Treating the Whole Person- Practical Treatment Strategies for Children and Teens that Stutter

A COLLABORATION BETWEEN HOSPITAL AND SCHOOL SETTINGS BY KRISTIN MANGAN, MA, CCC-SLP AND SARAH HERR DAVIES, MS, CCC-SLP AND

Financial Disclosures

Kristin Mangan, MA, CCC-SLP

Sarah Herr Davies, MS, CCC-SLP

Financial: Ms. Davies and Ms. Mangan are the founders and co-directors of Camp More, a recreational overnight summer camp for kids and teens that stutter. Each receives a small annual stipend from Camp More, a program affiliated with the Charitable Partnership Fund, a registered 503c non-profit.

Non-Financial: Ms. Mangan runs TOPS: Teens Out Promoting Stuttering; a monthly social group for teens that stutter. Ms. Davies runs KOPS: Kids out Promoting Stuttering; a monthly social group for kids that stutter. Ms. Davies is also the Portland chapter leader for the National Stuttering Association's (NSA) adult support group.

Goals and Intended Outcomes:

Learners will have an improved understanding of diagnostics as it relates to stuttering and gaining qualification for services both in the school and in the hospital settings.

Participants will be able to write educationally relevant speech therapy goals, that focus on more than simply fluency, for students who stutter.

Learners will be able to list the 4 primary treatment approaches currently used in stuttering therapy and will have practical and holistic therapeutic activities to implement with their clients, students, and patients, ranging from preschool-18 years of age.

[3 Minutes of Mindfulness](#)

# Assessment and Qualification of Services

Definition and Etiologies

Stuttering: Two Definitions

1) **Stuttering behaviors** are speech disfluencies that include repetitions, prolongations, and other interruptions (such as blocks) in the forward flow of speech.

1) The entire experience a speaker has due to stuttering behaviors is the **stuttering disorder**.

"Stuttering is more than just stuttering."

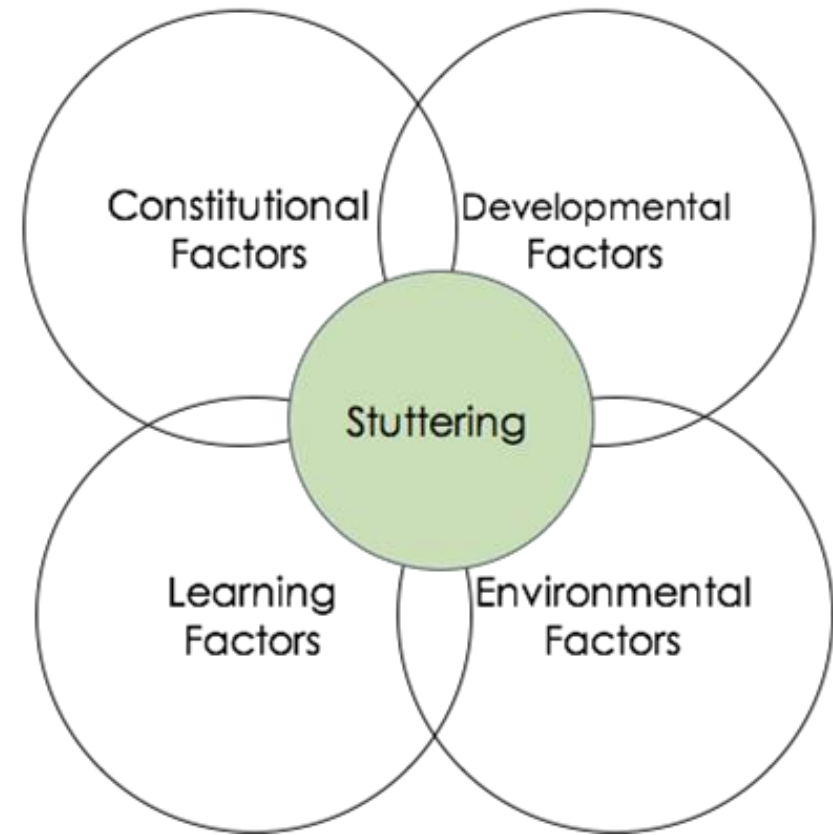~ J. Scott Yaruss

The Stuttering Disorder
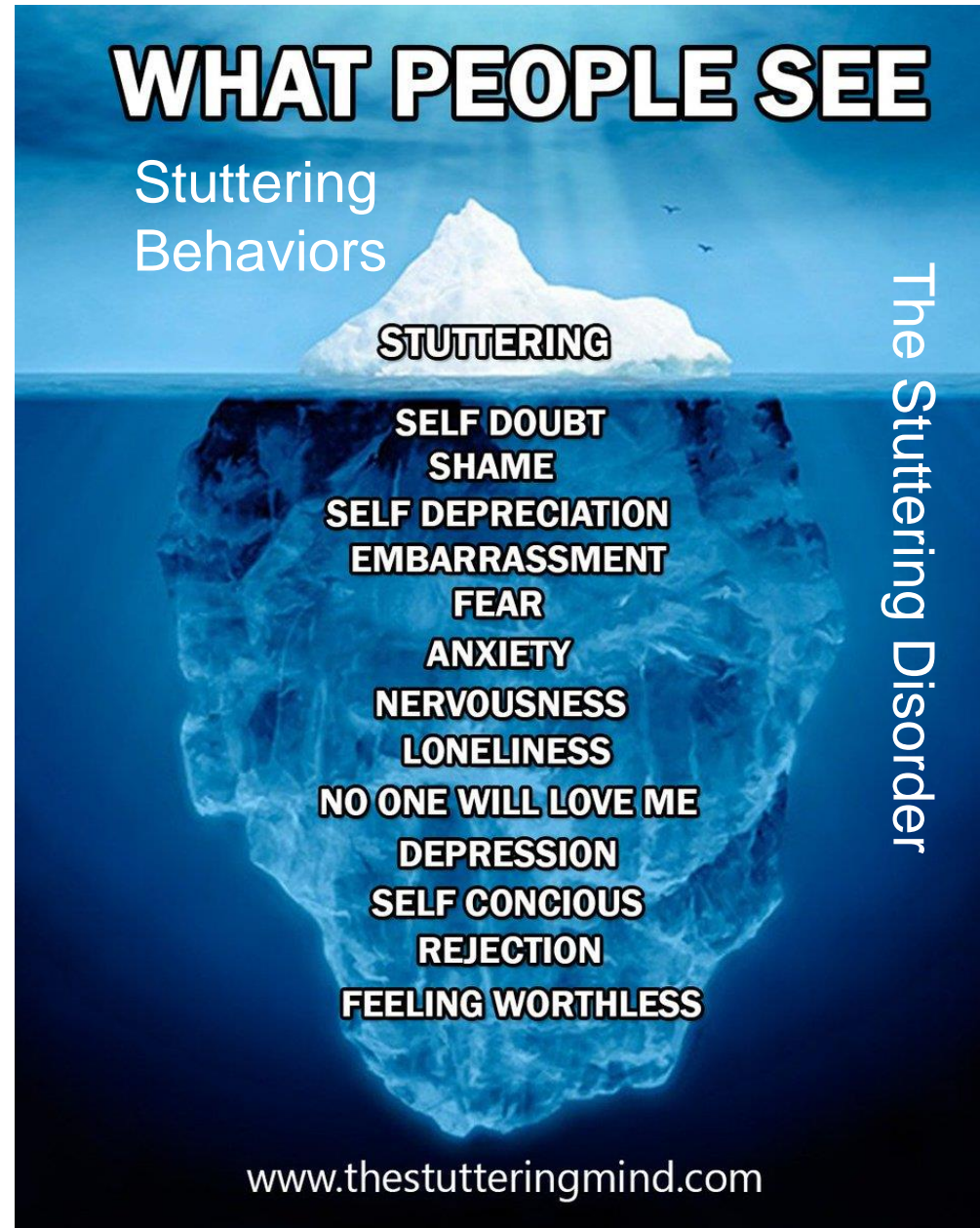
Stuttering is not...

- Caused by nervousness or anxiety

- A psychological disorder

- Caused by trauma

- Caused by bad parenting

Stuttering is Multifactorial

Stuttering is a neurophysiological
disorder that is multifactorial in nature
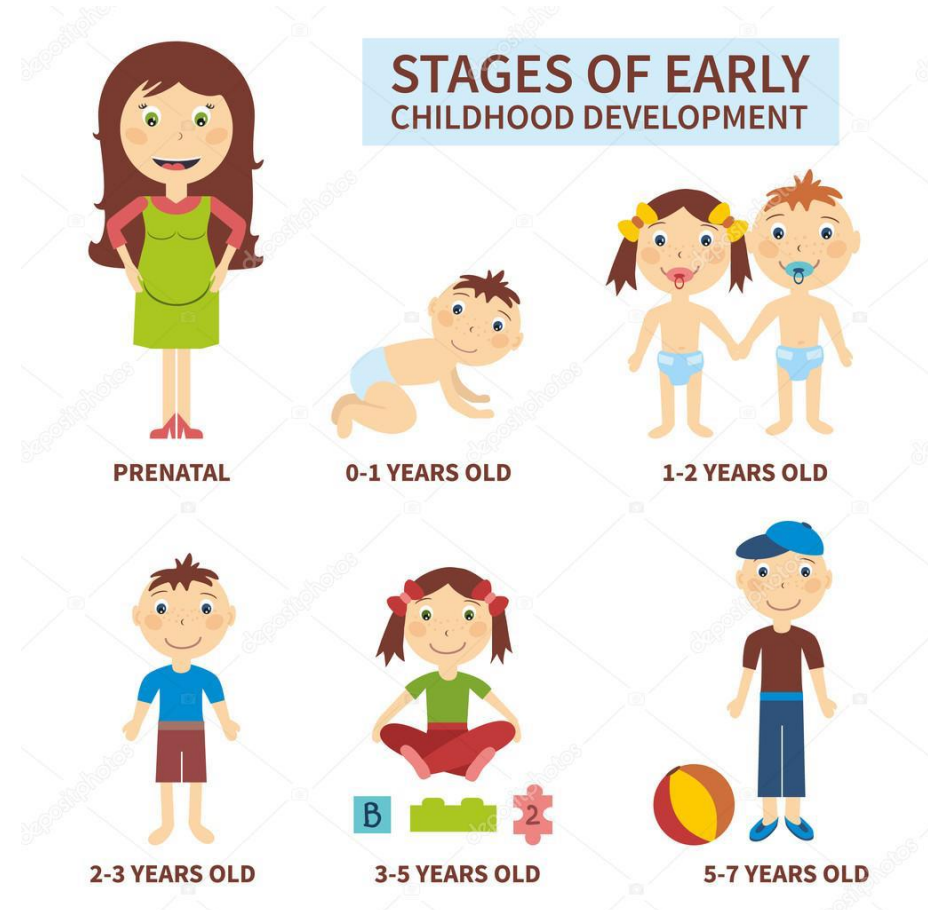(Smith & Weber, 2016)

Constitutional Factors

- Hereditary Factors
  - Twin/Family Studies
  - Genes
- Brain Structure and Function
  - Grey and white matter differences
  - Neural network connectivity differences
  - Increased white matter connections (adolescents and young adults)
  - Atypical hemispheric functions

- Congenital and Trauma
  - Head injury, diseases, stroke
  - Neurogenic Stuttering
  - Predisposition

Developmental Factors

- Competition for neural resources in a developing brain
- A child's physical, motor-skill, cognitive, social/emotional, and speech/language skills are developing at a very rapid rate.
- Predisposition
- Temperament

STAGES OF EARLY CHILDHOOD DEVELOPMENT

PRENATAL

0-1 YEARS OLD

1-2 YEARS OLD

2-3 YEARS OLD

3-5 YEARS OLD

5-7 YEARS OLD

Temperament

- Temperament is defined as one's natural predisposition, or, the combination of mental, physical, and emotional traits of a person.
- Temperament does not CAUSE stuttering but can exacerbate disfluencies and impact attitudes and emotions of stuttering
- According to many authors, temperament of children who stutter may differ from the temperament of fluent peers. Other's dispute this claim.
- Barry Guitar once suggested a connection between sensitive temperaments, environmental factors, and early disfluencies.

Environmental Factors

Environmental factors do not CAUSE stuttering but may:

- Trigger a predisposition
- EXACERBATE stuttering

Parents and Families do not cause stuttering

- Parental Attitudes/Family Dynamics
- Fast Paced Lifestyle/Demands
- Speech and Language Environment
    - Time pressures
    - Fast talking
- Life Events
    - Moving
    - Siblings
    - Divorce

Learning Factors

Most closely related to severity, secondary behaviors, and attitudes and emotions.

Different kinds of learning styles=different kinds of conditioning

- Operant Conditioning can increase frequency of *Escape Behaviors*
- Avoidance Conditioning can increase frequency of *Avoidance Behaviors*

The person has learned through conditioning history, a pattern of perceived escape or avoidance of stuttering (often a trick); thus, the onset and increase of secondary behaviors.

