FLUENCY TREATMENT STRATEGIES FOR SCHOOL AGED CHILDREN AND TEENS

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Fluency Review Within CSLD Presentations

- **Whitney's 2014 Presentation:** "Assessment and Treatment of School-Age Children Who Stutter"
  - Stuttering definitions, etologies, treatment models and theories, assessment components, case studies, Lindcombe Program treatment examples, sample goals,

- **Whitney's 2018 Team Day Presentation:** "Cluttering vs. Stuttering: A review..."
  - Hallmarks of stuttering and cluttering
  - Assessment and treatment frameworks and strategies

- **Babz's 2018 Team Day Presentation:**
  - Risk factors for Pervasive and Development Stuttering
  - Treatment approaches: indirect vs. Direct vs. Operant
  - Lidcombe Program—see also Lidcome treatment guide
  - Therapy ideas: visuals, worksheets, books, web-based resources
  - Hallmarks of both stuttering and cluttering
  - Assessment and treatment resources
Assessment Considerations

• Symptoms and severities of stuttering can vary across situations/tasks/contexts—imperative to individualize and get data from multiple contexts (Conture, 2001; St. Louis & Schulte, 2011).

• Stuttering does not need to occur all the time or in every situation to be considered a diagnosable disorder.

• Per ASHA, "The purpose of assessing school-age children and adolescents is to determine the presence, extent, and, most importantly, the impact of the fluency disorder and the potential benefit from treatment" (ASHA 2019)

• **English Language Learners:** Bilingual children typically stutter in both languages, though some report greater severity in one language vs other
  • Parents or someone familiar with the native language can be trained in perceptually identifying unambiguous stutters in L1, as well as noting secondary behaviors (Shenker 2011)

• **Educational Impact:** "adverse educational impact," including impact on functional situations in school and quality of life
  • "For students who stutter, the impact goes beyond the communication domain. In fact, stuttering can affect all areas of academic competency, including academic learning, social-emotion functioning, and independent functioning (Ribbler 2016)"
Assessment Components

- Case history:
  - Family hx of stuttering or cluttering
  - Dysfluency age of onset and pattern (continuous or variable)
  - Any previous tx hx/outcomes
  - Info re: family, personal, or cultural perception of fluency
- Consults with teachers or guardians—disfluent situations, any repetitive language that could result in avoidance patterns
- Speech sample outside of school
- Clinical assessment of speech fluency—Protocol
- Emotional, cognitive, and attitude impact of stuttering—Protocols
- Stimulability testing: +/- pausing, speech rate

ASHA breakdown of pre, during, and post assessment procedures: https://www.asha.org/Practice-Portal/Clinical-Topics/Childhood-Fluency-Disorders/Assessment-Procedures--Parallel-With-CPT-Codes/

CPT Codes

92521  Evaluation of speech fluency
92507  Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual
Assessment Protocols

Formal

- **Stuttering Severity Instrument (SSI-4):** normed all ages over 2;10, appropriate for preschool and school aged
  - measured the frequency of stuttering events, the duration of stuttering events, and the physical concomitants during reading/narration/memory retell and conversational speech

Informal

- **Clinical Use of Self Reports (from SSI):** survey designed to help students communicate their feelings about their stuttering, specifically their perception of stuttering severity, level of internal/external locus of control, and word or situation avoidance.

- **Children's Attitudes About Talking-Revised (CAT-R):** 32 statements surrounding perceptions and emotions surrounding communication and stuttering, individual either agrees or disagrees with statement

- **Scale of Communication Attitudes:** 24 statements surrounding perceptions and emotions surrounding communication and stuttering, individual either agrees or disagrees with statement

- **A-19:** Y/N statements gauging perceptions and emotions surrounding communication and stuttering

- **Overall Assessment of the Speaker’s Experience of Stuttering (OASES):** normed ages 7-12, with additional versions for teens and adults
  - 60 items in 4 sections: perceptions, reactions (feelings, actions, thoughts), functional communication difficulties, quality of life
# Resources on CSLD Drive

