Evolving Communicative Competence in School-Age Children Who Stutter

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Kristin Chmela, M.A., CCC-SLP BCS-F, spends the majority of her time working with individuals of all ages with fluency disorders at her clinic, Chmela Fluency Center, in the suburban Chicago area. She is a recognized lecturer on the topic of childhood fluency disorders across the world. She is Co-Founder and Co-Director of Camp Shout Out, a therapeutic program for school-age children who stutter and a hands-on training opportunity for professionals and graduate students. Kristin was former Chair of the American Board of Fluency and Fluency Disorders, supervises graduate students from across the globe, provides small group intensive trainings at her center, and has served as adjunct faculty at Northwestern University. Throughout her career, Kristin collaborated extensively with the Stuttering Foundation on training videos, conferences, and publications. She is lead author of two practical therapy manuals and provides ongoing consultation services for several area school districts. As a person who grew up stuttering, Kristin has remained passionate about helping people who stutter and those who serve them, even after 32 years in the field!

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From this workshop participants will be able to:

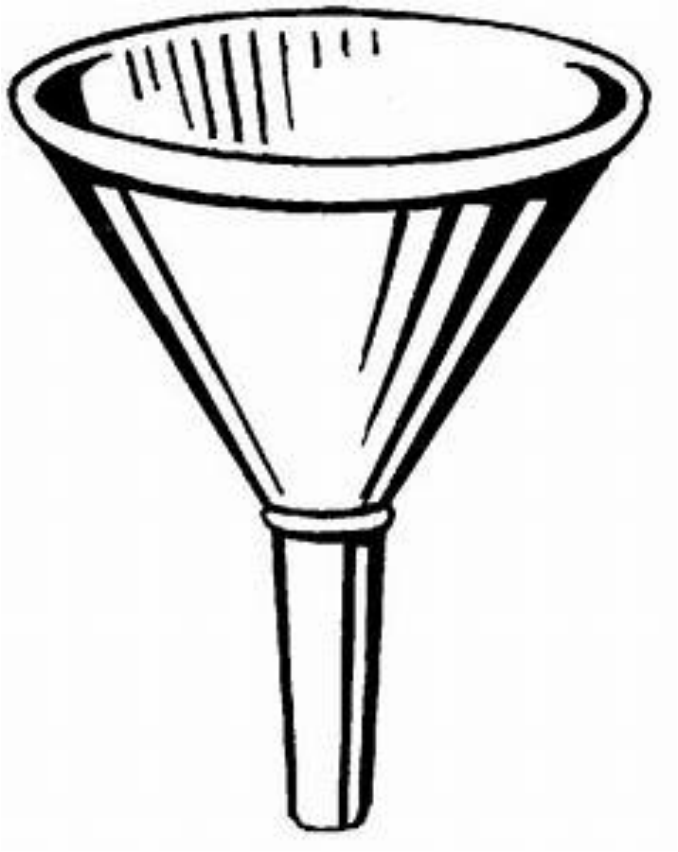
1) Assess communicative competence within the school setting for fluency cases

2) Develop Differential Evaluation and Treatment plans

3) Implement 3 strategies across each of the Five Areas of Focus of Communicative Competence

As well as:
-Atypical disfluency cases, making decisions about therapy for preschoolers, goal writing, and more

School-Age Stuttering is complicated



What can we do NOW to make this present problem ***evolve*** in a positive manner?

➢ School-Age Stuttering is complicated

-What causes stuttering? (*Smith & Weber 2016)*

"…We are now at a point in time when the answer to this question no longer must be "we don't know." It is now widely accepted that stuttering is a multidimensional disorder. It is also widely accepted that **stuttering is a neurodevelopmental disorder**, which means that it arises during development in childhood…"

(*emphasis added*)

➢ School-Age Stuttering is complicated

-Can we view stuttering as an isolated problem?

Briley, P.M., & Ellis, C. (2018). The coexistence of disabling conditions in children who stutter: evidence from the National Health Interview Survey. Journal of Speech, Language, and Hearing Research.

-Presence of at least 1 more disabling developmental condition was at least 5.5 times higher

-Higher odds for intellectual or learning disability, ADHD, seizures, autsim/Aspergers/pervasive developmental disorder/ other developmental delay

-Existence of other difficulties should be considered as part of the overall management plan

➢ School-Age Stuttering is complicated

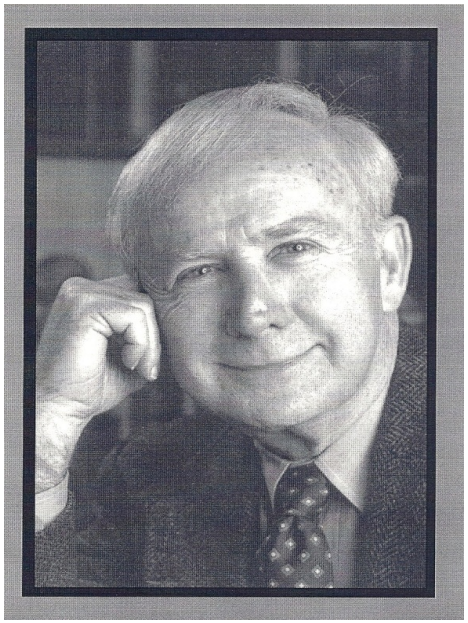
-Do the contributing factors matter?

Multifactorial Dynamic Pathways Theory (*Smith & Weber, 2017)*

-Does the approach include more than "speech techniques?"

Hughes, C.D. & Mahanna-Boden, S. (2017). Results from a stuttering clinic for school-age children who stutter: a pilot study using a comprehensive approach. Perspectives of the ASHA Special Interest Group.