Assessment

History and Background Information (Parent Interview)

Teacher Interview

Stuttering Severity Index (SSI)

Overall Assessment of the Speaker's Experience of Stuttering (OASES)

Informal Measures

Assessment: Parent Interview

- Medical history
- General development and current health status
- Speech and language development, including frequency of exposure to all languages used by the child and the child's proficiency in understanding and expressing himself/herself in all languages spoken
- Family history of stuttering or cluttering
- Description of characteristics of disfluency and rating of severity
- Child's awareness of stuttering; frustration when speaking; tension observed
- Age of onset of disfluency and patterns of disfluency since onset (e.g., continuous or variable) and other speech and language concerns
- Previous treatment experiences and treatment outcomes
- Information regarding family, personal, and cultural perception of fluency
- 1-10 Severity Rating

Parent Information can help identify possible risk factors

Risk Factor Chart

Place a check next to each that is true for the child

Risk Factor	Elevated Risk	True for Child
Family history of stuttering	A parent, sibling, or other family member who still stutters	
Age at onset	After age 3½	
Time since onset	Stuttering 6–12 months or longer	
Gender	Male	
Other speech production concerns	Speech sound errors or trouble being understood	
Language skills	Advanced, delayed, or disordered	

https://www.stutteringhelp.org/risk-factors

Assessment: Teacher Interview

- What do they hear?
- What do they observe?
- Is the child engaged or withdrawn?
  - How do they get along with peers?
  - Do they raise their hand to participate?
  - Do they avoid speaking aloud?
  - Does the child appear to be stressed or embarrassed?
  - What is the child's greatest strength?
- How long have they noticed the speaking difference?
- What do they tell the child when they notice it?
- Do other students notice it, say anything, or tease the child?

Assessment: SSI

Norm-referenced assessment that measures stuttering severity in both children and adults in the four areas of speech behavior:

1. frequency
2. duration
3. physical concomitants
4. naturalness of the individual's speech.

Produces a behavioral score of mild, mild-moderate, moderate, moderate-severe, or severe

Historically (and currently) the assessment most often used in qualifying students for services in schools (given a moderate to severe score)
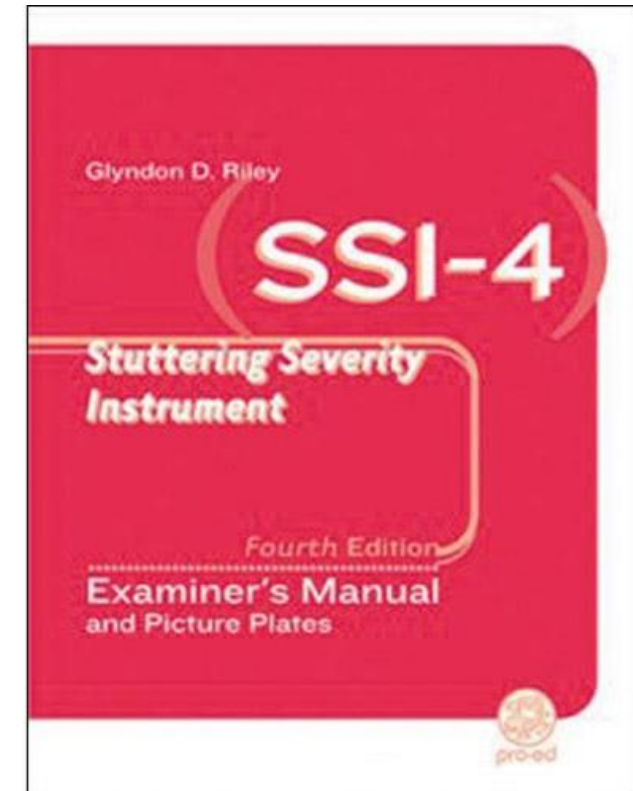
TD vs. SD (it's more than just counting syllables)

Typical Disfluency

Speech Characteristics

- Multisyllabic whole-word and phrase repetitions
- Interjections
- Revisions

Other Behaviors

- No physical tension or struggle
- No secondary behaviors
- No negative reaction or frustration
- No family history of stuttering

Stuttering

Speech Characteristics

- Sound or syllable repetitions
- Mid/Final position repetitions
- Prolongations
- Blocks

Other Behaviors

- Associated physical tension or struggle
- Secondary behaviors
- Negative reaction or frustration
- Avoidance behaviors
- Family history of stuttering

Assessment: OASES

- The OASES is a criterion-referenced, comprehensive, self-report measurement tool that assesses the impact of stuttering in four of one's life: *General Information, Your Reactions to Stuttering, Daily Situations,* and *Quality of Life*
- Based on World Health Organization (WHO) and International Classification Framework (ICF)
- For ages 7 and up
  - OASES-S (ages 7-12)
  - OASES-T (ages 13-17)
  - OASES (ages 18+)
- Can be used as a supplement for school eligibility
- Great to use for goal writing and yearly progress monitoring
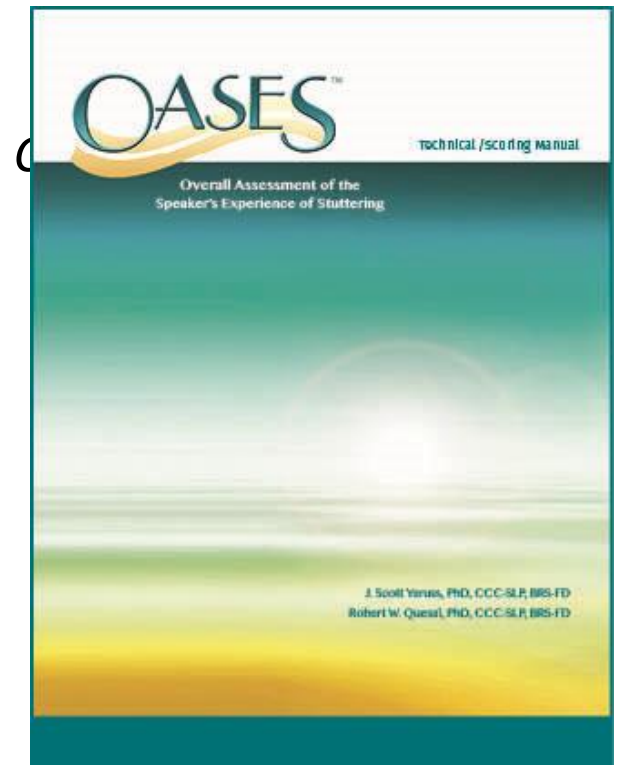
Assessment: Informal Measures

- Language samples in different contexts: recitation, repetition, one word responses, reading, spontaneous language samples, video samples from home
- Parent/Child Interactions
- Detailed student interview
  - If using the OASES, a lot of questions are already answered about reactions to stuttering but answers can vary
  - Awareness (ex: are they aware they stutter? what does their stuttering sound like? are there times they stutter more or less than others?)
  - What they know about stuttering
  - If they know anyone else who stutters
- Individual likert scales for areas of greatest concern (based on observation, interview, OASES)
  - ex: on a scale of 1-10, 10 being all of the time, 1 being never, and 3 being half of the time, how often do you change your words to prevent stuttering?

Qualifying in the schools

- Fluency skills must be significantly discrepant from typical peers and impede communication and/or negatively affect social interaction and participation.
- ODE states a moderate-severe requirement (loophole) CD ODE
- Some students may have a low SSI score but high OASES or likert scores
  - Some students may have a high SS! score but low OASES or likert scores
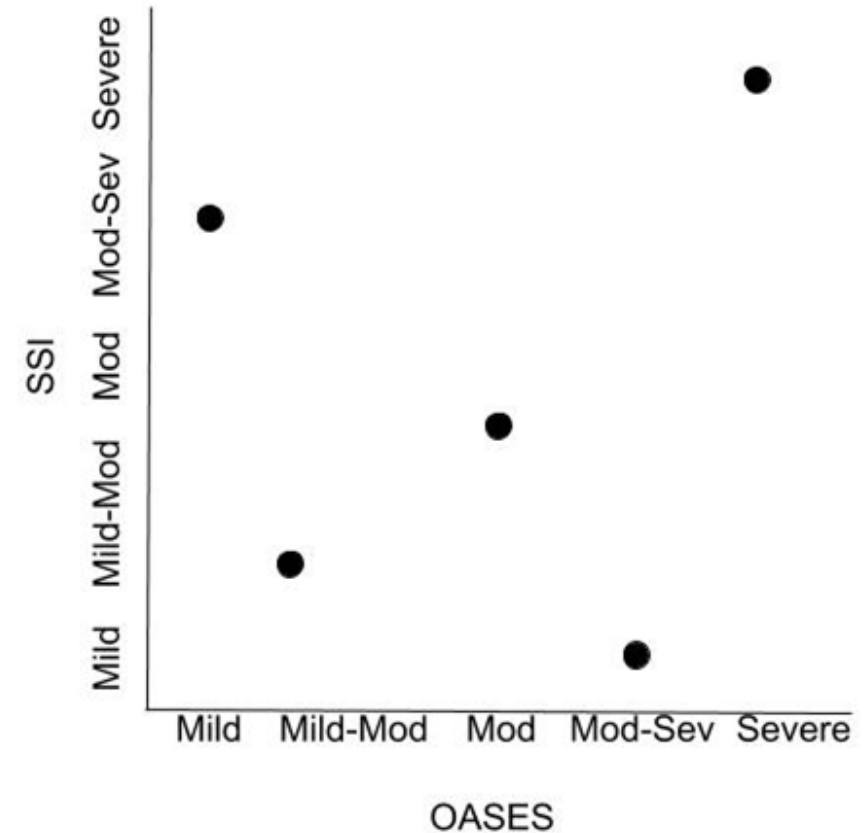
Authorization for Services from Insurance Companies

When requesting authorization for therapy sessions from insurance companies, in private/health care settings, use of the ICF-CY (The International Classification of Functioning, Disability, and Health- Children and Youth) can be helpful.

◦ Write request and treatment goals for services that focus on stuttering impact one's "health status."
◦ WHO definition of "health"
◦ Emphasize the areas of Activity, Participation, and Environmental Factors.

ICF Framework

Health condition
- Diagnosis

Body functions
- Mental or physical impairment: e.g., cognitive, emotional or physical problems

Activity
- Tasks and demands of daily living: e.g., walking, eating, reading

Participation
- Involvement in a life role: e.g., maintaining friendships, family ties, pursuing education or sports etc

Environmental factors
- Physical, social and institutional worlds surrounding the child: e.g., the family, school, and health care system

Personal factors
- The traits that make each child unique: e.g., sex, gender, age, culture, language, preferences, and ambitions

4 Main Therapeutic Approaches

Fluency Shaping, Stuttering Modification, Avoidance Reduction Therapy for Stuttering, and Acceptance Commitment Therapy
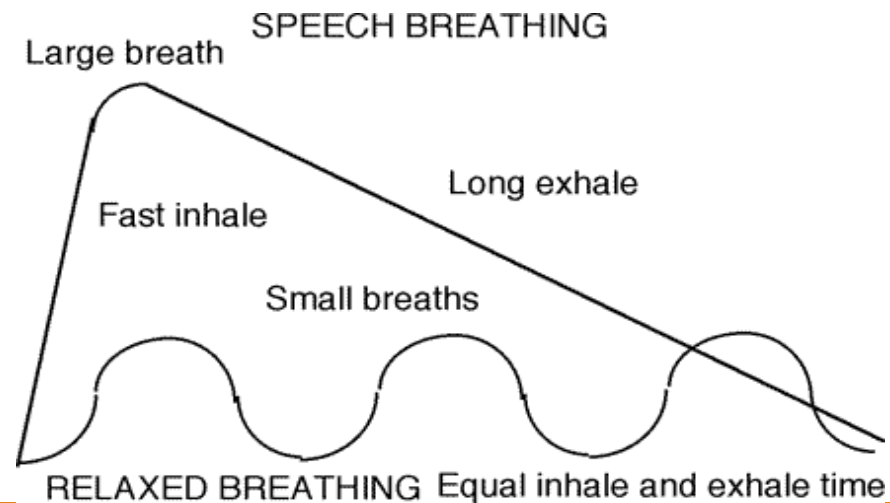
Fluency Shaping

- Developed in the 1970's.

- Working towards a new way of talking with a goal of 0% disfluencies.

- Intensive, more traditional, fluency shaping programs typically start with the production of very slow, unnatural sound prolongation of sounds and syllables- that are fluent. Then the rate and other factors are shaped gradually in to steps more closely resembling normal speech rate and more natural sounding speech- all while the client is aiming NOT to stutter.

Fluency Shaping Techniques

RELAXED BREATHING / BREATH STREAM MANAGEMENT:

- premise: disruptions in breath stream can contribute significantly to stuttering

- goal: improve ease and coordination of inhalations and exhalations to increase fluency

- suitable for: clients who exhibit breath holding, shallow breathing for speech, extended speech at the end of an exhalation, attempts to talk on inhalation, attempts to breath in medial word positions

SPEECH BREATHING

Large breath

Fast inhale

Long exhale

Small breaths

RELAXED BREATHING Equal inhale and exhale time

Fluency Shaping Techniques

EASY ONSET OF PHONATION:

- premise: many people who stutter have excessive tension in the laryngeal area. Tension in the vocal mechanisms then can lead to lack of movements, delayed onsets, and distortions of the speed and strength of vocal behaviors.

- goal: initiate phonation on command in an easy, related, controlled manner

- suitable for: clients who experience tense disfluencies including hard onsets/blocks, repetitions, and prolongations

Easy Onset

1. Take a deep breath in.

2. Let a little bit of that air out.

3. Turn your voice on. Remember to stretch out the first vowel. (ex: Myyyyyyyyyy cat)

Try to use all of your air for your voice. This means that you should not be letting out a big breath after your voice is off.