<table>
<thead>
<tr>
<th>Resource</th>
<th>Contents</th>
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<tbody>
<tr>
<td><strong>Fluency Interview Questions</strong></td>
<td>18 questions for students, covering motivations for tx, case history, types/frequency/situations of stuttering, previous therapies, emotional reactions and perceptions</td>
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<tr>
<td><em>(CSLD clinic)</em></td>
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<tr>
<td><strong>Fluency Questionnaire</strong></td>
<td>Parent focused, covering:</td>
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<tr>
<td><em>(Melissa Peterson 2015)</em></td>
<td>- options for disfluencies observed</td>
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<tr>
<td><strong>Parent Questionnaire Fluency</strong></td>
<td>- full case history</td>
</tr>
<tr>
<td><em>(Kathy Swiney 2000)</em></td>
<td>- family member emotions, attitudes toward stuttering</td>
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<tr>
<td><strong>Main difference</strong></td>
<td>Main difference is rating scales vs checklists but mainly gets at the same information</td>
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<tr>
<td><strong>Student Questionnaire</strong></td>
<td>Rating &quot;I&quot; statements from almost never-almost always</td>
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<tr>
<td><em>(CSLD team drive)</em></td>
<td>- &quot;At school, my stuttering prevents me from...&quot;</td>
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<td></td>
<td>- &quot;How I feel about my stuttering...&quot;</td>
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Differential Diagnosis

- **Stuttering/Cluttering**: PWS more likely to be self-aware of disfluencies and may exhibit more physical tension, secondary behaviors, and negative reactions (PWC: errors related to speech intelligibility secondary to increased speech rate)

- **Stuttering/Reading Disorders**
  - PWS: increased disfluency --> cannot change words to avoid stuttering moment OR disfluencies with physical tension and secondary behaviors
  - PWS can usually decode, while individuals with reading disorders will struggle decoding
  - Oral reading measures --> difficult to differentiate decoding or stuttering: NEED TESTING MODIFICATIONS (e.g. silent reading assessment)

- **Stuttering/Language Deficits**: determine normal (interjections, filled pauses, revisions, phrase repetitions) vs abnormal (sound/syllable repetitions, prolongations, blocks, secondary behaviors) during structured language tasks and communication situations
  - Blurrier lines cluttering vs. Word finding language deficits --> assess organization of discourse helpful

- **Stuttering/ADHD**: need to understand interplay with co-dx
  - Difficulty monitoring speech and making online adjustments in moments of stuttering
  - Medication and Stuttering behaviors? Not enough research currently to explain relationship
  - ADHD and Stuttering Brochure from The Stuttering Foundation
Treatment Components: Keep In Mind

◦ Treatment is highly individualized: based on thorough assessment of speech fluency, language skills, emotional and attitude, and quality of life
  ◦ Important to consider how fluency interplays with other co-existing disorders (ex. ADHD, other speech-language disorders)
  ◦ Sensitive to preferences and values of the individual or family

◦ Most children with fluency disorders demonstrate both observable disfluency and negative life impact (Ribbler 2006)
  ◦ With goals of treatment targeting these difficulties, individuals who are progressing may become more disfluent because they are communicating more freely (not exerting effort to hide/avoid/suppress their disfluencies)
  ◦ An individual's shame/embarrassment towards stuttering can limit progress toward tx goals
Treatment Goals For Fluency Disorders—WHO ICF Framework

(Yaruss 2007)
(Yaruss & Quesal 2004)

Increasing helpful coping reactions in the speaker and reducing negative responses by those in speaker's environment
Ex: reducing anxiety/shame/etc., increasing confidence in communication, establishing a support system, increasing competence in responding to questions about stuttering, managing bullying

Reducing disfluency adverse impact by improving functional communication across multiple situations
Ex: improving quality of life, habituating and generalizing new behaviors for increased comfort, spontaneity, and naturalness in functional communication

Increasing Speech Fluency and Reducing Severity of Disfluencies
Ex: reducing frequency and severity of disfluencies, reducing physical concomitant behaviors and avoidance behaviors, and reducing tension

Ex: reducing anxiety/shame/etc., increasing confidence in communication, establishing a support system, increasing competence in responding to questions about stuttering, managing bullying

The diagram illustrates the interplay between health conditions, body functions and structure, activity, participation, personal factors, environmental factors, and their impact on speech fluency and disfluency.
**Strategies For Reducing Impairment in Body Function**

- **Rate Control**: encompasses pausing strategies and/or prolonging certain sounds to overall reduce speech rate.