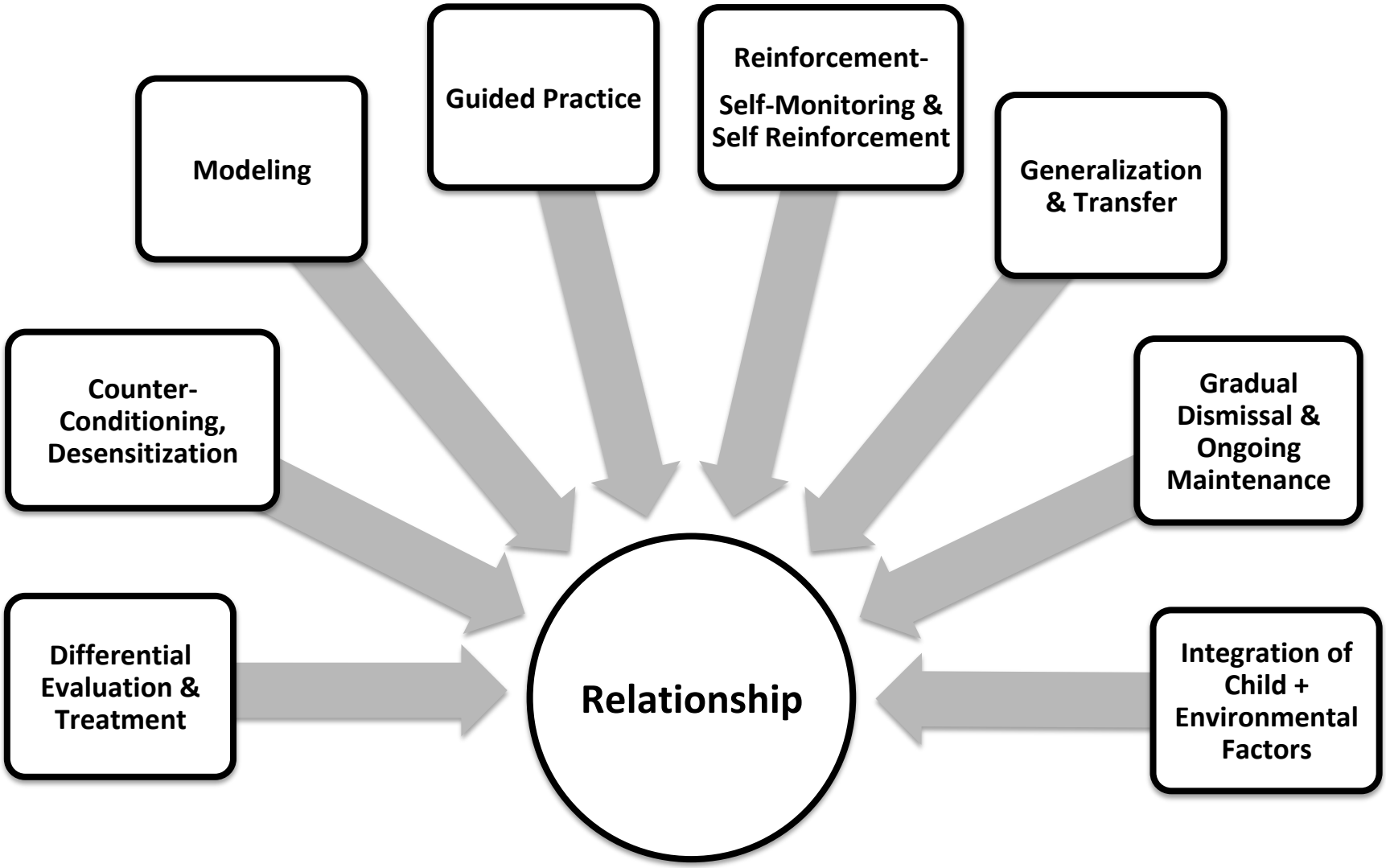
School-Age Stuttering Services



Dr. Hugo Gregory

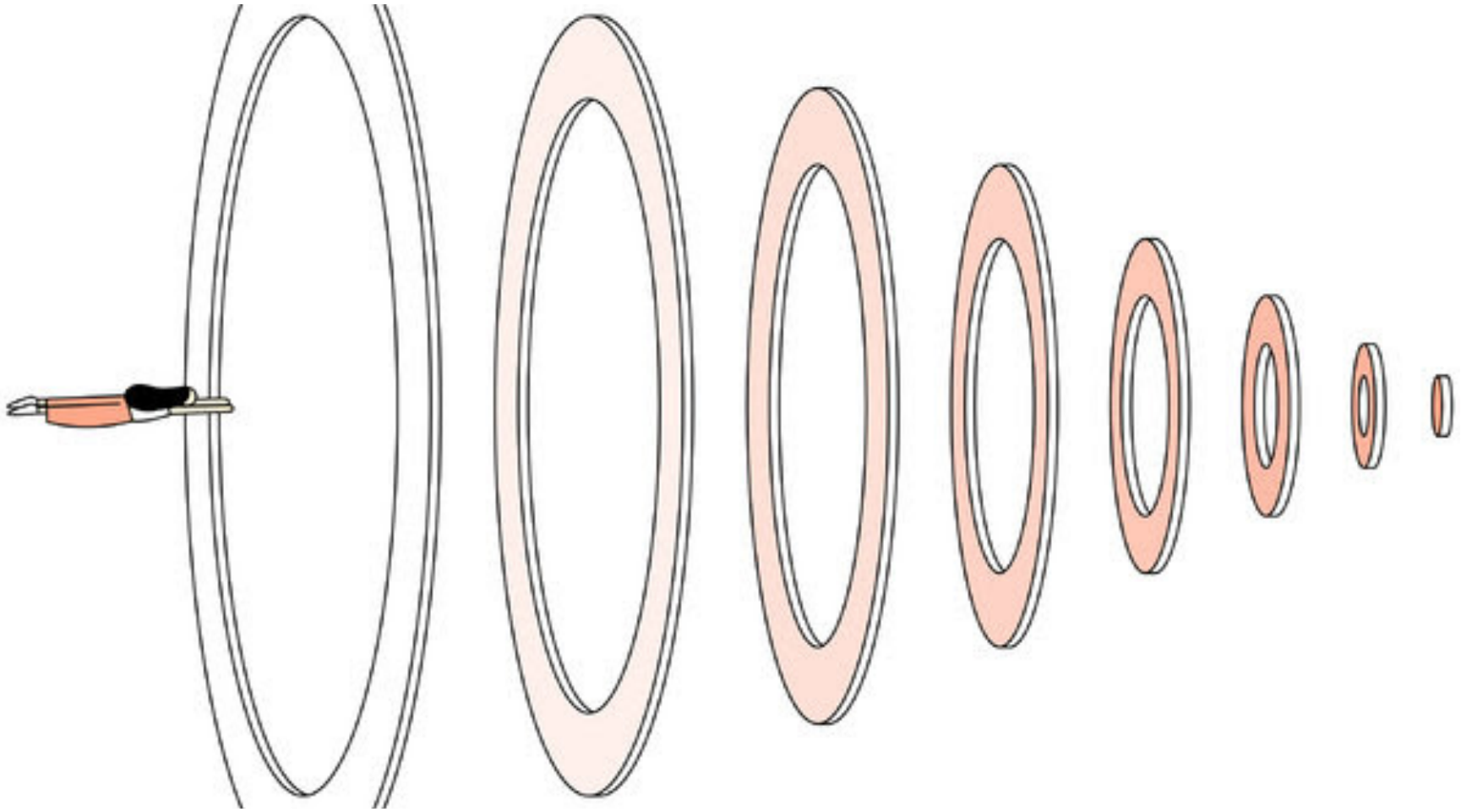
-Ongoing problem solving:
referencing and interpreting the Basic Principles according to current knowledge, evidence, and research

-Identifying school-based challenges within 3 areas:
content, *process*, & *integration*
(*Chmela & Johnson, 2018)*



