed (e.g., increases the rate to approximately one second per syllable).

**Rationale**
- Initial step toward more natural rate
- Students must use skills more quickly
- Continues to help increase coordination
- Continues to “ground” speech production

(See Kully & Bobberg, 1991; Perkins, 1992; Ramig & Dodge, 2005; Wall & Meyers, 1995)

### Linked Relaxation Rhythm

**Teaching Method:**
Demonstration & Hands-On Practice
- Alex: Therapist Instruction
- Pat: Conversation
- Ari: Working with a Block
- Student Workbook

### Extra Intonation

**Teaching Method:**
Demonstration & Hands-On Practice
- Alex: Therapist Instruction
- Jack: Phrase Level
- Ari: Oral Reading
- Pat: Conversation
- Alex: Teaching a Peer
- Student Workbook

### Linked Relaxation Rhythm

**Description**
A rhythmic speech pattern in which relaxed, continuous phonation is maintained as students oscillate the loudness of their voice on successive syllables and words.

**Rationale**
- Reduces tension and choppiness
- Prevents tension from building
- Facilitates fluid, relaxed speech
- Reduces number of vocal initiations
- Decreases chance of stuttering

(See Bloodstein, 1995; Manning, 2001; Starkweather & Givens-Ackerman, 1997)
Nearly Natural Speech

**Description**
This modification involves increasing speech rate, reducing the exaggerated quality of Extra Intonation, using more normal intonation, and shortening certain stretches.

**Rationale**
- Uses fluency skills with sophistication
- Approximates natural sounding speech
- Maintains kinesthetic / physical awareness
- Facilitates transfer of fluency skills

Natural Speech

**Teaching Method:**
Demonstration & Hands-On Practice

- Jack: Therapist Instruction
- Ari: Oral Reading
- Pat: Conversation
- Aldyne: Conversation
- Jack: Conversation
- Alex: Teaching an Unfamiliar Listener
- Alex: Play Rehearsal & Performance

**Teaching Method:**
Demonstration & Hands-On Practice

- Jack: Therapist Instruction
- Ari: Oral Reading
- Pat: Conversation
- Aldyne: Conversation
- Jack: Conversation
- Alex: Teaching an Unfamiliar Listener
- Alex: Play Rehearsal & Performance

Questions & Comments

Natural Speech

**Description**
Natural Speech feels freer to the speaker and sounds normal to the listener. While the speech rate is faster than Nearly Natural, an overall centered feeling remains. It is a consciously produced speech modification.

**Rationale**
- Incorporates all fluency-enhancing strategies with high level of sophistication
- Involves a natural sounding speech pattern
- Used in conjunction with stuttering modification strategies
Resources & References Related to School-Age Stuttering Therapy


Sample IEP Goals

For clinicians who teach the stuttering modification and fluency enhancing strategies presented by *Speak Freely: Essential Speech Skills for School-Age Children Who Stutter*, a number of sample IEP goals are listed below. This list provides possible wording for goals related to each of the strategies. You are encouraged to modify these goals as needed.

**Stuttering Modification Strategies**

**Catching the Stutter**

When in the speech therapy room, student will identify when the clinician fails to signal awareness of her “stuttered speech” by closing her hand and making a fist with a tension level that matches the stuttering behavior.

During spontaneous conversation in the speech therapy room, student will signal awareness of his own moments of stuttered speech by closing his hand and making a fist with a tension level that matches the stuttering behavior.

**Relaxing the Stutter**

When producing single words in the speech therapy room, student will identify and explore his stuttering behaviors by purposefully stuttering on words with 100% tension and then decreasing that tension by 50%.

**Slide**

During spontaneous speech on the playground, student will manage moments of stuttering by holding the stuttered sound steady and then slowly stretching out the transition into the subsequent sound in a relaxed manner.

**Easy Stuttering**

During game activities within the speech therapy room, student will manage moments of stuttering by producing slow, easy, relaxed repetitions of sounds, syllables, or words.