- **Full Breath**: diaphragmatic breathing, inhale through mouth with relaxed breath, cue talking on exhale.

- **Prolonged syllables**: purposefully stretching the vowel sound in the beginning syllable to ease into production.

**Speech Modification/Fluency Enhancing Strategies**

- **Easy Onsets**: counters hard attack from vocal folds coming together forcefully, typically with vowel sounds—aim is to bring folds together more gently—scaffold first with hhhV then fade, could also yawn.

- **Light Contacts**: focus on touching articulators lightly vs tense places of articulation/sounds, more with obstruent initial consonants.

- **Pausing and Chunking or Phrasing**: focus on forward moving speech by grouping words together and taking natural pauses.
Strategies For Reducing Impairment in Body Function

- **Increasing awareness and self-monitoring**: foundational skills for stuttering modification strategies; individual trained to "catch" the disfluency before (anticipation of), during, or after a stuttering moment; includes identifying tension in speech mechanism or concomitant physical behaviors, so can modify during disfluent speech

- **Preparatory sets**: used prior to producing word that PWS anticipates will be stuttered—uses slow rate and light contacts to produce the first sound, and then the rest of the word in relaxed, "smooth" manner

- **Cancellation**: 1) PWS notices stuttering event, 2) pauses, waiting up to a few seconds, 3) produces word again in slower, more controlled ("easier") manner

- **Pull-out**: *releases tension IN the stutter (not after a pause when using a cancellation); PWS catches themselves in stuttering moment, then eases themselves out by producing it in a slower, more controlled (easier) manner

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**Stuttering Modification Strategies**

GOAL: Aim to reduce physical tension by helping students identify core stuttering behaviors, recognize physical concomitant behaviors, locate tension during disfluency, and reduce physical tension (Van Riper 1973)
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<tr>
<td><strong>BW/Color Fluency Strategies</strong></td>
<td>Education of muscles/systems involved in speech; strategy description + practice sent. Paragraphs with rating scales and debriefing.</td>
<td>Jeopardy game: name that stutter,</td>
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<td>(Speech is Heart, 2017)</td>
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<tr>
<td><strong>Fluency Student Workbook</strong></td>
<td>Catching/relaxing the stutter; speech and stuttering modification structured practice. *FAQ section</td>
<td>Helpful descriptions when teaching content</td>
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<tr>
<td>(<em>Speak Freely Student Workbook</em> by Mark Allen 2007)</td>
<td>*use in tandem with &quot;Essential speech skills...&quot;</td>
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<td><strong>Fluency Approaches</strong></td>
<td>Breaks down how to scaffold pullouts and cancellations as well as prolongations (light contacts into holding out the first sound of word); focuses on place/manner of articulation to recognize tension. *Mentions hierarchy of contexts (words to storying telling)</td>
<td>Suggestions for games to play with strategies</td>
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<tr>
<td>(<em>intro to stuttering modification and fluency shaping approaches</em> Gail Wilson Lew)</td>
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<tr>
<td><strong>Fluency Strategy Mini-Posters</strong></td>
<td>Visuals and descriptions for fluency enhancing strategies. <strong>Creating visuals unique to your student/client is the most effective!!</strong></td>
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<td>(Amanda Schaumburg, Panda Speech LLC, 2015. TPT)</td>
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<td><strong>Hasbrouck Program</strong> (Jon Hasbrouck 1998)</td>
<td>Progresses through 3 stages: 1) tension/immediate relaxation, 2) <strong>EMG biofeedback training, airflow training</strong></td>
<td><strong>Requires biofeedback equipment</strong></td>
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<tr>
<td><strong>Mega Fluency Packet</strong> (Shannon Lisowe 2016, Speechy Musings)</td>
<td>Visuals, homeworks, stuttering fact vs myth cards <em>Speech Fluency Checklists-Teachers</em> <em>Relaxation ideas</em></td>
<td>Dice activity with pausing-roll a sentence <em>Self Advocacy Situations</em></td>
</tr>
<tr>
<td><strong>No Prep Practice Pages</strong> (CSLD Drive)</td>
<td>Fluency enhancing strategies with supporting visuals</td>
<td>Introducing fluency enhancing strategies</td>
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<tr>
<td><strong>Stuttering Strategy Toolbox</strong> (Julianne Ludwig M.A CCC-SLP 2013)</td>
<td>Cut out of tools with strategies on them and toolbox Strategy descriptions (fluency enhancing and stuttering modification)</td>
<td>Built-in visual, especially for someone who gets behind the &quot;tool/toolbox&quot; idea</td>
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Strategies for Reducing Negative Reactions