Fluency Shaping Techniques

LIGHT ARTICULATORY CONTACTS:

- premise: stuttering often results from excessive contact/force/tension of speech sound production

- goal: reduce articulatory tension and the tightness of the contacts used to make sounds. Teach the client to produce SOFT, LOOSE articulatory movements.
  ◦ "touch and go"

- suited for: clients who report or show tension in the lips, tongue, throat, and jaw during moments of stuttering

Fluency Shaping Techniques

REDUCTIONS IN SPEECH RATE:

- premise: use of a slower than normal rate of speech facilitates coordination of timing and movements for respiratory, phonatory, and articulatory activities- and results in more fluency.

- goal: start with an excessively slow rate of speech and gradually increase speech rate back to a more normal/natural rate.

- suited for: clients who talk rapidly between stuttered movements or find it easy to remain fluent when slower rates of speech are incorporated.

Fluency Shaping Techniques

PROLONGED SPEECH PATTERN / CONTINUOUS PHONATION:

- premise: singing and connected speech patterns result in more smooth flowing and fluent style of speech

- goal: creating fluent speech by prolonging vowel sounds while linking final consonants of one word onto the initial vowel or consonant of the following word
  ◦ "keep vibration/phonation ON"

- suited for: your most disfluent clients. Can provide an "experience" with fluency that can then be useful in teaching other, more natural sounding tools.

Your most disfluent students might find great comfort and fluency while using PSP.

Fluency Shaping Strategies

PAUSING AND PHRASING:

- premise: bundling words into meaningful phrases and taking intentional pauses, we are allowing the speech mechanism time to reorganize and reduce communicative pressures and therefore disfluencies

- goal: achieve a slower rate of speech that sounds more natural and results in fluency

- suited for: use in presentations, interviews, phone calls

Stuttering Modification

- Developed by Charles Van Riper in the 1930's with the goal to "stutter more easily."

- Traditionally focuses systematic techniques to reduce tension by training muscle relaxation during the moment of stuttering.

- Modifies the moment of stuttering, addresses feelings through desensitization, and examines instances of stuttering.

  ◦ Stages of IDENTIFICATION, DESENSITIZATION, MODIFICATION, and STABILIZATION

    ◦ Begin by identifying core behaviors, secondary behaviors, and feelings and attitudes about stuttering

    ◦ Exercises address avoidance behaviors, word/sound/situational fears, etc.

    ◦ Work on increased awareness of what happens when stuttering occurs

    ◦ Confront and accept stuttering

    ◦ Pre, Post, and Mid-stutter correction tools are incorporated when stuttering is occurring

    ◦ Transfer and maintenance with goal of "becoming one's therapist"

Stuttering Modification Techniques

VOLUNTARY STUTTERING:

- premise: stuttering in an easy way- on purpose; by choosing to show some easy bounces on initial sounds, fears about true stuttering/reveal are reduced. Also provides an example of what it feels like to stutter in a more controlled way.

- goal: increase comfort with revealing and experiencing stuttering; desensitization

- suited for: clients who fear stuttering and/or want to conceal it.

H...h...h...ello!
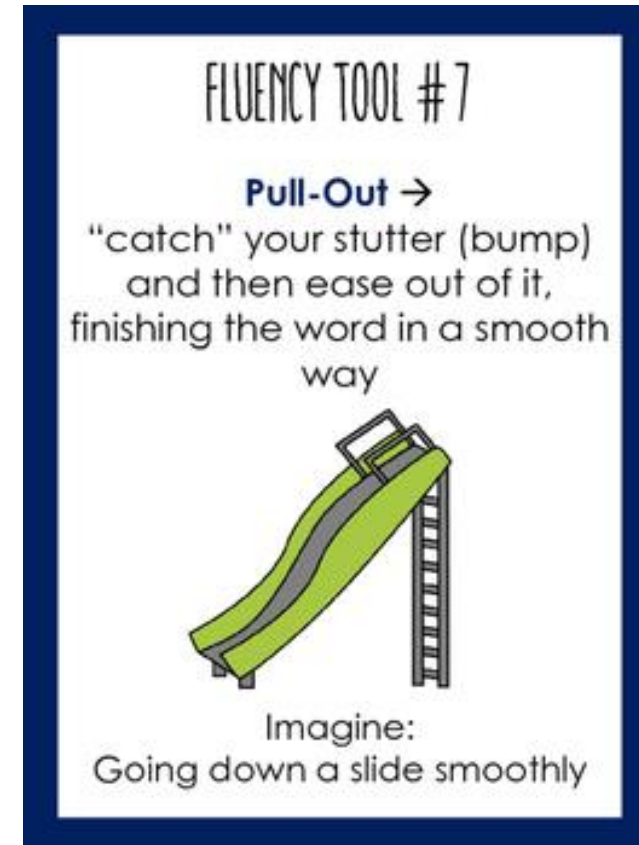
Stuttering Modification Techniques

CANCELLATION:

- premise: a post stutter correction; following a disfluency, client stops and resays the disfluent word in a easier way- typically with a preparatory set

- goal: increase the client's feeling of success and retrain motor and psychological pathways following an instance of stuttering

- suited for: clients new to the idea of stuttering modification tools. Also for clients who have developed a tolerance for stuttering and have an understanding and an awareness of their stuttering pattern.

Stuttering Modification Techniques

PULLOUT:

- premise: a mid-stutter correction; client reduces tension and struggle during the stuttered moment and eases into a controlled prolongation of the initially disfluent sound

- goal: ease out of stuttering rather than pushing, forcing, or hurrying through a disfluency
  ◦ Client is taught to continue to stutter, slow it down, and then gain control to ease through the rest of the word with more control and intentional sound prolongation.

- suited for: advanced clients who have the ability to stay in a stutter until ease and control can be accessed.

FLUENCY TOOL #7

Pull-Out →
"catch" your stutter (bump) and then ease out of it, finishing the word in a smooth way

Imagine:
Going down a slide smoothly

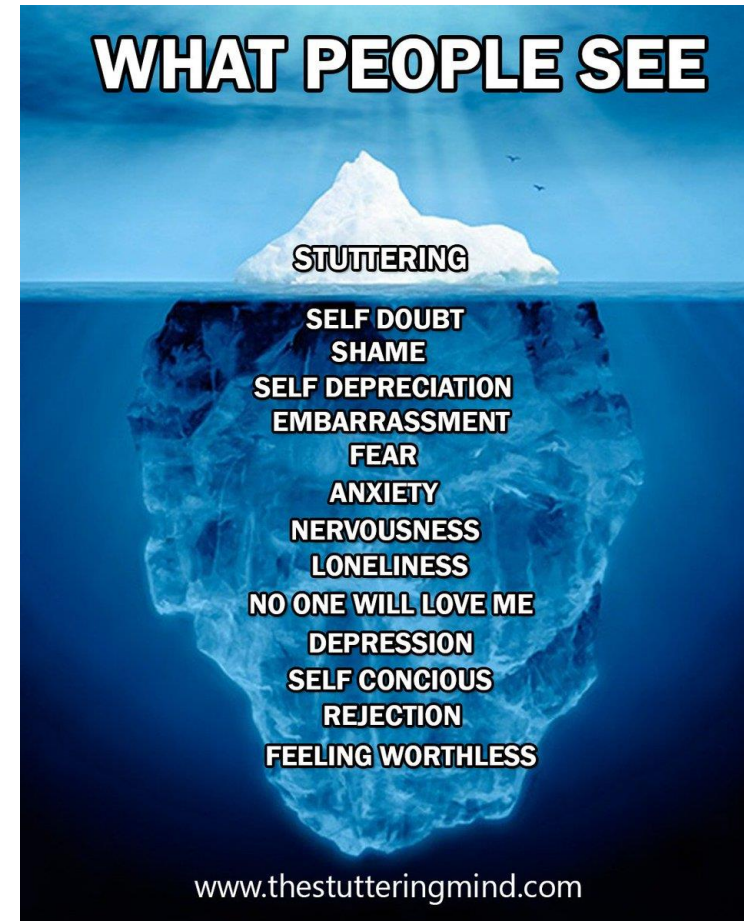# Stuttering Modification Techniques

PREPARATORY SET / PREP SET:

- premise: a pre-stutter correction; to be used when stuttering is ANTICIPATED
  ◦ Tool that is considered preventative and proactive

- goal: to help a person stutter more comfortably and have more easy, forward moving speech
  ◦ Client uses an initial PHONEME slide/prolongation on a word that they anticipate stuttering on or when they feel building tension or communicative pressure.

- suited for: more advanced clients that well understand their stuttering patterns, fears, and avoidances and have the skills and ability to incorporate pre-stutter corrections

"Hhhhhi, my name is Kkkkkristin."

Avoidance Reduction Therapy (ARTS)

- Based on the Approach-Avoidance work of Joseph Sheehan (psychologist) and his wife Vivian Sheehan (speech language pathologist) in the 1970's.

- ARTS further developed by Vivian Sisskin, MS, CCC-SLP, BCS-F

- Premise is that the true struggle of stuttering is not from the disfluencies but instead from the fear, shame and embarrassment experienced by the person who stutters. Avoidances, fillers, word substitutions, and secondaries are a result of these negative thoughts and experiences.

- Therapy focuses on reducing fears and avoidances systematically and in natural environments.


WHAT PEOPLE SEE

STUTTERING

SELF DOUBT
SHAME
SELF DEPRECIATION
EMBARRASSMENT
FEAR
ANXIETY
NERVOUSNESS
LONELINESS
NO ONE WILL LOVE ME
DEPRESSION
SELF CONCIOUS
REJECTION
FEELING WORTHLESS

www.thestutteringmind.com

Acceptance & Commitment Therapy (ACT)

- Considered a "Contextualistic Approach" combining elements from traditional behavior and cognitive behavioral therapy with mindfulness.
- **Accept** what is out of our control
- **Commit** to taking action that will improve quality of life
- ACT is about improved quality and participation in life WITH whatever difficulties are instead of feeling the need to get rid of difficulties
- ACT identifies two key processes responsible for most psychological suffering:
  1) Cognitive Fusion: Negative thoughts becoming truth and allowing them to dominate experiences and behavior.
  2) Experiential Avoidance: Ongoing attempt to suppress or avoid unwanted internal experiences, such as emotions, thoughts, memories, and bodily sensations.
- ACT normalizes these processes and aims to increase psychological flexibility

Acceptance & Commitment Therapy (ACT)

The Hexaflex - Psychological Flexibility

1. Self as Context: developing flexibility in how the person views and defines themselves.
2. Defusion: Noticing thoughts and letting go
3. Acceptance: Active process of allowing ourselves to have difficult experiences
4. Present Moment: Mindfulness
5. Values: Knowing what matters
6. Committed Action: Following through with goals guided by values and mindful action. Future quality of life.
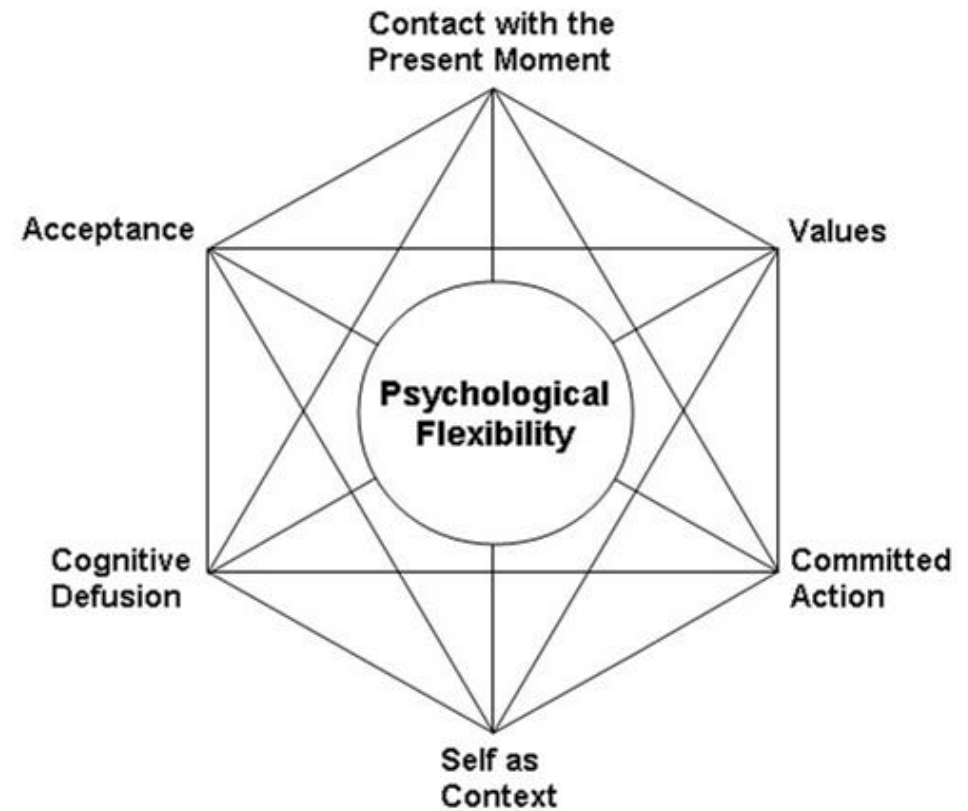
Hybrid Approach

- Given that there is no CURE for stuttering and that every stuttering pattern is unique to that individual, it is best to incorporate a hybrid approach to therapeutic planning.

◦ 100% fluency is not an attainable goal

◦ Tools and techniques will not always work

◦ Need to have various tools for various situation and needs

◦ Attitudes, beliefs, and emotions MUST be part of the equation

◦ Previous focus on TENSION, TOOLS, and TALKING

◦ Now focusing on CONFIDENCE, COMMUNICATION, and COMMUNITY

Treatment Planning

Important Distinctions Underlying Stuttering Treatment

1) Reactions and stereotypes to stuttering are very different than people's reactions to other communication disorders.