When ordering lunch in the cafeteria, student will manage moments of stuttering by producing slow, easy, relaxed repetitions of sounds, syllables, or words.

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1 Please Note: This list is a sampling of suggested goals. It does not address all levels linguistic complexity (e.g., sound, syllable, word, phrase, sentence, oral reading, conversation); all conditions/situations/listeners (e.g., immediate, delayed, indirect, no model; structured/unstructured activity; in/out of the speech therapy room; in home, school, community; with family, friends, strangers); and/or all levels of difficulty (e.g., propositionality of message, anxiety producing situations, interruptions, time pressure, other disruptive environments). It is assumed that levels of accuracy will be noted elsewhere.
Cancellation

When producing sentences in the speech therapy room, student will manage moments of stuttering by stopping after stuttering on a word, pausing for a moment to assess the nature of the disfluency, and then repeating the same word with less tension.

When speaking to a friend in the hallway, student will manage moments of stuttering by stopping after stuttering on a word, pausing for a moment to assess the nature of the disfluency, and then repeating the same word with less tension.

**Fluency-Enhancing Strategies**

**Relaxed Breath**

Student will use relaxed diaphragmatic breathing with no model when producing sentences during structured therapy activities within the speech therapy room.

**Slow Stretched Speech**

When producing one syllable words in the speech therapy room with a direct model, student will prolong individual words for a duration of approximately two seconds by stretching out the first stretchable consonant (e.g., m, n, l, r, w, y, v, voiced th, z and j) or vowel in a relaxed manner.

**Smooth Movement**

When reading CV syllables in the speech therapy room with an indirect model, student will gently stretch out initial “stretchable” consonants (e.g., m, n, l, r, w, y, v, voiced th, z and j) and then make a smooth, steady transitions into the subsequent vowels.

When speaking with a classmate in the library, student will gently stretch out “stretchable” consonants (e.g., m, n, l, r, w, y, v, voiced th, z and j) and then make smooth, steady transitions into subsequent vowels.

**Easy Voice**

Student will produce initial vowels in an easy, relaxed manner during a three minute conversation with a classmate in a variety of school settings (e.g., homeroom, student lounge, cafeteria, schoolyard, etc.).

**Light Contact**

When reading CV syllables in the speech therapy room with no model, student will gently articulate “light contact” consonants (e.g., b, p, d, t, g, k, f, voiceless th, s, sh, h, ch).

Student will gently articulate “light contact” consonants (e.g., b, p, d, t, g, k, f, voiceless th, s, sh, h, ch) when reading school textbooks in the speech therapy room.
**Stretched Speech**

When producing one syllable words in the speech therapy room with no model, student will prolong individual words for approximately one second by stretching out the first “stretchable” consonants (e.g., m, n, l, r, w, y, v, voiced th, z and j) or vowels in a relaxed manner.

**Linked Relaxation Rhythm**

When conversing with the clinician during structured activities in the therapy room, student will produce “linked bell curves” on successive syllables (e.g., oscillate the loudness of his voice in a rhythmic fashion) while maintaining continuous phonation that incorporates relaxed breath, stretched speech, smooth movement, easy voice, and light contact.

**Extra Intonation**

When reading paragraphs in the speech therapy room, student will use a notably prolonged speech pattern that exaggerates intonation patterns, while incorporating relaxed breath, continuous phonation, smooth movement, easy voice, light contact, and stuttering modification strategies.

**Nearly Natural Speech**

When talking with an unfamiliar listener in the speech therapy room, student will use a slightly prolonged speech pattern that incorporates normal intonation, relaxed breath, continuous phonation, smooth movement, easy voice, light contact, and stuttering modification strategies.

**Natural Speech**

When making telephone calls to local stores from the teacher’s lounge, student will use a normal sounding speech pattern that incorporates relaxed breath, very slight prolongations, continuous phonation, smooth movement, easy voice, light contact, and stuttering modification strategies.