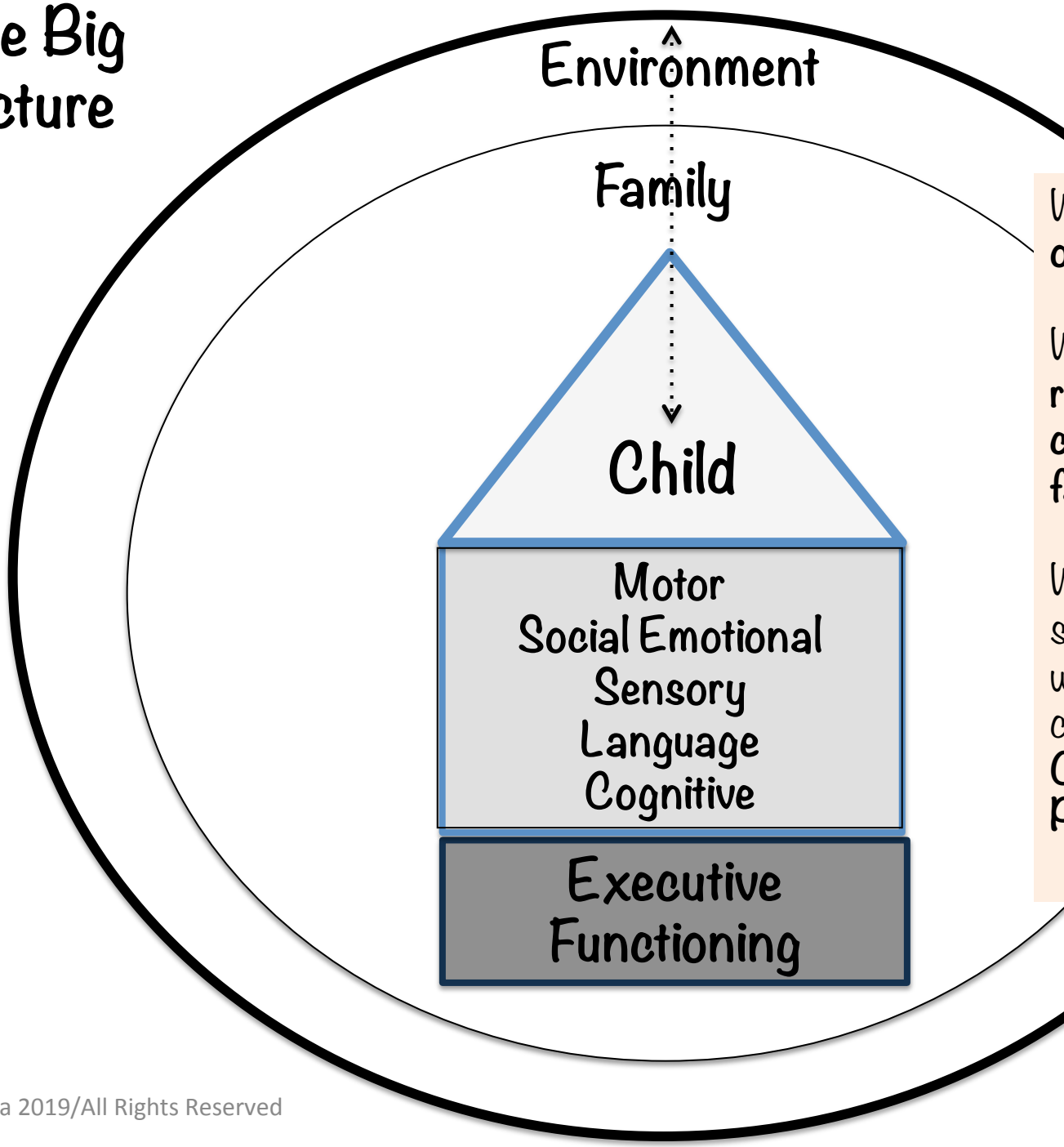
Basic Principles help us guide the clinical process of positive change

Chmela & Campbell, 2014; Gregory, 1968; 2003



Be a Differential Thinker

The Big Picture



What is the **pattern of fluency?**

What are the **relevant potential contributing factors?**

What are the strengths/ weaknesses of the child's **overall Communication Profile?**

Fluency Evaluation Options	Formal Measures	Informal Measures
Motor	➢ Test of Childhood Stuttering (Gillam, Logan, & Pearson, 2010) Ages 4-11 ➢ Stuttering Severity Instrument- 4 (Riley & Riley 2009) Ages 3-up ➢ Formal articulation, phonology, oral motor, voice assessment tools if needed	Informal Options: see continuum next page ➢ Ratings of Stutter Like Disfluencies (Onslow & Packman, 2003 ➢Ratings of Other Disfluencies/Rate of Information flow ➢Ratings across various speaking situations ➢Systematic Disfluency Analysis (Campbell & Hill, 2003) ➢Real-Time Analysis (Yaruss, 1998) ➢On-line % Stuttered Syllables (Onlsow & Packman, 2003) ➢Cursory oral motor and voice assessment
Contributing Factors	Formal Options: ➢Overall Assessment of the Speaker's Experience of Stuttering (OASES) (Yaruss, Coleman, & Quesal, 2010); ages 7-12; 13-17) ➢Behavioral Assessment Battery for School-Age Children Who Stutter (BAB), (Brutten & Vanryckeghem, 2006); ages 6-15 AND ➢Language evaluation measures ➢Single word Receptive Vocabulary assessment and ➢Single word expressive vocabulary ➢Short Sensory Profile: caregiver/parent, teachers; child if age appropriate OR Sensory Processing Measure	➢ Detailed developmental, medical, and academic history; report of other concerns or diagnoses; cultural factors ➢ Informal analysis of spontaneous speaking sample ➢ Informal dialogue regarding perceptions, feelings, and experiences related to the problem as well as adverse ➢ Pencil-Paper Tasks; (Chmela & Reardon, 2001) Ages 8-Teens ➢ Parent & Teacher Checklists (Chmela & Reardon, 2001; Reardon & Yaruss, 2004)

Chmela, 2019; Adapted from Chmela & Campbell, 2014

Informal case summary worksheet: G age 9-3

Fluency Case Summary	Motor	Social-Emotional	Sensory	Language	Cognitive
Fluency Pattern & Potential Contributing Factors	Moderate Stuttering; blocks, prolongations; tense reactions with head movements	Significant frustration within blocks; Pragmatic-peer issues	Significant		
Risk Factors	Very High				
Executive Functioning Skills & Other Diagnoses	❑ Difficulties observed ❑ Diagnoses: High Functioning Autism; ADHD ❑ Moderate impact of stuttering problem				

Present Student Needs:

- ❑ Communication within small group interactions
- ❑ Increased self-initiated peer verbal interactions
- ❑ Increased effectiveness of messages communicated via easier relaxed approach to onset of phonation, pausing; self-adjustments of tension; assertiveness regarding needing increased time; healthy reactions to comments regarding stuttering
- ❑ Ongoing communication regarding status of self-perceptions of fluency

Developing GOALS for Stuttering Therapy

- **Frequency of communication as compared to same-age peers across academic environment**

-Measured across rating scales completed by caregiver/s, student, teacher/s, SLP

-May lead to goal focused upon increasing communication within certain speaking situations