2) We do not have the ability to CURE stuttering. Explaining this to families and clients is imperative.
   - We are able to work on MANAGEMENT, improved quality of life and communication skills, and functional outcomes.

1) Over time treatment should be shifting from intensive, weekly, to maintenance.

2) One size DOES NOT fit all.

One Size Does Not Fit All

We must consider other pieces:

- Cultural and linguistic differences
- Age
- Social/Environment
- Communication abilities and consideration for co-existing disorders (e.g., e.g., other speech or language disorders, Down syndrome, ASD, ADHD, motor abilities, mental health)
- The degree of stuttering behaviors
- Client reactions to stuttering/acceptance
- Caregiver/family knowledge and level of acceptance of stuttering
- Temperament and other resiliency factors

Treatment Is More Than Therapy

Part of treatment is advocating and setting appropriate accommodations

- Letters to teachers
- Stuttering fact sheets
- Handouts to parents and teachers - Stuttering Foundation of America (SFA)
- Classroom presentations (if the client is willing)
- Teacher PD sessions
- Accommodations/Recommendations
- Family Involvement (especially for preschoolers)

Teacher letters- From SLP

Dear Ms. Teacher,

You have a student, XX, in your class who stutters. Stuttering is... (insert favorite definition)

Many times, embarrassment, fear, and anxiety are secondary emotions that people who stutter feel due to stuttering. (give specific example of student's stuttering behaviors and reactions to stuttering if known; ex: X will suddenly stop talking and appear as if she has forgot what she was going to say-these are blocks. She also will change her words or restart what she was going to say often as an avoidance strategy if she feels like a stuttering event is going to happen.) We never want students to feel like stuttering is "bad" and fluent speech is "good," so I have attached 8 Tips for Teachers, a helpful handout provided by the Stuttering Foundation of America.

I have also attached X's accommodations page (or included a list of recommendations if no IEP/504). Please let me know if you have any questions or concerns.

Kindly,

Your friendly neighborhood SLP

Handouts (SFA)

https://www.stutteringhelp.org/8-tips-teachers

https://www.stutteringhelp.org/7-tips-talking-your-child-0

7 tips for talking with your child

Experts agree that most children who stutter benefit from taking time to speak at a rate that promotes fluency. These guidelines represent a number of ways that adults can help.

1 Reduce the pace. Speak with your child in an unhurried way, pausing frequently. Wait a few seconds after your child finishes before you begin to speak. Your own easy relaxed speech will be far more effective than any advice such as "slow down" or "try it again slowly." For some children, it is also helpful to introduce a more relaxed pace of life for awhile.

2 Full listening. Try to increase those times that you give your child your undivided attention and are really listening. This does not mean dropping everything every time she speaks.

3 Asking questions. Asking questions is a normal part of life – but try to resist asking one after the other. Sometimes it is more helpful to comment on what your child has said and wait.

4 Turn taking. Help all members of the family take turns talking and listening. Children find it much easier to talk when there are fewer interruptions.

5 Building confidence. Use descriptive praise to build confidence. An example would be "I like the way you picked up your toys. You're so helpful," instead of "That's great." Praise strengths unrelated to talking as well, such as athletic skills, being organized, independent, or careful.

6 Special times. Set aside a few minutes at a regular time each day when you can give your undivided attention to your child. This quiet, calm time — no TV, iPad or phones — can be a confidence builder for young children. As little as five minutes a day can make a difference.

7 Normal rules apply. Discipline the child who stutters just as you do your other children and just as you would if he didn't stutter.

A Nonprofit Organization
Since 1947—Helping Those Who Stutter

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8 tips for teachers

1 Don't tell the student to "slow down" or "just relax."

2 Don't complete words for the child or talk for him or her.

3 Help all members of the class learn to take turns talking and listening. All students — and especially those who stutter — find it much easier to talk when there are few interruptions, and they have the listener's attention.

4 Expect the same quality and quantity of work from the student who stutters as the one who doesn't.

5 Speak with the student in an unhurried way, pausing frequently.

6 Convey that you are listening to the content of the message, not how it is said.

7 Have a one-on-one conversation with the student who stutters about needed accommodations in the classroom. Respect the student's needs, but do not be enabling.

8 Don't make stuttering something to be ashamed of. Talk about stuttering just like any other matter.

Compiled by Lisa A. Scott, Ph.D., The Florida State University
Illustration by Amy L. Dech

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School Accommodations/Recommendations

If the client has an IEP or 504, the following can be implemented as accommodations. If not, they can be recommended to teachers, but they legally do not have to follow them:

- Do not grade student on oral reading or speaking fluency
- Allow student to select in which order they present in the classroom
- Do not require the student to read aloud in front of the class; let them volunteer given a hand signal
- Allow student different modes of presentation (ex: 1:1, video recording)
- Lessened expectations of class speaking participation with options to show competency/content of a subject (if contributing to overall grade, as often does in high school)

Goal Writing

- Stuttering is unique to each person; so must be treatment and goals
    - Age appropriate
    - Appropriate for co-existing disorders
    - **Must consider all aspects of the assessment and the stuttering disorder in its entirety**
        - SSI for fluency
        - OASES/Interviews/Informal measures for attitudes, emotions, feelings, beliefs, general knowledge and reactions to stuttering
- Always include goals targeting all of the stuttering disorder
- Goals are highly dependent on where they are at on their "stuttering journey"
- Fluency goals should **not** be written with fluency as the end goal (e.g., X will speak fluently with speech tools 80% of the time)
- All stuttering goals can (and should be) SMART

Sample Goals:

Preschool Age

Fluency Tool
- After learning and practicing easy speech, X will decrease percentage of syllables stuttered from 12% to 6% across 3 consecutive therapy sessions at the conversation level.
- Parents will report a stuttering behavior rating of 5 or less for 4 out of 7 days of the week as recorded in daily rating log.

Learning about the term "bumpy speech"
- X will be able to explain what bumpy speech is in their own words by the end of week 3 therapy session when given a verbal prompt. (e.g., "bumpy speech is when words get stuck in my throat.")

Being able to identify bumpy speech in others and then in self
- X will recognize bumpy speech in clinician during structured turn-taking activity with 70% accuracy.
- X will be able to recognize moments of own bumpy speech during a structured turn-taking activity with 70% accuracy.

Parent/family goal
- X's parents will report speaking in a slowed/non-hurried way at home during 1:1 play session with child at least two times per day.

Sample Goals:

Elementary Years

X will learn about the speech mechanism and be able to explain the speech process, including all learned "helpers" to 3 other adults outside of therapy sessions as measured by journal data.

During structured therapy activity, X will speak with imbedded pausing between phrases at the conversational level with 80% accuracy as measured across 3 therapy sessions.

X will independently recite 10 facts about stuttering as measured by SLP probe data.

With SLP support in therapy sessions, X will identify and research a celebrity who stutters/stuttered through adulthood, and create a poster to present to family.

When prompted, X will explain what the three main types of stuttering are and what their main type of stuttering behavior is, across 3 random probe data sessions.

When prompted, during identified, structured speech sample sessions, X will be able to identify their own moments of stuttering behaviors with 70% accuracy.

While role playing and presented with hypothetical, teasing statements or questions about stuttering, X will respond with kind, calm, educational, and unapologetic statements (e.g., I don't talk funny-it's just my stutter) in 8 out of 10 opportunites.

Sample Goals:

Middle School

X will utilize speech tools of choice (e.g., preparatory sets) at times he wishes (e.g., during classroom presentations) in 4 out of 5 self-identified opportunities as measured by SLP observation and/or student report

When talking with peers in the cafeteria, X will include at least one episode of voluntary stuttering 3 out of 5 afternoons across 3 consecutive weeks as measured by student report.

With minimal support from SLP, X will create a presentation (or book, poster, handout) about stuttering and present it to a group of peers and/or teachers by end of school year.

Using her stuttering journal as a guide, X will learn a minimum of 10 facts about stuttering and share them with 5 new people as measured by self-report, journaling data.

By the second semester of school, X will independently present and verbally share their IEP/504 accommodations to at least 2 teachers, as measured by teacher report.

X will decrease her weekly self rating of changing her words from a 7 out of 10 to a 3 out of 10 for 5 consecutive weeks as measured by client report data.

X will self-advertise his stuttering while participating in the school talent show or trying out for the school play as measured by student, teacher, or SLP report.

Sample Goals:

Teens

After practicing and role play, throughout each stage of his speaking hierarchy, X will use voluntary stuttering and disclosure independently across 3 tasks for each step as measured by SLP observation or self-report data.

When asked about her stuttering or presented with a natural opportunity to share (e.g., someone mimics her stutter), X will educate her communication partner about stuttering in 3 out of 5 identified opportunities as measured by self report.

X will participate in a local stuttering support group at least 1 time and reflect on the experience using his journal to record and reflect on experience.

X will use pull-outs as desired (e.g., classroom presentations) in 4 out of 5 opportunities as measured by self-report.

After preparing for and practicing his audition speech, X will try-out for the debate team or participate in a toastmasters event, using self-advertising at the beginning of his speech as measured by self-report or observational data.

X will state her real name when placing an order at Starbucks in 8 out of 10 opportunities as measured by self-report or observational data.

X will order the food he wants to order when eating at a restaurant or going through a drive-thru and reflect on the experiences by journaling in 3 out of 5 opportunities as measured by journal and self report data.
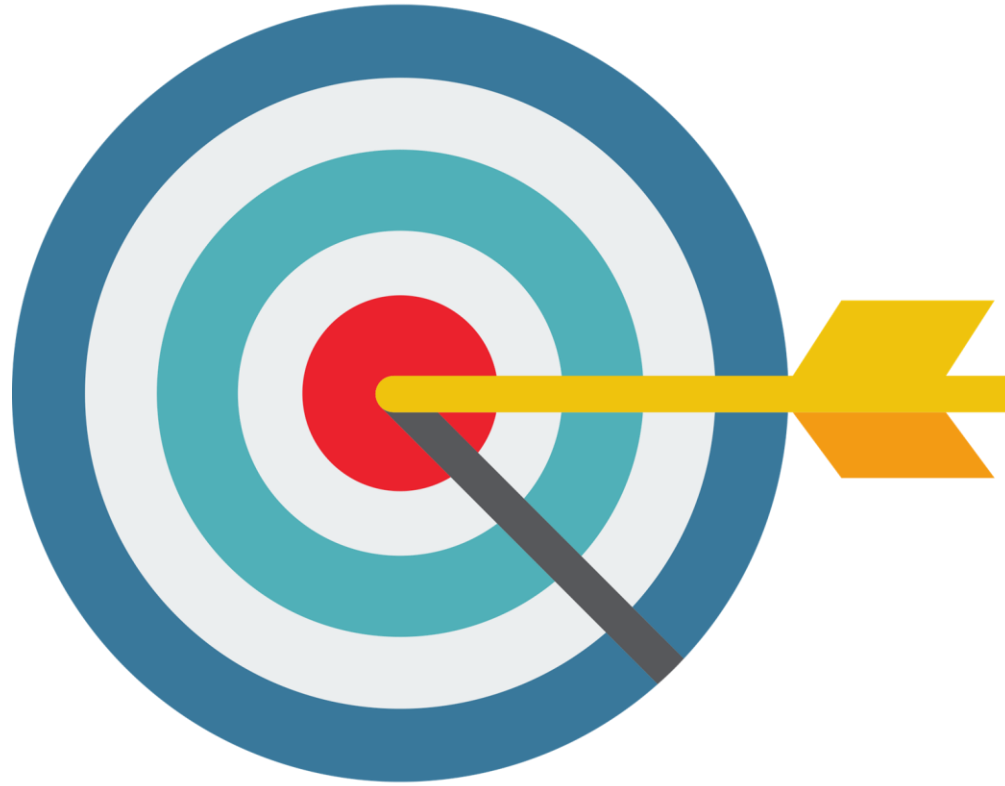
Targeting Goals

Treatment Foundations for All Clients (and families)

- Trust/Relationship

- Rationale

- Education

- Incorporates family and significant others

- Real life activities

- Reinforce intuition/problem solving skills

- Client ownership

- Clinician models

- Support groups

- Hierarchies

- Clients become the "experts"
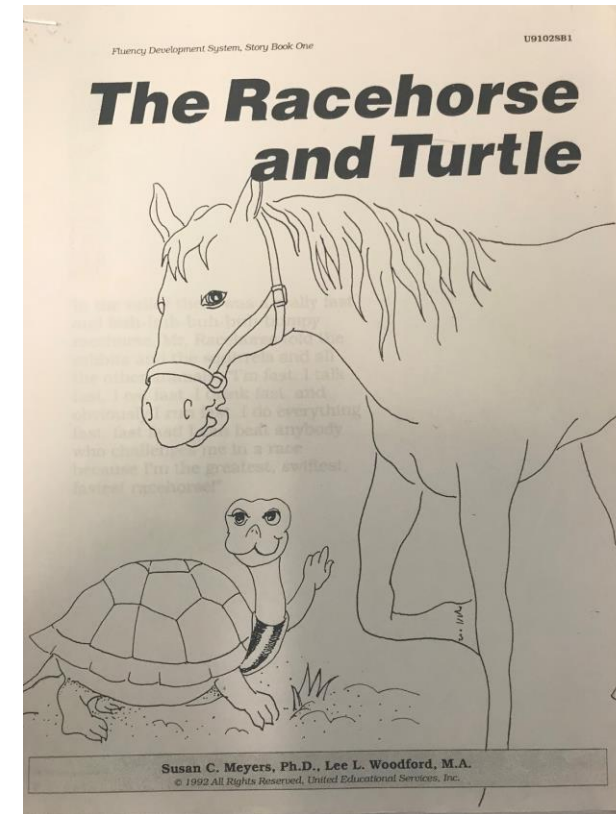
Family-Focused Treatment Approach for Preschoolers