- **Desensitization**
  - Pseudo(fake) stuttering in structured then unstructured contexts where PWS fears the occurrence of real moments of stuttering

- **Cognitive Restructuring:** helps speakers change how they think of themselves and their speaking situations
  - Identifying negative attitudes and emotional reactions and how these interplay with speech--> then adopt different assumptions or thoughts

- **Self-Disclosure:** communicating to others information that reveals identity as a PWS
  - Classroom presentation for school aged students; "advertising" in different ways about stuttering (talking about intervention, providing advice for someone communicating with a PWS)

- **Support:** think both giving and receiving can help self confidence and reduce feelings of isolation
  - Online resources including support groups and self help groups (see other resources)

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| **Fact or Fiction**  
(Wollman 2004, PowerPoint) | 10 fact or fiction questions about stuttering that can prompt discussion | Create game show, could incorporate components into a presentation        |
|                                                    |                                                                          | *Fiction statements can highlight how stuttering is not curable, and that's ok! |
| **50 Great Activities for Children Who Stutter**  
(Peter Reitzes 2006) | Sections relating to: fluency enhancing strategies  
- facts about stuttering  
- interviews from famous people who stutter  
- "undercovering feelings"  
*Most sections have handouts and homeworks | So many fun ideas: jokes, 20 questions, poems/stories, newscasts, verbal sequencing |
| **Muscle Relaxation**  
(Anxiety BC) | Guided relaxation techniques and how to teach tension/relaxation           | Relaxation activities to precede work alleviating tension, or just to begin each session |
| **Smooth Speech Journal**  
(Whitney Klein SLP, CSLD) | Reflection on how activity went, including a rating system where both PWS and listener rates speech fluency (outlined as 1, 2, 3) | **Customize for particular student**** |

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| **Straight Talk For Teachers**  | Referral tips for teachers, questions to ask parents, teacher FAQ re: stuttering and things to share with SLP and parents - Large group discussion leads for parents and teachers-->
|                               | **inservices**                                                                                                                                                                                          | - Guidelines for presentations for PWS |
| **Stuttering Jeopardy**        | Interactive PowerPoint with questions in these categories: famous PWS, T/F facts, types of stuttering, T/F things that help                                                                                     | Jeopardy game                           |
| **Tips For Parents**           | 7 tips for talking with a child who stutters with descriptions/examples                                                                                                                                     | Parent handout                          |
|                               |                                                                                                                                                                                                        |                                         |
Strategies for Reducing Activity Limitations and Participation Restrictions

- **Generalization Activities**
  - Bringing peers into treatment sessions
  - Planning strategies to use in the classroom—**CUSTOMIZED VISUALS**
  - Community outings (grocery store, etc.)
  - Making phone calls
  - FUNCTIONAL TO EACH STUDENT

- **Accommodations at School and in the Community**
  - Using audio/video recording
  - Increasing time provided for an oral reading or presentation
  - **Advocating to teachers about reading fluency scores within standardized testing and to provide training and accommodations**
  - Altering size of group/audience
Social Emotional Components

- **Counseling:** skills assist with improving PWS' quality of life by minimizing the burden of their communication disorder
  - Foundation is active listening, then skills like attending behavior, empathy, demonstrated shared interest in the PWS and their caregivers, and work to build trust
  - If emotional needs extend beyond communication, refer to appropriate outside provider.