- **Competency of communication as compared to same-age peers**

-Measured across caregiver/s report, student report, teacher/s, SLP

-May lead to goal related to modifications of various communicative behaviors (see 5 Areas of Focus) across various speaking situations

- **Progress indicated across Rubrics related to what will occur across specific situations whereby frequency/competency is being targeted**

-Utilizing rubrics accounts for the variability of stuttering

- G. will demonstrate present engagement (self-regulating body, connecting, inhibitory control) making 2 or more relevant contributions (building upon others' ideas or expressing his own) within collaborative group discussions as measured by corresponding rubric (0-4 Rating Scale; with 3 as an overall average) by…
- G. will communicate within small group interactions and self-initiated peer communications while communicating in various settings with a frequency of 3 (based upon 0-4 Rubric)) completed by staff observations by…
- G. will demonstrate a variety of modifications (Easier-Relaxed Approach-Smooth Movements-Phrasing; Pausing; Self-Adjustments to Tension; Turn the Question Around) while communicating in various settings while answering questions and demonstrating narratives with a frequency of 3(based upon 0-4 Rubric) as measured by a comparison of his self-rating to staff rating (75% correspondence) by...

GOAL #1,3: Present Engagement RUBRIC A: Quiet Mind (Mindfulness Practices)			
		SLP	**Student**
0%	0.	Adult introduces QM	Student is unable to state definition of QM.
25%	1.	Adult guidance of definition of QM	Student is able to define QM.
50%	2.	Adult provides consistent verbal-visual support* for QM	Student demonstrates QM with consistent adult support.
75%	3.	Adult provides intermittent verbal-visual support for QM	Student demonstrates QM with intermittent adult support.
100%	4.	Student independently executes QM	Student is able to demonstrate QM with no adult support

Examples

GOAL #2: Frequency of Communication (Adult Ratings) RUBRIC B: Small Group Participation		
0%	0.	Student never participations in small groups.
25%	1.	Student seldom participates in small groups.
50%	2.	Student participates in small groups less than peers.
75%	3.	Student participates in small groups as comparable to peers.
100%	4.	Student participates in small groups exceeding peers.

Brief Overview of Treatment Strategies: G age 9-3

Attentive Awareness of thoughts, emotions, & body; situation & resultant actions	**Assertive** Initiating, participating; advocating for oneself	**Confident** Body language; Voice volume & strength	**Effective** Communicating with greater ease; intelligibility, organization, & clarity	**Proactive** Engaging in setting oneself up for evolving communicative success
❑ **Breath awareness** ❑ **Mindfulness** ❑ **Reflective listening** Executive Functioning: *(Skills targeted within academic and home environment; reinforced throughout speech therapy)* ❑ Self-Regulation ❑ Inhibitory Control ❑ Shift-Sustain ❑ Sensing Time ❑ Cognitive Flexibility ❑ Social Language *(Social language goals formulated and are reinforced within fluency therapy and throughout the academic day)*	❑ **First to Approach** ❑ **Talking for yourself** ❑ Talking More ❑ Saying All Words ❑ **Nonverbal-Verbal Noting** ❑ **Self-Advocacy** ❑ **Educating others about his communication & stuttering**	❑ Core seated & standing postures ❑ **Handshake** ❑ **Natural eye contact** ❑ **Body language** ❑ **Volume-power of voice**	❑ **Varying intent & expression** ❑ **Pausing with variation** ❑ **Phrasing with variation** ❑ **Expressive Organization: Complete sentences; Narratives; Answering questions (TTQA)** ❑ **Easier-Relaxed Approach with variation** ❑ **Smoother Movements** ❑ **Self-adjustments of tension** ❑ Voluntary disfluency ❑ **Natural stuttering w/ ease**	❑ **Core Practices** ❑ **Guided Hierarchies of Practice** ❑ **Accessing Ongoing Support** ❑ Other Daily Preparation **Balancing input-technology; physical body**

Informal case summary worksheet: T age 11-6

Fluency Case Summary	Motor	Social-Emotional	Sensory	Language	Cognitive
Fluency Pattern & Potential Contributing Factors	Moderate Atypical Disfluency (final sound repetitions)	Some self-regulatory issues reported at home		Significantly above average	
Risk Factors	No family history				
Executive Functioning Skills & Other Diagnoses	❑ None reported				

Present Student Needs:

- ❑ Communication within various levels of language complexity
- ❑ Communication within family conversations
- ❑ Increased effectiveness of messages communicated via counterconditioning of final sound disfluencies
- ❑ Education & involvement of parents in therapy; teacher

Brief Overview of Treatment Strategies: T age 11-6

Attentive Awareness of thoughts, emotions, & body; situation & resultant actions	**Assertive** Initiating, participating; advocating for oneself	**Confident** Body language; Voice volume & strength	**Effective** Communicating with greater ease; intelligibility, organization, & clarity	**Proactive** Engaging in setting oneself up for evolving communicative success
❑ **Breath awareness** ❑ **Mindfulness** ❑ Reflective listening Executive Functioning: ❑ **Self-Regulation** ❑ Inhibitory Control ❑ Shift-Sustain ❑ Sensing Time ❑ Cognitive Flexibility ❑ Social Language	❑ First to Approach ❑ Talking for yourself ❑ Talking More ❑ Saying All Words ❑ Nonverbal-Verbal Noting ❑ Self-Advocacy ❑ Educating others about his communication & stuttering	❑ **Core seated & standing postures** ❑ **Handshake** ❑ **Natural eye contact** ❑ Body language ❑ Volume-power of voice	❑ Varying intent & expression ❑ **Pausing with variation** ❑ **Phrasing with variation** ❑ **Naming & countering atypical disfluency; Complete sentences; Narratives; Answering questions (TTQA)** ❑ Easier-Relaxed Approach with variation ❑ Smoother Movements ❑ Self-adjustments of tension ❑ Voluntary disfluency ❑ Natural stuttering w/ ease	❑ **Core Practices: Breath Awareness; Mindfulness** ❑ **Guided Hierarchies of Practice** ❑ **Accessing Ongoing Support: parent will provide feedback during daily 10 minute special communication time** ❑ **Other Daily Preparation Balancing input-technology; physical body**

Therapy Goals for T age 11-6:

Informal case summary worksheet: M age 8-1

Fluency Case Summary	Motor	Social-Emotional	Sensory	Language	Cognitive
Fluency Pattern & Potential Contributing Factors	Severe SLD; blocks, prolong; multiple interjections noted prior to SLD	Instances of bullying; Withdrawing from talking in classroom	Seeking input; tactile-proprioceptive; history of OT	Recept-Expr vocab discrepant	
Risk Factors	Very high				
Executive Functioning Skills & Other Diagnoses	❑ None identified; disorganization at home noted; parent concerned about attention; very impulsive				

Present Student Needs:

- ❑ Communication with teacher (frequency & competency)
- ❑ Communication within small reading groups in classroom (freq & comp)
- ❑ Increased effectiveness of messages communicated via reducing effort associated with stutter; desensitization of fear related of stuttering moment; attitudes & feelings
- ❑ Education & involvement of parents in therapy; teacher
- ❑ Self-advocacy with peers
- ❑ Further exploration of 'attention' concerns

Brief Overview of Treatment Strategies: M age 8-1

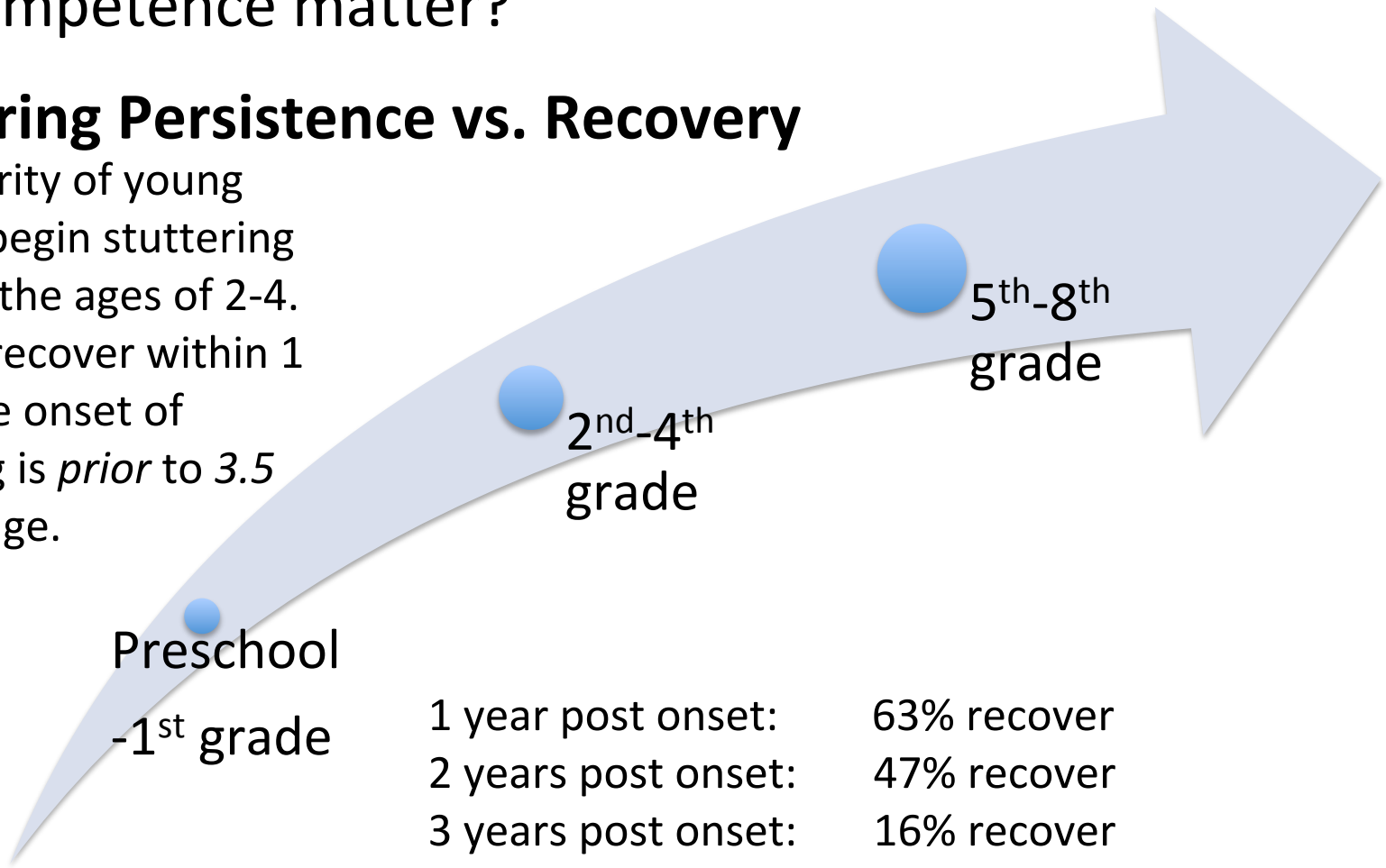
Attentive Awareness of thoughts, emotions, & body; situation & resultant actions	**Assertive** Initiating, participating; advocating for oneself	**Confident** Body language; Voice volume & strength	**Effective** Communicating with greater ease; intelligibility, organization, & clarity	**Proactive** Engaging in setting oneself up for evolving communicative success
❑ **Breath awareness** ❑ **Mindfulness** ❑ **Reflective listening** Executive Functioning: ❑ **Self-Regulation** ❑ **Inhibitory Control** ❑ Shift-Sustain ❑ Sensing Time ❑ Cognitive Flexibility ❑ Social Language	❑ **First to Approach** ❑ **Talking for yourself** ❑ **Talking More** ❑ **Saying All Words** ❑ **Nonverbal-Verbal Noting** ❑ **Self-Advocacy** ❑ **Educating others about communication & stuttering**	❑ **Core seated & standing postures** ❑ **Handshake** ❑ **Natural eye contact** ❑ Body language ❑ Volume-power of voice	❑ **Varying intent & expression** ❑ **Pausing with variation** ❑ **Phrasing with variation** ❑ **Complete sentences; Narratives; Answering questions (TTQA)** ❑ **Easier-Relaxed Approach with variation** ❑ **Smoother Movements** ❑ **Self-adjustments of tension** ❑ **Voluntary disfluency** ❑ **Natural stuttering w/ ease**	❑ **Core Practices: Breath Awareness; Mindfulness** ❑ **Guided Hierarchies of Practice** ❑ **Accessing Ongoing Support** ❑ **Other Daily Preparation Balancing input-technology; physical body**

Therapy Goals for M age 8-1:

- Why does focusing upon overall Communicative Competence matter?

Stuttering Persistence vs. Recovery

The majority of young children begin stuttering between the ages of 2-4. 75% will recover within 1 year *if* the onset of stuttering is *prior* to *3.5* years of age.