- Directly and indirectly targets communication (and stuttering) behaviors
  - Therapy sessions
  - At home through parent training on use of own communication modifications
    - Easy talking/easy voice
    - Increased pause time between phrases and turn taking
    - Reduced communication demands
    - Positive reflecting/rephrasing
- Educates parents about stuttering
- Reduces parental fears and concerns about their child's speech-counseling
- Addresses child's attitudinal reactions to stuttering
- 3 Family Focused Treatment Outcomes
  1) Improved Speech Fluency
  2) Effective Communication Skills
  3) Healthy Communication Outcomes

Family Focused Treatment Approach

Yaruss, J.S., Coleman, C., & Hammer, D. (2006)
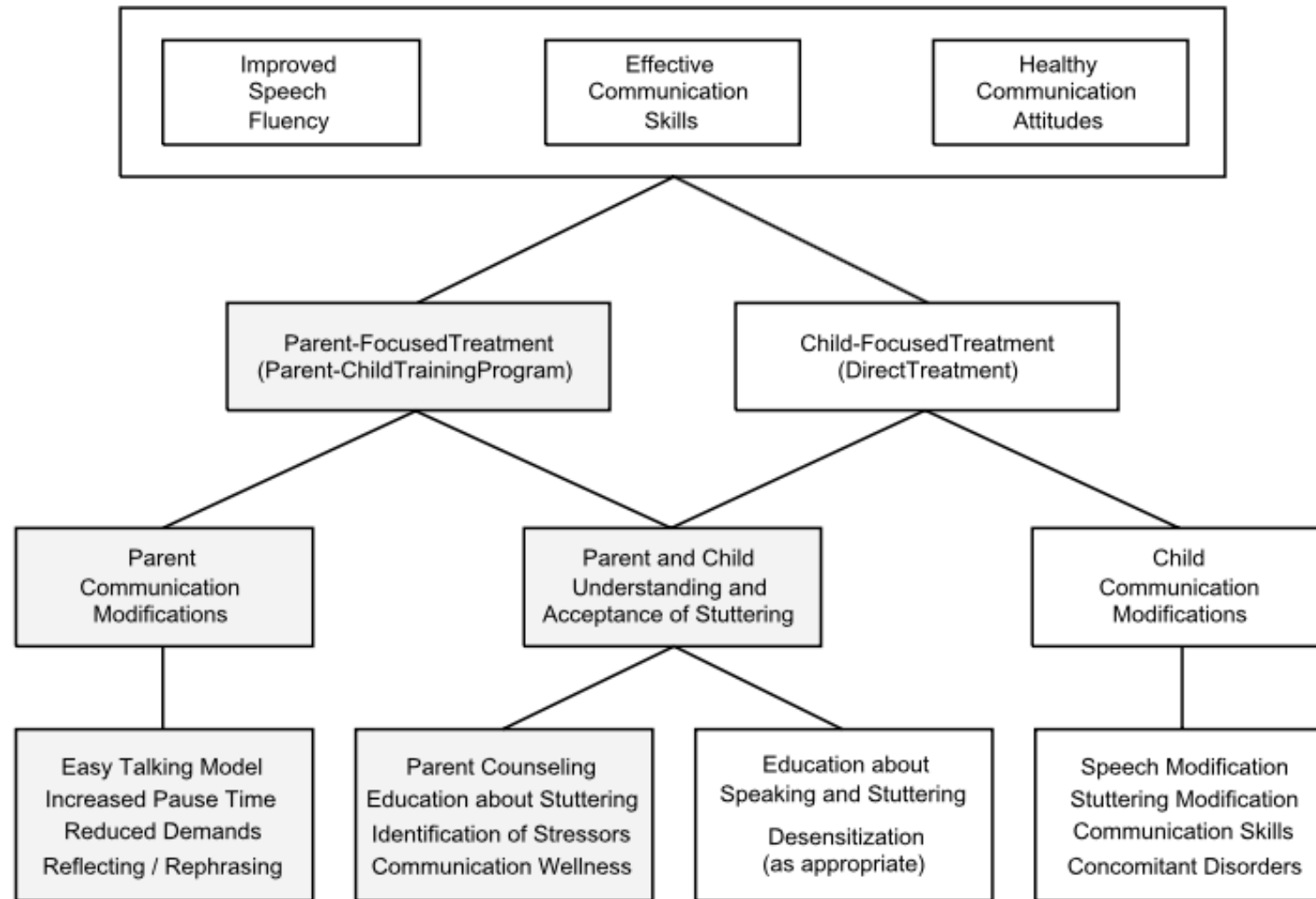
Tools in Preschool Treatment

- Use of books and characters to explain stuttering to preschoolers
  - The Fluency Development System by Susan Meyers Fosnot (1992)
  - "Jeremy and the Hippo: A Boy's Struggle with Stuttering" by Gail Wilson Lew
  - "Wendi's Magical Voice" by Brit Kohls
- Awareness games
  - Bump Tag
- Activities and games to practice vocal flexibility
  - Use of superhero characters, puppets, trains and cars, characters from books/movies, transportation vehicles , coloring, silly putty

Fluency Development System, Story Book One   U910?SB1

The Racehorse and Turtle

Susan C. Meyers, Ph.D., Lee L. Woodford, M.A.
© 1992 All Rights Reserved, United Educational Services, Inc.

Reframing the Stuttering Toolbox

By the end of treatment, every client should leave therapy with a stuttering toolbox

- Should contain speech tools AS WELL AS tools targeting feelings and beliefs (ex: prep set, disclosure, voluntary stuttering, pausing and phrasing, etc)
- Toolbox activity (preschool-early middle school)
  - Add a tool as you go
  - Create at the end of therapy as a summary
- Metaphorical toolbox (middle school-teen)

Stuttering Toolbox
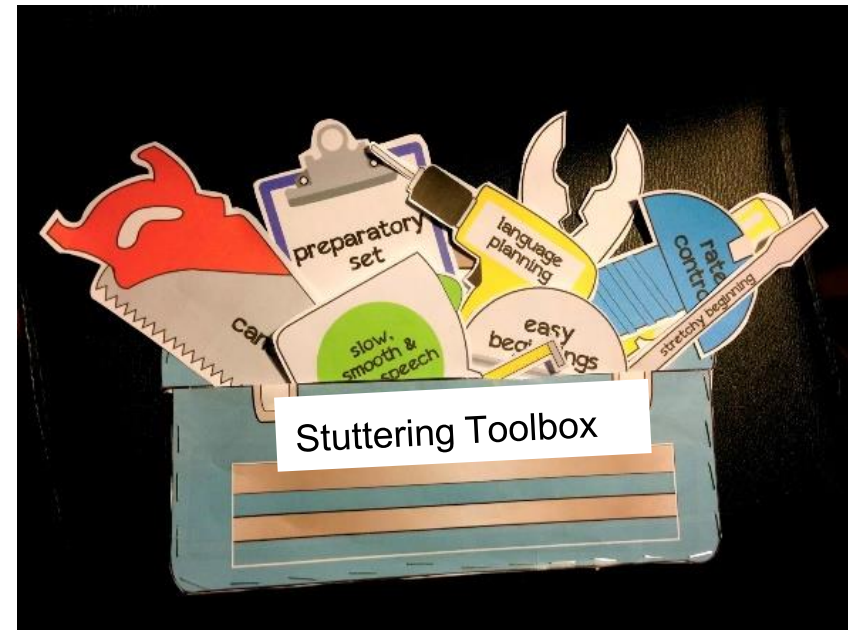
Speech Tools in Treatment

- For school age and teen clients, start with explanation of each of the therapy types and a review of types of disfluencies.
    - provide rationale for each tool
    - explore and identify the different types of stuttering moments that the client experiences
    - show examples of tool use and ask for client's initial reaction to it

- If student does not yet have awareness, we must build awareness of these disfluent moments objectively and without judgement/consequence.
    - Videos of other's stuttering, identifying bumps in SLP, modeling SLPs "bumpy" speech, playing Bump Tag, to eventually identifying bumps in their own speech (with and without video/audio recordings)

Speech Tools in Treatment

- Start by having client teach you HOW TO STUTTER like they do
  - have them critique and give feedback of how to better stutter like them
  - examples: more/less tension, involvement of neck/face muscles, louder/softer, more/less repetitions, etc

- Take turns allowing each client and SLP to try to modify moments of fake (and then real stuttering, if possible) by giving directives like: louder, softer, tighter, looser, longer, short, faster, slower, etc
  - taking back control, exploring variables in the disfluencies, desensitization

Speech Tools in Treatment - Stuttering Modification

- Next step in tool treatment- teach stuttering modification style corrections
  - initial sound phoneme modifications/slides
    - this is where stuttering most typically occurs
  - start with prep sets then move to cancels (later teach pullouts)
  - single word (practice through each English phoneme) and then scaffold up
    - A-Z activities
    - Q&A one word response
    - Madlibs
    - Carrier phrase games
    - Low language demand games
    - More conversational Q&A
    - Reading
    - Conversation

Speech Tools in Treatment- Fluency Shaping

- For school aged and teen clients with mild to more moderate stuttering- first fluency shaping strategy that I generally teach is PAUSING AND PHRASING
- For school aged and teen clients with more severe stuttering, SLP may want to start with a unnatural sounding tool that allows the client to touch on and experience the feeling of fluency. This may allow the client to have some motivation towards tools and more confidence in therapy and communication.
- Tool first explore for this more severe client: PROLONGED SPEECH PATTERN/CONTINUOUS PHONATION/EASY SPEECH/RAINBOW SPEECH

Speech Tools in Treatment

- Clients must have a variety of tools to use in different situations
  - They should understand how, when, and why to use a tool
- Vary tool use within sessions once mastery is obtained
- At transfer and maintenance level, client should be able to switch easily between tools
  - JENGA game with tools
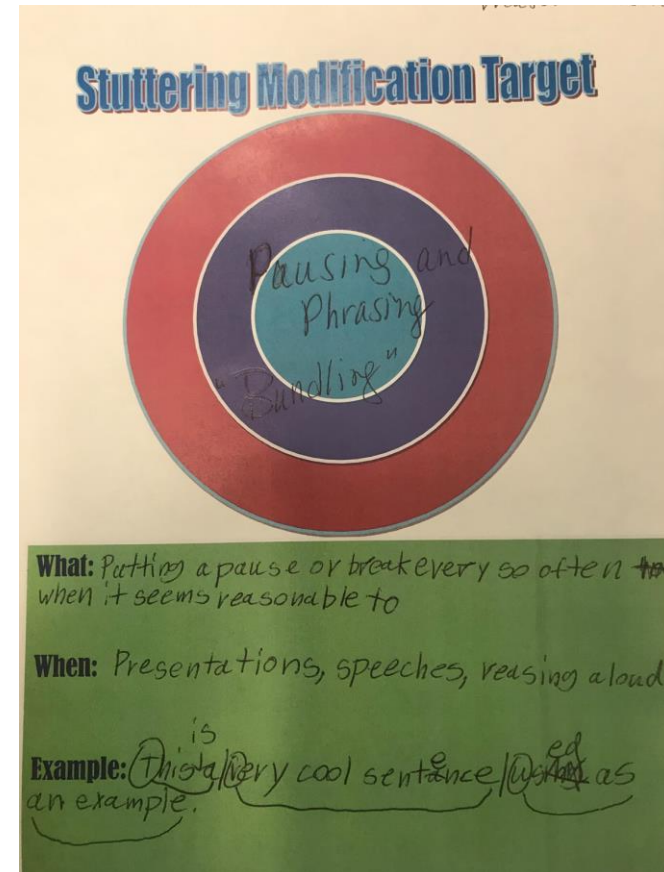
Identification and Reduction of Secondaries

- Identify Avoidances and Accessory Behaviors
  - These include but are not limited to- loss of eye contact, switching words, not talking or decreasing amount of talking, pretending to not know/remember, use interjections/fillers/running starts, secondary/accessory behaviors (of hands, fingers, arms, face, trunk, legs, etc)
  - Again will have to assess awareness of these behaviors first and sensitively use mirror work and feedback to bring awareness if necessary.
  - Once awareness and acknowledgement of secondaries is achieved, SLP can use monitoring to reduce these behaviors. The responsibility of monitoring can then be shifted to client. And finally journaling and rating scales can be used.