- **Bullying:** "Adolescents who stutter were at a significantly higher risk of experiencing bullying behavior (43%) than were adolescents who did not stutter" (Blood 2004)
  - SLPs are main advocates/support systems for students with bullying

- **Change Readiness:** Zebrowski (2015): SLPs assume that all individuals receiving fluency tx are ready to change—not the case, but individuals often progress through stages of change.
  - Include decision balance pros/cons, self efficacy, situational statements then create action plan of change

- **Self Advocacy:** important for individuals to take an active role in learning and creating a nurturing environment at school
  - Talk with teachers about what stuttering is/how to respond when you (student) stutters
  - Prepare answers to common comments/questions classmates have about stuttering
  - Go-to line or elevator speech re: response to peers/staff--"I stutter, so I'll need you to be patient, I like to say things on my own", etc.
  - Give a presentation to the whole class or pick a friend to educate about stuttering (also an advocacy partner)
CSLD Drive: Holistic Treatment Approaches

- **"Fluency Kit"**- Super Duper's *Focus on Fluency* (Chemela 2006)
  - Ages 7-13
  - Uses dynamic approach..."encourages confident communicators, while assisting them to produce speech that is moving forward with little to no tension" (Chemela 2006)
  - 5 topic areas used in any order—example resources
    - **Education**: teaches normal processes --> the speech machine
    - **Desensitization**: encourages healthy attitudes and feelings --> speech stories about kids who stutter
    - **Basic Communication**: eye contact, wait time, pausing --> chunking cards
    - **Fluency Shaping**: involves easy, relaxed approach to speaking --> easy beginnings
    - **Stuttering Modification**: assists with changing the way a person stutters—cancellations, pull outs
  - "Contract Cards" at beginning of each unit to assist with data collection/skill tracking.
CSDL Drive: Holistic Treatment Approaches

- **School-Age Stuttering Therapy: A Practical Approach** (Scott Yarus 2017, handout)
  - Outline of entire treatment model, incorporating EBP approaches and frameworks
- **Essential Speech Skills for School-Age Children Who Stutter:** PowerPoint from ASHA, student workbook
  - Stuttering modification strategies and fluency enhancing strategies
  - Working with stuttering: catching the stutter, relaxing the stutter, slide, easy stuttering, cancellation
  - Working with fluency: rationales, methods, and practice
- **Source For Stuttering Ages 7-18**
  - "Checking in with..." Checklists (about school, with teachers, post therapy sessions)
  - Detailed descriptions digest-able for students with speech and stuttering modification strategies
- **Fluency Friday Plus**
  - Diagnostic profile, child/teen booklets, group and individual treatment ideas, handouts
  - Group and individual treatment ideas
  - Section on goal writing
Other Resources/Tips

- President Obama speeches: great to practice pausing/chunking, slowed rate
- Delayed auditory feedback apps for Ipad
- Stuttering Therapy Resources Inc. [Link](www.stutteringtherapyresources.com/blog); "how to" videos for speech and stuttering modification strategies—info based on *School Age Stuttering Therapy: A Practical Guide* book (Reeves and Yaruss); info for providing education/carryover recommendations to parents and teachers
- FRIENDS: The Association For Children Who Stutter [Link](www.friendswhostutter.org)
- The Stuttering Association For The Young [Link](https://www.say.org/)
- Books: "Bullies are a Pain in the Brain", "Self Therapy For The Stutterer" (on drive)
- Dramatic play: put on skits/plays or be news reporters to practice fluency skills
- Video from teenage PWS perspective [Link](https://www.youtube.com/watch?v=1rJURzEcvFY&t=333s)
References


Klein, W (2018), Cluttering vs. Stuttering: A review of Literature to Help Clinicians Figure Out Differential Diagnostic Characteristics Between Cluttering and Stuttering As Well As Some Treatment Ideas. [PowerPoint Slides]. Retrieved from CSLD team drive.


Zebrowski, P (2015). Therapy For Adults And Adolescents Who Stutter: Paving the Way for Change. ASHA Short Course Convention