1 year post onset:	63% recover
2 years post onset:	47% recover
3 years post onset:	16% recover
4 years post onset:	5% recover

Risk Factors Analysis Chart

*Primary Rank Ordered Risk Factors	
Family history with persistence	❑ Who?
Gender of child	❑ Male
Trends in fluency pattern	❑ Flat or Increased trend in frequency over time
Time persisted since onset	❑ Continued for 6-12 months
Age at onset	❑ After 3 ½ years of age
# and tempo of repetition units	❑ 2-3 or more units of repetition; quicker tempo
Presence of prolongations/blocks	❑ Pattern of SLD includes Blocks-Prolongations
Secondary Risk Factors	
Stuttering Severity	❑ Post 1 year, remains in severe quantity range
Movements of head, neck	❑ Post 1 year, remain frequent & severe
Phonological Skills	❑ Below normal in early phase of stuttering
Expressive Language Skills	❑ Remained advanced over time; weaknesses
Other Considerations	
Child Reactions to problem	❑ Frustration/Withdrawal/Avoidance
Child's Temperament observations	❑ Lower sensory threshold, higher reactivity; lower adaptability, higher distractibility, lower attention
Other	❑ Other developmental issues
Parent Reactions	❑ Significant anxiety/negative manner of reacting
Other family history	❑ Speech/language, learning, anxiety, mood, attention tic or compulsive disorders; autism

References include Yairi & Ambrose, 2005, Illinois Prediction Criteria; Yairi & Seery, 2015; Kraft & Yairi, 2011

➢ School-age stuttering therapy focuses upon evolving Communicative Competence

- The mindset of an *Evolving Communicator*
- 5 Areas of Focus
- Integration of speech pathology, psychology, neuroscience, and occupational therapy

Considers the integration of familiar approaches (Fluency Shaping & Stuttering Modification) and adaptations of "third-generation behavioral and cognitive therapies"

(Hayes, 2004)

- **School-age stuttering therapy focuses upon evolving Communicative Competence**

Key Concept #1:

- **Communicative success is defined in multiple ways and is within reach for all of us.**

  -Considers "The Big Picture" (the ongoing *Differential Evaluation-Differential Treatment Processes)*

  -Willingness to keep learning and growing

- **School-age stuttering therapy focuses upon evolving Communicative Competence**

Key Concept #2

- **Communicative competency is not perfect for anyone.** (*"The Concept of Communicative Competence." Handbook Of Communication Competence, ed. by G. Rickheit and H. Strohner. Walter de Gruyter, 2010)*

  -A historical topic
  -3 part definition
  -Accounts for relevance, variability, & motivation

- **School-age stuttering therapy focuses upon evolving Communicative Competence**

Key Concept #3:

- **Communicative abilities thread through most of what matters to us.**

  -Linking what we do (actions) to what matters to us (our values)

  -Helps us to identify behaviors that may no longer be helpful to us

  -Fosters healthier communicative attitudes-behaviors

5 Areas of Focus
of
Evolving Communicative Competence

Adapted further by Chmela, 2018; three/five elements defined originally by Chmela, expanded by Chmela & Campbell, 2014; further expanded by Chmela, Campbell, Eldridge,& Raynor throughout Camp Shout Out collaboration

Thumb= Attentive

How aware am I?
Am I aware of my breath?
Am I aware of what is going on around me? Am I aware of my thoughts? My emotions? What my physical body is telling me?

Am I aware of listeners' expressions and body language? Am I tolerant of waiting? Do I notice what I do when talking is harder?

Do I notice when it is easier to speak? Do I hear it, feel it? Do I know what I do when I am trying not to stutter?

Counterconditioning & Awareness

Adaptive responses

Maladaptive responses

➢ We may focus upon:

- ❑ Breath awareness
- ❑ Mindfulness
- ❑ Reflective listening

- ❑ Aspects of Executive Functioning
-Self-Regulation
-Inhibitory Control

- ❑ Aspects of Social Language

Index= Assertive

Do I talk if I want to? Do I say every word I want to say? Do I talk enough? Do I talk for myself?

Do I self-advocate around communication if need be?

Am I the first to introduce myself to someone new?

Is the language I am using, voice tone and loudness respectfully appropriate for the situation?

➢ We may focus upon:

- ❑First to Approach
- ❑Talking for yourself
- ❑Talking More
- ❑Saying All Words
- ❑Nonverbal-Verbal Noting
- ❑Creating & Holding Space
- ❑Self-Advocacy
- ❑Educating others about communication & stuttering

Third Finger= Confident

Confident:

Do I have a strong body core? Do I sit with dignity? Stand like a majestic mountain?

Do I connect with my eyes while communicating?

Do I have a firm handshake and make a connection with my eyes when introducing myself?

Is my voice from the start to the end of a phrase powerful? Do I feel a sense of ease in the pause?

- **We may focus upon:**

  - Core seated & standing postures
  - Handshake
  - Natural eye contact
  - Body language
  - Volume-power of voice

Fourth= Effective

Effective:
Do I communicate moving towards what I want to say? Can I create greater ease?

Are my sentences complete?
Is my message organized and clear?

Does the manner of my speaking allow the listener to focus upon my message?

➢ We may focus upon:

Varying intent & expression
Pausing with variation
Phrasing with variation
Complete sentences
Turning the Question Around
Expressive Organization
Easier-Relaxed Approach with variation
Smoother Movements

↕

Self-adjustments of tension
Voluntary disfluency
Voluntary self-adjustments
Natural stuttering w/ease

Less specific to more specific ways of modifying speaking

Pinky= Proactive

Proactive:
Do I know how to set myself up for success as a communicator ?

Do I have a team?
Do they know how to help me?

Do I know what my goals are?
Do I know how to ask for feedback?
Am I working on self-feedback?
Do I do Core Practices? Am I learning how to Guide my own practice?

➢ Exploring Attitudes and Feelings

4 Categories of Questions to Ask Teens

1. Desire-What do you want?
2. Ability-What is possible?
3. Reasons-What are the benefits?
4. Need-How important is this change?

Zebrowski (*2018 presentation*)

Motivational Interviewing *(Rollnick et al., 2008)*

What is it that you want? (Desire Questions)

- What would you like to see different about stuttering?
- What makes you think you need to change?
- Are you concerned about your stuttering? Are others concerned?
- Why do you think others are concerned about your stuttering?
- What ideas do you have about what needs to happen?
- What is your theory about why you stutter?
- In what ways do you see *me and this process* helpful in attaining your goals?

What do you see yourself doing? (Ability)

- What are the most challenging speaking situations for you (worried you will stutter, avoiding talking-stuttering; stutter the most)?
- What-where are the circumstances when "doing something with a stutter" is very hard to do?
- How confident are you in your ability to use a new behavior and remain engaged following failure (on a 1-10 Rating Scale)?
- Of the most challenging situations, which one would you be willing to take on first? What would it take to create a positive change in that situational circumstance?
- Across the 5 Areas of Focus, where do you see yourself-your strengths and areas of possible change or growth?
- What areas matter the most to you to facilitate change? Why?

Adapted by Chmela/Zebrowksi

Why are you doing it? (Reason & Need Questions)

- What would be the good things about changing something about your stuttering? What would be not so good about changing?
- What will happen if you don't change?
- What will your life be like if tomorrow you woke up and never stuttered again? What would you be thinking, feeling, and doing differently? What would your teachers notice? Your parents? Siblings? Friends?
- How important is making this change?