Rating Scales

- Use of client or caregiver rating scale:
  - Clients assign a daily/weekly measurement of behavior being targeted for self
    - Example behaviors include:
      - Stuttering behaviors
      - Avoidance behaviors
      - Accessory behaviors
      - Negative feelings towards stuttering
    - 1-10; 1=no target behavior, 2=very little target behavior, 5=moderate amount of target behavior, 10=constant target behavior)
  - Journaled ratings and any observed contributing factors (e.g., illness, excitement, etc) provided to SLP at each therapy session for discussion and SLP data collection
  - Built-in progress monitoring within therapy sessions

Beyond Speech Tools- exploration of feelings and beliefs

- Aim for each session to session to include:
  1. a discussion of feelings/beliefs and attitudes/emotions- counseling
  2. provision of knowledge/facts about stuttering
  3. opportunities to practice tools
  4. home practice/home carryover/communication challenge assignments

Mindfulness

- Begin each session with a short mindfulness/meditation.
- Incorporate longer mindfulness sessions throughout treatment
- Not meant as a therapy replacement but a supplement
- Research shows mindfulness practice results in decreased avoidance and emotional reactivity, increased acceptance, and subsequently, decreased stuttering frequency.
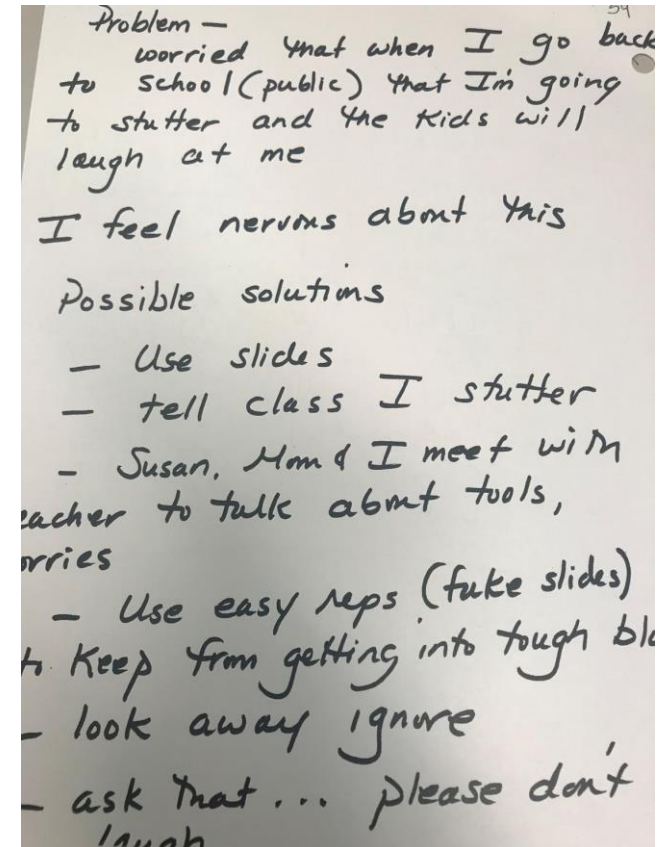
Counseling Tools in Treatment

- Mantra: "I cannot help until I understand."
- Use of OARS (Motivational Interviewing Strategies)
  - OPEN ENDED QUESTIONS AND STATEMENTS: "So, what do you think would happen if…" "This might not be for you but what if…" "How do you think others would react if…" "Some kids I have worked with have found XXX helpful, what do you think…" "Tell me more about…)
  - AFFIRMATIONS: "Wow, so last year when X said this to you, you just… that takes some serious courage." "Your teacher told me they were really impressed when…"
  - REFLECTIVE LISTENING:
    - REFLECTIONS: "So your mom said…" "It sounds like you are saying…"
    - ACTIVE LISTENING: Nonverbal silence, "hmm," engaged body language, allowing the awkward silence
  - SUMMARIZING (VALIDATING): Pulls together what has been said, validates, and allows a "what else" opportunity. "So you just told me… That sounds like it might be hurtful."

Problem Solving Plans in Treatment

- State the problem.
- State feelings around the problem.
- Brainstorm any solution.
- Discuss consequences of each solution.
- Choose the option that feels like the "best fit" to the client.
- Role play.
- Discuss follow up plan/next steps.

Problem —
worried that when I go back to school (public) that I'm going to stutter and the kids will laugh at me

I feel nervous about this

Possible solutions

- Use slides
- tell class I stutter
- Susan, Mom & I meet with teacher to talk about tools, worries
- Use easy reps (fake slides) to keep from getting into tough bl...
- look away ignore
- ask that ... please don't laugh

Role Play

- Role Play
  - Use in problem solving and working through goals
    - Advocacy statements (ex: responding to teasing, educating others, answering questions about stuttering)
    - Classroom presentations
    - Working through hierarchies (ex: situations, disclosure)
    - Trying out for talent shows, school play, etc.
    - Hypothetical situations
  - Trade listener and speaker roles. Attempt to use realistic response (both in opposition and support)

Reframing

- Reframing
  - Step 1- discuss the feelings
  - Step 2- examine
    - "what is the worst that can happen?"
    - separate feelings from reality
  - Step 3- reframe/try a new way of thinking
    - think ACT
    - mindfulness approach
    - identify the feeling objectively and do not judge or assign good/bad rating
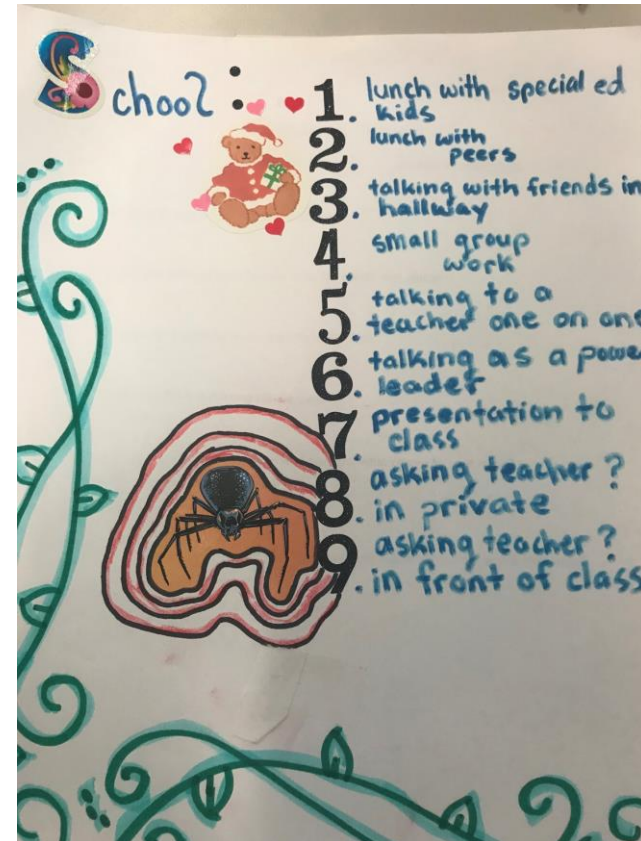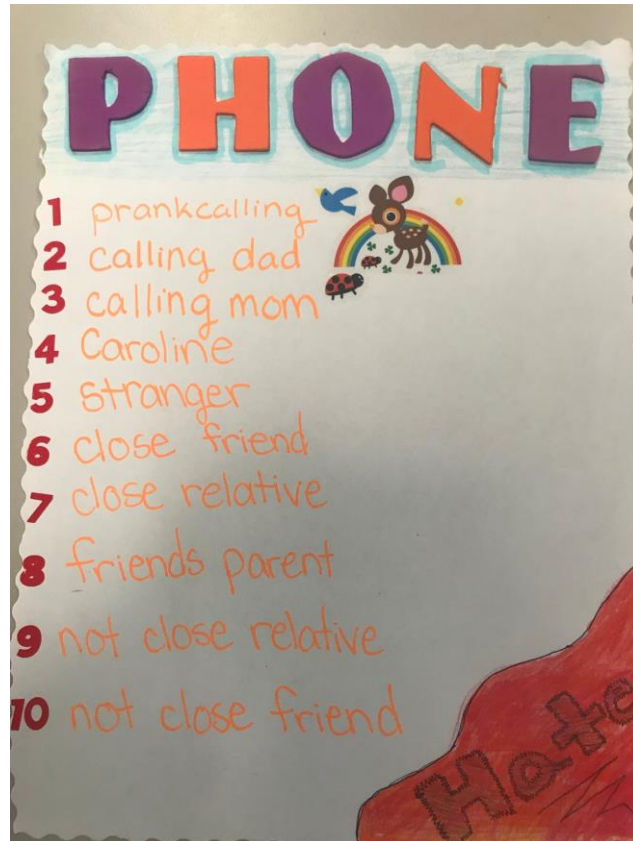
Stuttering Journal

- Clients are given a binder/folder to personalize
- Journals will be used throughout therapy sessions for activities and reflections
  - Feelings/Beliefs work
  - Speech Tools visuals
  - Facts about stuttering
  - Research projects
  - Responses to activities/experiences
  - Paper/pencil activities
- Journals may or may not be taken home depending on therapy goals and if there are "homework assignments"
  - Homework assignments may include daily ratings, reflections on working through hierarchies, thoughts on watching stuttering related films such as The Way We Talk, book club journal entries, specific speech tool practice
- Journal goes home at end of therapy for generalization period or IEP year
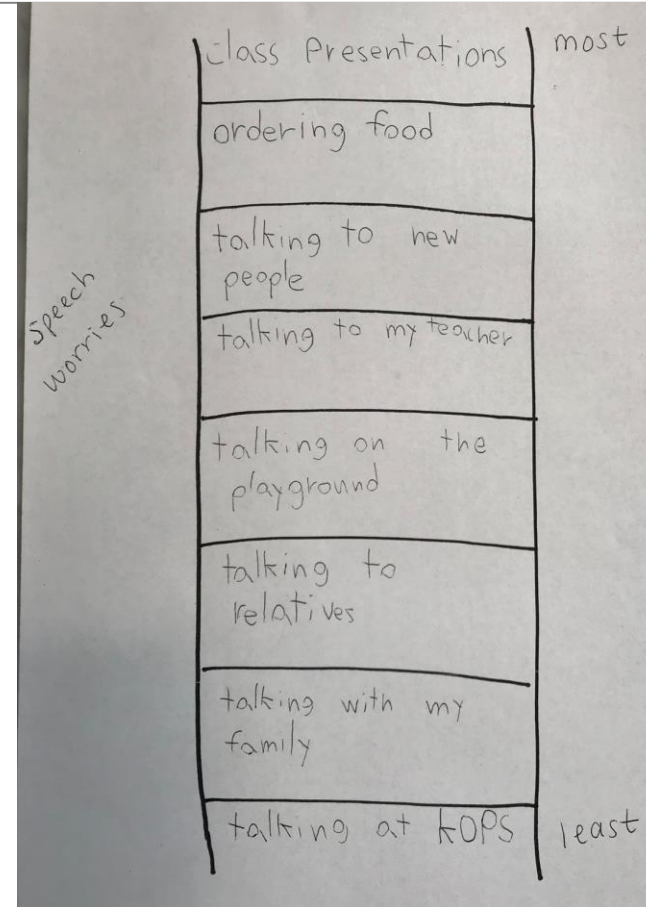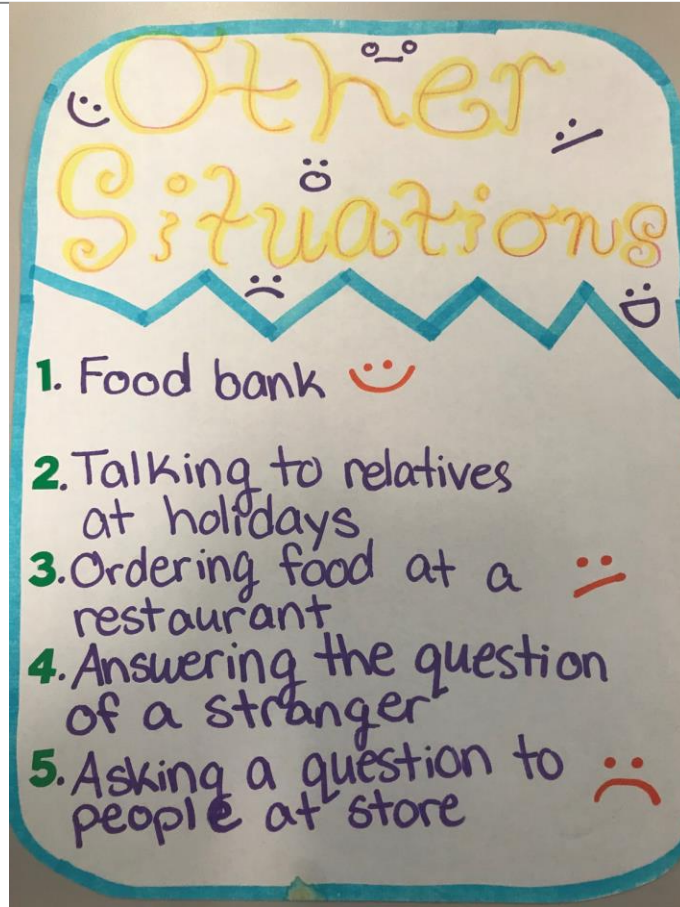
Treatment Hierarchies

- Use of SITUATIONAL, PERSONAL, and FEAR/WORRY hierarchies
  - can be used in conjunction with multiple goals
    - (ex: use of disclosure and voluntary stuttering through fear hierarchies)
  - helps explore the feelings and experiences
  - helps guide treatment planning
  - Incorporates a high level of participation-based activities
 - measurement of success/progress

Hierarchies

PHONE
1. prankcalling
2. calling dad
3. calling mom
4. Caroline
5. stranger
6. close friend
7. close relative
8. friends parent
9. not close relative
10. not close friend

Hate

School:
1. lunch with special ed kids
2. lunch with peers
3. talking with friends in hallway
4. small group work
5. talking to a teacher one on one
6. talking as a power leader
7. presentation to class
8. asking teacher? in private
9. asking teacher? in front of class

Hierarchies

Other Situations
1. Food bank
2. Talking to relatives at holidays
3. Ordering food at a restaurant
4. Answering the question of a stranger
5. Asking a question to people at store

Speech worries

class presentations	most
ordering food	
talking to new people	
talking to my teacher	
talking on the playground	
talking to relatives	
talking with my family	
talking at KOPS	least

Speech Machine

My Speech Machine

1. Lips
2. Teeth
3. Alveolar ridge
4. Hard palate
5. Velum
6. Tongue
7. Vocal Folds
8. Trachea
9. Epiglottis
10. Lungs

- Clients learn the anatomy and physiology of speech production and stuttering
- Encourages personal reflection
  - Clients are able to better identify "where" their stuttering occurs
  - Puts stuttering into context and helps normalize it.
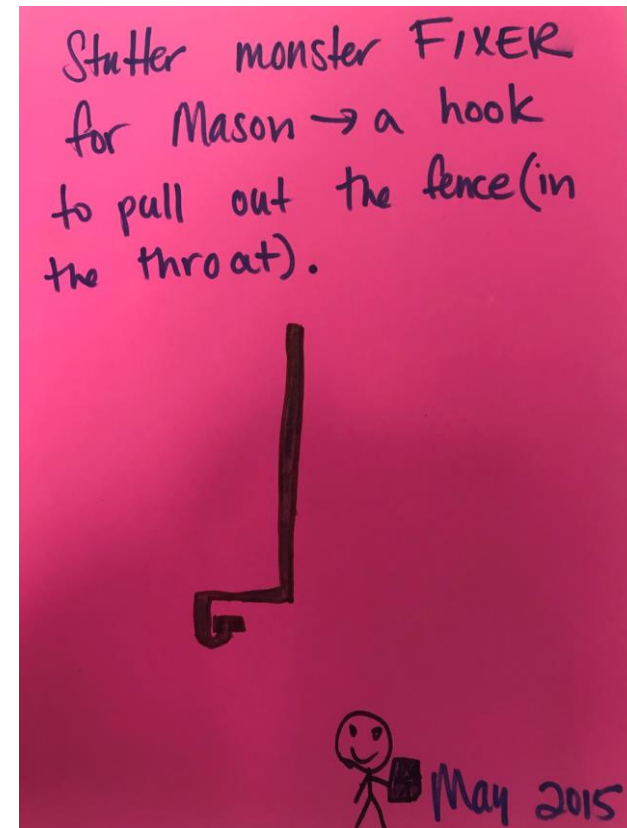- To be adjusted for age appropriateness
  - Hand drawn
  - Cut/Paste
  - Velco/Magnet

The Speech Machine

Brain
Lips
Vocal Cords
Tongue
Voice box
Teeth
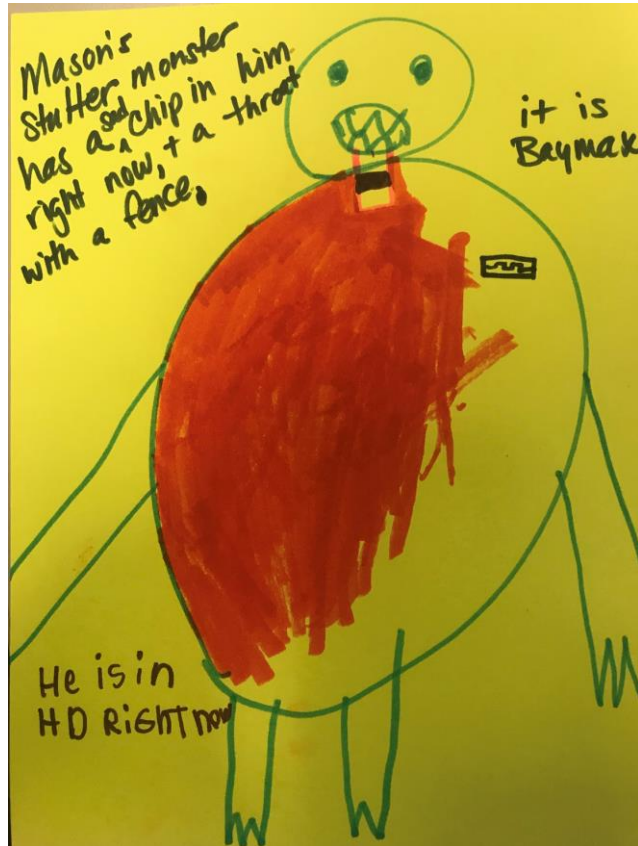Lungs
Air

Speech Me Maybe
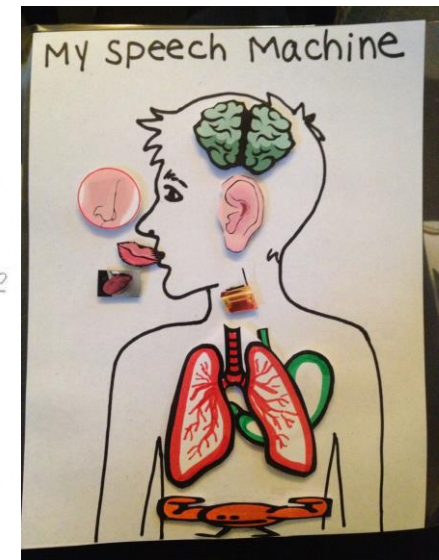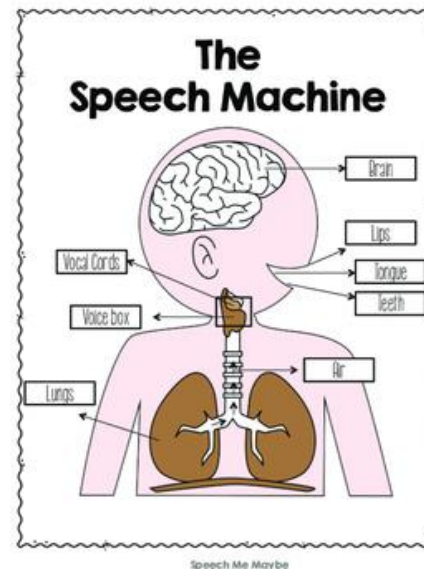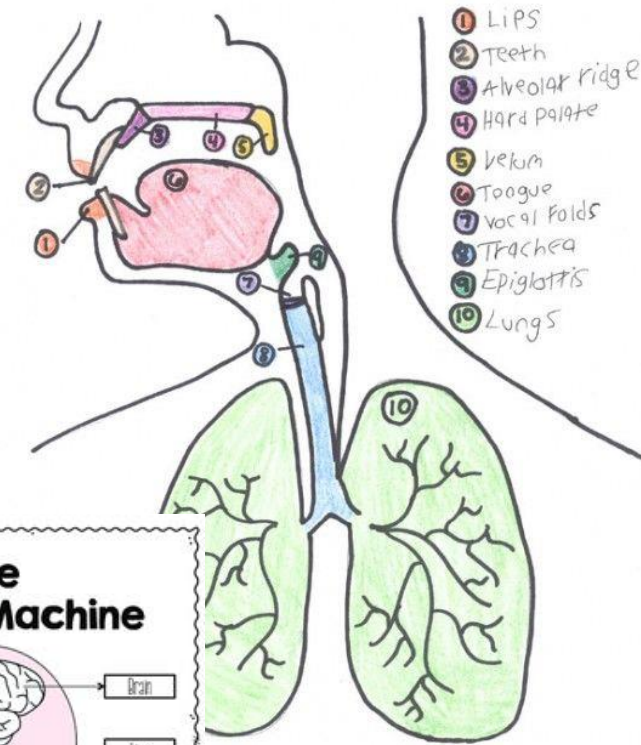
Stutter Creature

Drawings/collages and description of stuttering

- My stuttering is like a...because...
- My stuttering looks like... because...
- My stuttering feels like...because...

Stutter Creature/Monster

Mason's Stutter monster has a 2nd chip in him right now, + a throat with a fence.

it is Baymax

He is in HD Right now

Stutter monster FIXER for Mason → a hook to pull out the fence (in the throat).

May 2015

I Am Collages

Similar to Stutter Creature; More age appropriate for teens
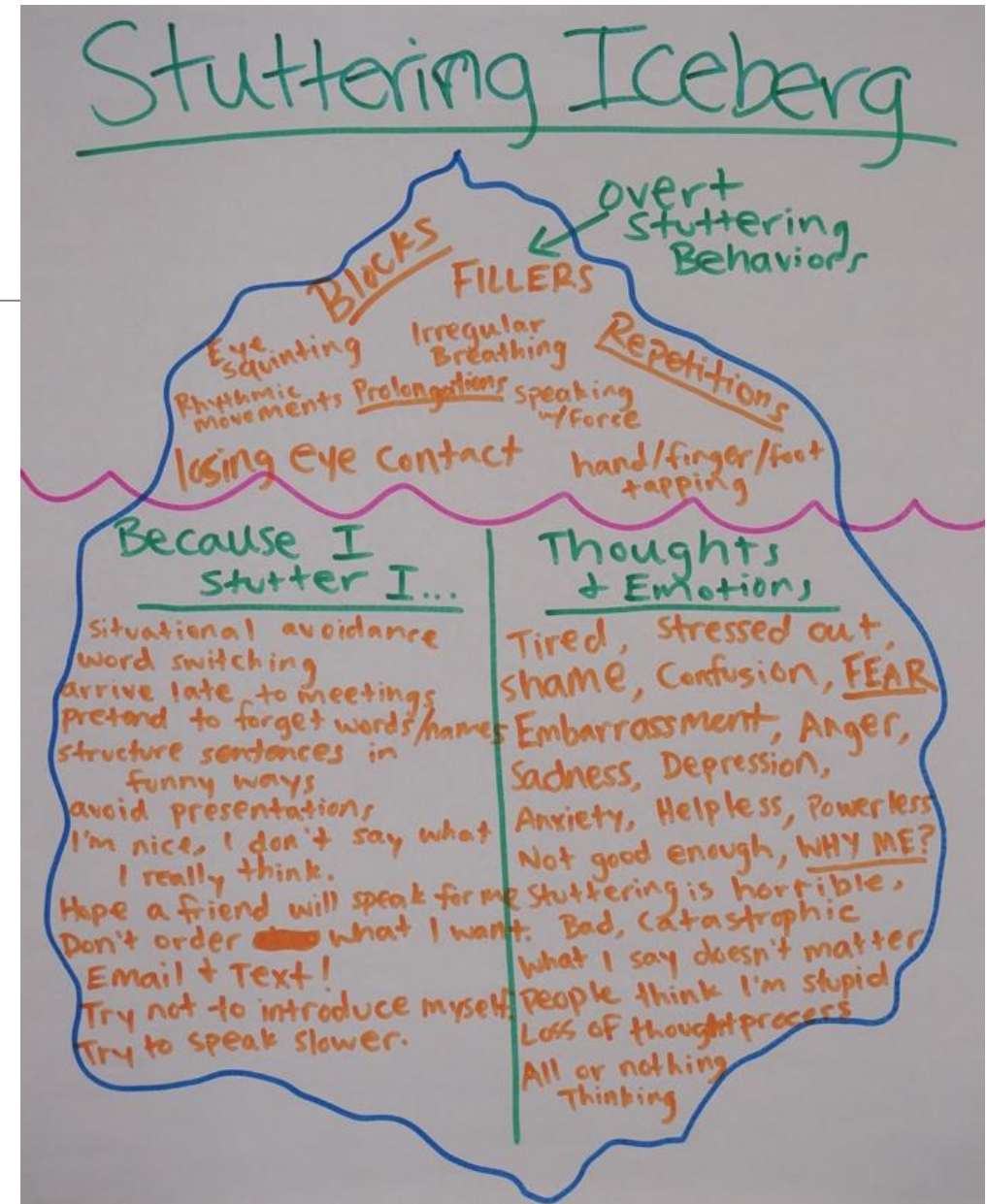
Helps visually describe how they view their own stuttering as well as their sense of self
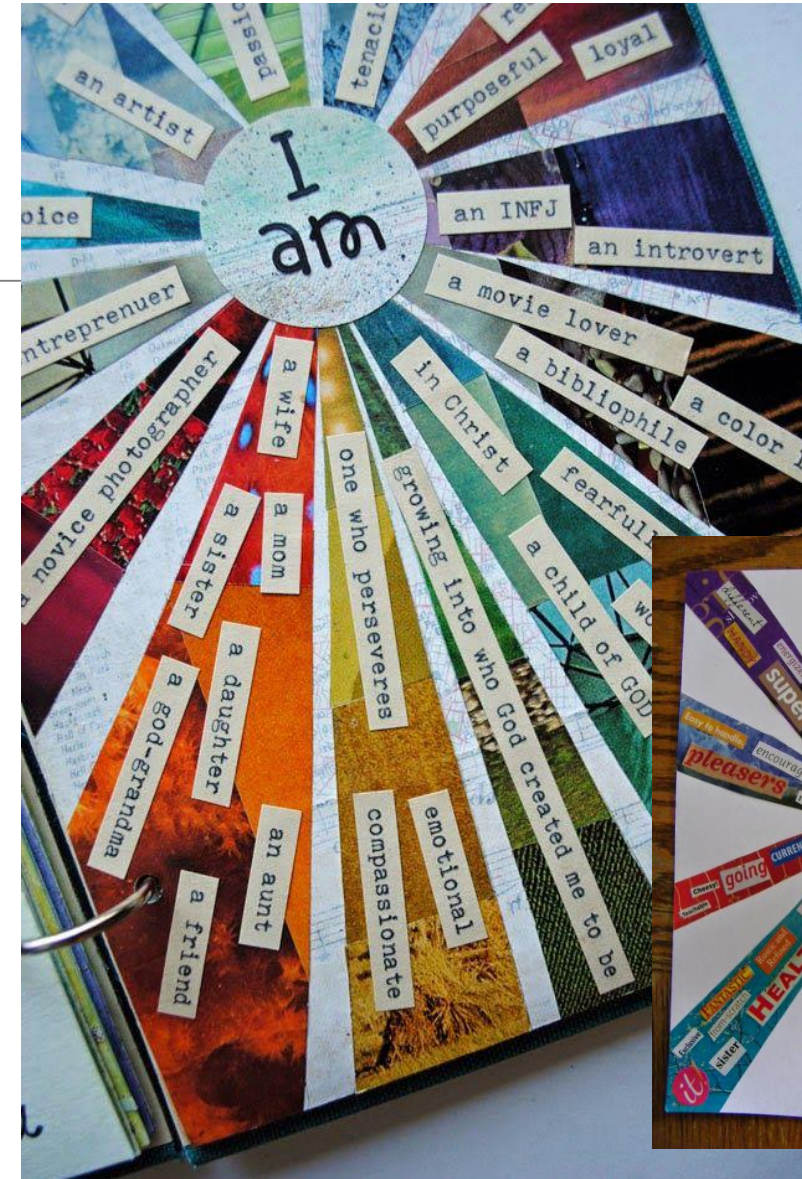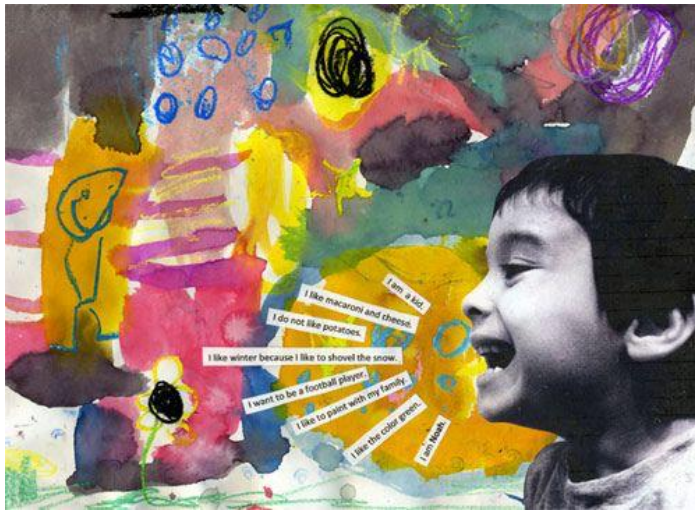
Personalized Iceberg