- **We may focus upon:**

  - ❑Core Practices
  - ❑Guided Hierarchies of Practice (see next)
  - ❑Meet with teacher/other

Guided Practice Chart

How many people?	Who are they?	What input do I need?	Feedback	What ACTIONS (Attentive, Assertive, Confident, Effective) will I DO WHILE I am:
☐ 2-3	☐ Peers I know ☐ Girl(s)/Boy(s)	☐ Sitting ☐ Standing ☐ Walking ☐ Other	Who will give Feedback? ☐ SLP ☐ Self ☐ Teacher ☐ Other	
☐ 4-5 ☐ Half class	☐ Peers I don't know ☐ Girl(s)/Boy(s) ☐ Speech group			
☐ Whole class	☐ Authority Figures ☐ Familiar Adults ☐ Unfamiliar Adults	☐ Visually distracting ☐ Limited visual distractions	How?	
☐ Whole grade ☐ Whole School *Other:*	*Other:*	☐ Noisy ☐ Quiet ☐ Verbal Reminder ☐ Tactile Reminder ☐ Visual Reminder		

**All situations consider language context, discourse structure, and semantic complexity.*

Campbell, 2003; Chmela & Campbell, 2014

Guided Practice Chart

How many people?	Who are they?	What input do I need?	Feedback	What ACTIONS (Attentive, Assertive, Confident, Effective) will I DO WHILE I am:
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☐ 4-5 ☐ Half class	☐ Peers I don't know ☐ Girl(s)/Boy(s) ☐ Speech group			
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**All situations consider language context, discourse structure, and semantic complexity.*

Campbell, 2003; Chmela & Campbell, 2014

Meet with the Teacher

Create an agenda & negotiate who will do the talking

1. Things about my communication skills: my strengths across the 5 Areas of Focus & my areas of growth I am working towards
2. Facts about my stuttering
3. Facts about stuttering
4. Things going well for me in your classroom
5. Things I worry about or notice related to my communication
6. What I am working on that helps my growth as a communicator
7. Ways you and my peers can support me

Suggestions for Teachers, Coaches, & Others Interacting with Elementary-High School Students Who Stutter

The following ideas are *suggestions* for the teacher, coach, or instructor who has a child who stutters in her or his classroom or program.

Stuttering is a complex, variable problem with a basis in the wiring and functioning of the brain. It is not caused by nerves or lack of confidence, although it may increase with moments of anxiety. Stuttering waxes and wanes, both in quantity as well as in severity of the actual moments. It constantly changes over time. Some children who stutter have other speech and/or language problems. Some children may have attention problems or struggle with anxiety. Stuttering runs in families. Each child who stutters is different.

Children perceive, feel, and react to stuttering differently. Some keep on talking no matter what, and others talk less or say less when they do talk because they do not want others to see them stutter. Some children experience high anxiety when meeting new teachers, coaches, or peers in school, sports, or during other activities. Others do not. Children who stutter perceive speaking situations differently. Some feel giving an oral presentation is very challenging, whereby others feel is is easer for them because they are the only ones speaking. Some love to read aloud, and others dread it every day of the school year.

Helpful reactions to stuttering include waiting, letting him or her finish what is being said, keeping eye contact, and if possible, saying, "*I am not in a hurry*," or, "*I have time to listen*." If peers or others chuckle or imitate the child, it is helpful to say very matter-of-factly, "We give each other time for talking here, and we do not talk about, laugh, or mimic the way someone talks." If it's not the appropriate time for the child to talk, or you can't be available to listen, it's O.K. to say, "Let's hold that idea for later" or, "I can't be a good listener now. A better time would be…" to the child.

Let the child know in private you have time to listen if they feel uncomfortable about anything associated with talking in your environment. You can ask him or her directly what you should do when they are having difficulty. It helps to assure them it is O.K. if talking is easy and it is O.K. if it is not, and that no matter what, you want them to share their ideas! Sometimes spending a few minutes talking daily or weekly with the child one-on-one can help him or her become more at ease.

Teachers, coaches, and others can help by helping the child feel comfortable talking, demonstrate zero tolerance for bullying, and offer support and understanding. Bullying is commonplace for children who stutter, and positive communicative experiences for the child are essential throughout their development. Other suggestions are listed on the next page. If the child is in speech therapy, it may be helpful to reach out to the child's speech-language pathologist for ideas as well. Other suggestions are listed on the next page, as well as helpful resources.

✓If you are having the children **introduce themselves**, it *may be* easier for the student to **start first**.

✓ The student may prefer to **sit in a certain spot**. Sometimes closer to the front of the room is easier.

✓**Delayed response** (wait purposely for two seconds after being called on before providing an answer) for all students to practice reduces the feeling of time pressure during large group discussions and participation.

✓Ask all students to orally communicate in **complete sentences,; when answering questions orally, teach them TTQA** (*Turn the Question Around*) at the start of their answer.

✓Create a **signal** for oral participation to help a child become more comfortable if warranted (if the child wishes to speak, he/she raises his/her hand with the fingers in an open position; if the child knows the answer but does not wish to speak, he/she raises his/her hand but keeps it in a fist.

✓Offer the **initial part** of the desired response as a lead-in to the child's answer (i.e. "*Tyrone, number five states that the boy….*").

✓Ask the child more closed-ended questions with choices, such as, "Did the boy find the treasure or was he still searching for it?"

✓Physically **approach** a child when he/she is called upon to speak (so that the communicative exchange is between the 2 of you).

✓Provide a **warning** prior to be called upon (Sam you answer # 1 and *Max* will be #2).

✓Allow the class to have **oral reading options** (reading alone, or reading *chorally* with a partner).

✓Create a **Substitute Card**, including the student's picture, information regarding the student's communication, as well as the best ways to react. Let the student know that if there will be a substitute, he or she will be able to carry through what you have been doing to support him or her.

Helpful Resources

www.stutteringhelp.org

The Stuttering Foundation provides free online resources, services and support to those who stutter and their families, as well as support for research into the causes of stuttering. (educational materials, professional referral list, teacher video and booklet)

www.stutteringspecialists.org

Helps consumers and professionals locate speech-language pathologists who are Board Certified Specialists in Fluency: professionals who have gone beyond the basic clinical certification (CCC-SLP) awarded by the American Speech-Language-Hearing Association (ASHA).

www.friendswhostutter.org

FRIENDS is a national organization created to provide a network of love and support for children and teenagers who stutter, their families, and the professionals who work with them.

www.westutter.org

The National Stuttering Association provides support, friendship, and information to the stuttering community. The NSA provides information about stuttering, increases public awareness of stuttering, serves as a support and advocacy group, and is a referral organization for speech therapy sources throughout the United States.