Clients identify

- Their own stuttering behaviors
- Their own internal reactions including attitudes/emotions and feelings/beliefs
- Therapy sessions can be designed specifically target their personal iceberg

Teacher Letters- From Student

Dear Mr. Teacher- I am looking forward to being in your History class this year, and I realize that portion of my grade will be based on class participation. Despite being a person who stutters, I do enjoy class participation, particularly in the area of history, which is very interesting to me. I do have some concerns however about my ability to participate verbally in class given my stutter. It may be difficult for me to verbally communicate my thoughts as efficiently (i.e. quickly) and frequently as the other students. I am not asking for a "pass" or an accommodation to NOT participate; but instead wondering if the expectations about frequency of class participation could be marginally less for me? Is there a way that we could look at class participation more creatively given my concerns and speech differences? I greatly appreciate your flexibility and consideration.

Many thanks, J

Stuttering Fact Sheets

- Misconceptions:
    - Stuttering is NOT caused by nerves or nervousness. It is a neurological difference that cannot be cured.
    - Most people do not "grow out" of stuttering.
        - If you are going to "grow out" of stuttering, it usually happens by age 5.
- Ways to Help:
    - Please do not correct or interrupt; please let me finish talking.
    - Please do not remind me to "use my tools" or to "slow down;" mostly I am trying to use my tools when I can.
    - Learn about stuttering.
    - Be a friend.
- Interesting Facts about Stuttering:
    - More boys than girls stutter.
    - Most people don't stutter when they sing.
    - Only 1% of people stutter and every culture in the world has people who stutter.
    - A ton of famous people (actors, athletes, news reporters, writers, politicians, and singers) stutter.
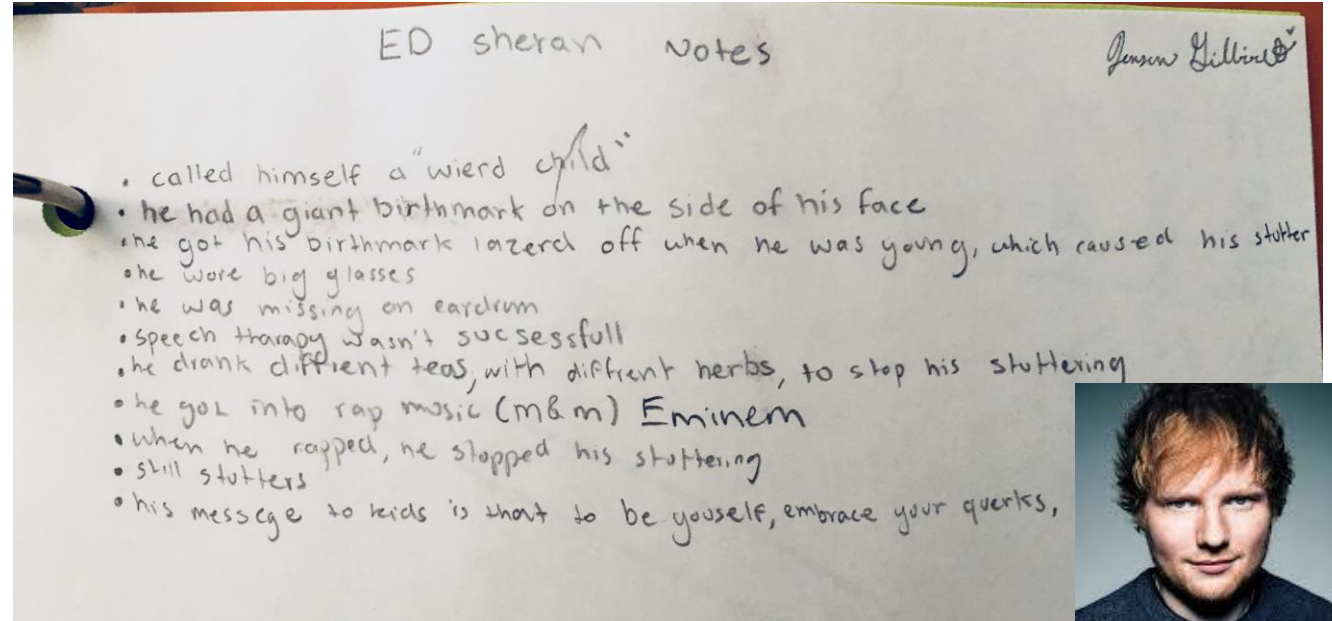
Additional Resources and Ideas for Exploration of Feelings and Beliefs

- SFA and NSA newsletters
  - use of letters from kids (school aged clients)
  - articles (teen)
- Book clubs
  - Young adult fiction (school age and especially teen)
- Picture books
  - Directly and Indirectly related to stuttering (preschool to school age)
  - Reading, discussing, creating own picture book
- Use of electronic/online materials
  - SFA DVDs and Stuttering Films/Shows
  - Stuttertalk podcasts
  - Ted Talks
  - Celebrities who stutter interviews
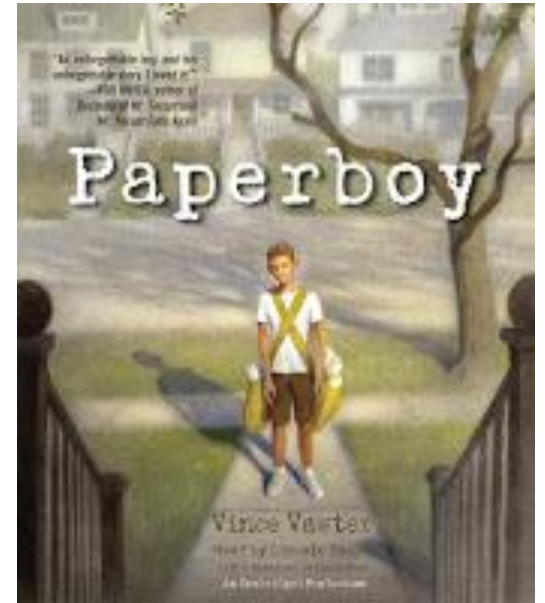
Additional Resources and Ideas for Exploration of Feelings and Beliefs

- Classroom/teacher presentations
  - Create together in therapy sessions
  - Present to groups of students and/or teachers
    - Anti-bullying week
    - Health units
    - Expository presentations
    - Just because
- Celebrity who stutters report
  - Written or oral
  - Write a letter to the celebrity
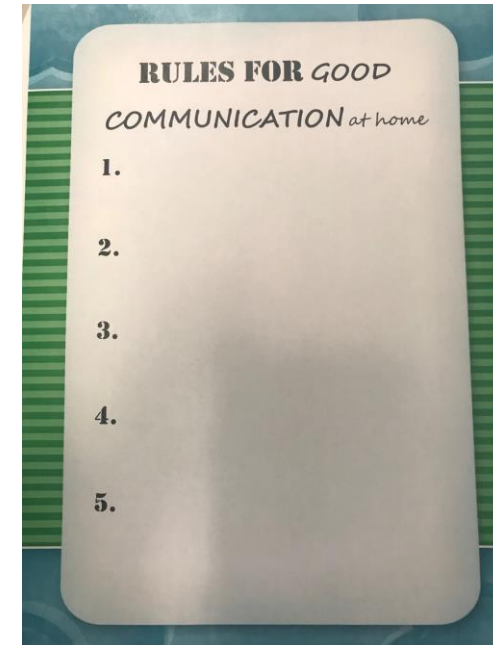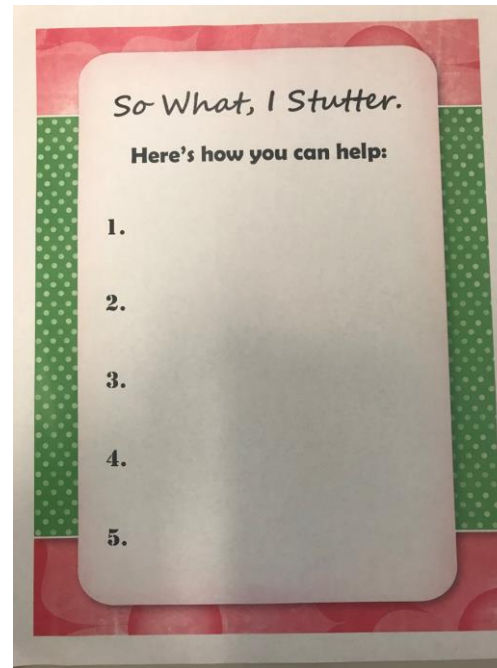

Classroom Presentation

Additional Resources and Ideas for Exploration of Feelings and Beliefs

- School lunch bunch
- Pen-Pal with someone else who stutters
  - Adult from community
  - Another student/peer from another school who stutters
  - Mentor/Mentee program
- PowerR Game (Blood, G.) (teen)
- Trivia to increase knowledge about stuttering
  - Myth/Fact games
  - Stuttering Jeopardy
  - Quiz the adults

The POWERR Game
Managing Stuttering

Gordon W. Blood, Ph.D., CCC-SLP

THE STUTTERING FOUNDATION

Transfer and Maintenance

- By transfer and maintenance stage, there should also be a level of acceptance about being a person who stutters.

- Acceptance also includes advocacy, education, and hopefully disclosure.

So What, I Stutter.
Here's how you can help:

1.
2.
3.
4.
5.

RULES FOR GOOD
COMMUNICATION at home

1.
2.
3.
4.
5.

Self Advertising/Disclosure

- Teach how to do it (unapologetically)... (e.g., you may hear me stutter; I stutter sometimes so don't be alarmed; I am a person who stutters; oh did you just hear me stutter? Yeah I do that...)
- Brainstorm together times to use it
- What to say in different situations (e.g., to strangers, at the restaurant, on the phone, in a job interview, to peers and adults, etc).
- Listen to podcasts about disclosure/self-advertising on stuttertalk.
- Throw in some voluntary stuttering shortly after disclosing/self-advertising
- Practice through role-playing and observe in different situations (e.g., over the phone, to a peer at lunch, during a classroom presentation).
- This is not for the listener, it's for the speaker. Lessens anxiety. In turn, often creates less amounts of stuttering.
- JOURNAL DISCLOSURE STATEMENTS

Transfer and Maintenance- Get out of the Clinic Room

- Phone calls
- Scavenger Hunts
- Surveys
- Community Excursions
- Rolling Calendar Alert Reminders
- Referring to Stuttering Toolbox
- Stuttering Support Group Participation (ex: NSA, Friends, KOPS or TOPS, Camp More, Camp SAY)

Stuttering Survey
– Developed by [redacted] Fall 2016

1. What do you think causes stuttering?

2. Do you know anyone famous or in the media that stutters?

3. What do you think stuttering might feel like?

4. Do you think stuttering can be cured?

5. When you think of someone who stutters, what comes to your mind? (Age, gender, personality type, IQ, etc)

(Do you have any questions for me about stuttering?)

Questions

Kristin H. Mangan, MA, CCC-SLP mangan@ohsu.edu
Sarah Herr Davies, MS, CCC-SLP sarahherr.slp@gmail.com

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