SELECTED REFERENCE LIST: School-Age Children

- Bernstein Ratner, N. (2005). Evidenced-based practice in stuttering: Some questions to consider. *Journal of Fluency Disorders, Vol. 30, 3, pp. 163-188.*
- Bloodstein, O. & Bernstein Ratner,N. (2008). *A handbook on stuttering, 6th edition. Clifton, NY: Delmar.*
- Bothe, A.K., Davidow, J.H., Bramlett, R.E., Franic, D.M. & Ingham, R.J. (2006). Stuttering treatment research 1970-2005: II. Systematic review of incorporating trial quality assessment of pharmacological approaches, *American Journal of Speech-Language Pathology, 15,* 342-52.
- Brutten, G. & Vanryckeghem, M. (2007). Behavior Assessment Battery for school-age children who stutter. San Diego, CA: Plural Publishing, Inc.
- Chang, S. E., & Zhu, D. C. (2013). Neural network connectivity differences in children who stutter. Brain, 136, 3709–3726.
- Chang, S. E., Zhu, D. C., Choo, A. L., & Angstadt, M. (2015). White matter neuroanatomical differences in young children who stutter. Brain, 138, 694–711.
- Campbell, J.H. (2003). Therapy for elementary school-age children who stutter, In H.H. Gregory (Ed.), *Stuttering therapy: rationale & procedures,* (pp. 217-262). Boston: Allyn & bacon.
- Chmela, K. & Johnson, L. (2018). How can we overcome the challenges of providing school based fluency services? Seminars in Speech and Language, Vol. 39, No 4.
- Chmela, K. & Campbell, J.H. (2014). Basic Principle Problem Solving: Working with school-age children who stutter. Greenville, SC: Super Duper, Inc.
- Chmela, K. (2006). Self & double charting: A self-monitoring strategy for school-age children who stutter. Presented at the International Stuttering Awareness Day (ISAD) Internet Online Conference; October 1-22, 2006, http://www.mnsu.edu/comdis/isad9/papers/chmela9.html
- Chmela, K. & Reardon, N. (2001). *Dealing with school-age children who stutter: Working effectively with attitudes and emotions.* Memphis, TN: Stuttering Foundation of America.
- Craig, A., Hancock, K., Chang, E., McCready, C., Shepley, A., McCaul, A., et al. (1996). A controlled clinical trial for stuttering in persons aged 9 to 14 years, Journal of Speech & Hearing Research, 39(4), 808-26.
- Donaher, J., Soffer, S., and Healey, E. C., (2004). ADHD and children who stutter: considerations for evaluation & treatment. Paper presented at American Speech-Language-Hearing Association Convention. Philadelphia, PA.
- Faber, A. & Mazlish, E. (1999). How to talk so kids will listen and listen so kids will talk (20th Anniversary ed.). New York: Avon Books.

- Gregory, H.H. (2003). Stuttering therapy: rationale and procedures, (pp.217-262). Boston: Allyn & Bacon.
- Gillam, Ronald B.; Logan, Kenneth J.; Pearson, Nils A.: **Test of Childhood Stuttering**. http//*www.proedinc.com/Customer/productView.aspx?ID=4504*
- Healey, E.C., Scott Trautman, L., & Susca, M., (2004). Clinical application of a multidimensional approach for the assesment and treatment of stuttering, Contemporary Issues in Communication and Sciences Disorders, 31, 40-48.
- Healey, E.C., Reid, R., & Donaher, J. (2005). Treatment of the child who stutters with co-existing learning, behavioral, and cognitive challenges. In R. Lees and C. Stark (eds.) *Treatment of the school-age child who stutters*. London: Whurr Publishers Ltd.
- Herder, Howard, Nye & Vanryckehgem (2006). Effectiveness of behavioral stuttering treatment: A systematic review and meta-analysis. *Contemporary Issues in Communication Science and Disorders, 33,*61-73.
- Laiho, A., & Klippi, A. (2007). Long- and short-term results of children's and adolescents' therapy courses for stuttering. International Journal of Communication Disorders, 42, 367–382.
- Langevin,M. & Hagler, P. (2004). Development of a scale to measure peer attitudes toward children who stutter, In Bothe, A. K. (Eds) Evidenced-based treatment of stuttering: empirical bases and clinical applications. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Murphy,W. P., Yaruss, J.S., & Quesal, R. (2007). Enhancing treatment for school-age children who stutter: Reducing negative reactions through desensitization and cognitive restructuring, *Journal of Fluency Disorders,* Vol. 32, Number 2, 2007.
- Murphy, W., Yaruss, J.S., & Quesal, R. (2007). Enhancing treatment for school-age children who stutter through role-play and self-disclosure, *Journal of Fluency Disorders,* Vol. 32, Number 2, 2007.
- Reardon, N.A. & Yaruss, J.S. (2014).School-Age Stuttering Therapy: A practical guide. Stuttering Therapy Resources.

- Riley, G: **SSI 4: Stuttering Severity Instrument, 4th Edition**; www.pearsonassessments.com
- Riley G., & Riley, J. (2000). A revised component model for diagnosing and treating children who stutter, *Contemporary Issues in Communication Science and Disorders, 27,* 188-199.
- Scott, L.A. (2009). *Decoding IDEA eligibility for children who stutter*, an instructional DVD produced by Stuttering Foundation of America. Memphis, TN.
- Sisskin,V. (2002). Therapy planning for school-age children who stutter, *Seminars in Speech and Language,* 23, 173-179.
- Smith, A. & Weber, C. (2017). How Stuttering Develops: The Multifactorial Dynamics Pathways Theory.Journal of Speech, Language, and Hearing Research • Vol. 60 • 2483–2505 • September 2017 • Copyright © 2017 American Speech-Language-Hearing Association 2483
- Whitmire, K. & Scott, L.A. (2007, July). ***IDEA 2004 and speech-language services: Key issues for children who stutter***. ASHA Division 4 Leadership Conference, Minneapolis, MN.
- Whitmire, K. & Reardon-Reeves, N. (2006, November). ***Meeting the Challenges of Stuttering: Writing IEP goals for school age children.*** ASHA National Convention, Miami Beach, FL.
- Yaruss, J.S., Coleman,C.E., & Quesal, R.W. (2010). *OASES for school-age children and teens.* Minneapolis, MN: Pearson.
- Yaruss, J. S., & Pelczarski, K. Evidence-Based Practice for School-Age Stuttering: Balancing Existing Research with Clinical Practice, EBP Briefs, 2(4), pp. 1-8.
- Yaruss, J.S., & Quesal, R.W. (2004). Stuttering and the International Classification of Functioning, Disability, and Health (ICF): An update. Journal of Communication Disorders, 37, 35–52.

Other Helpful References:

Board Certified Specialists in Fluency Disorders: www.stutteringspecialists.org

Stuttering Foundation: www.stutteringhelp.org 1-800-992-9392; resources, education, research

friendswhostutter.org Friends: (support group for school-age children-teens and families) conventions & workshops; support; volunteer opportunity for speech and language pathologists

westutter.org – National Stuttering Association conventions & workshops, support; volunteer opportunity for speech-language pathologists

Stutteringhomepage.com – resources and International On-Line conference-section available for school clinicians

The MindUP Curriculum: Brain-focused Strategies for Living & Learning by The Hawn Foundation

community.mindfulschools.org

Willard, Christopher (2016). Growing Up Mindful: Essential Practices to Help Children, Teens, and Families Find Balance, Calm, and Resilience. Sounds True. Boulder, CO.

Cheasman, C. (2013). Embrace your demons and follow your heart: An Acceptance and Commitment Therapy approach to work with people who stammer. In Stammering Therapy from the Inside: New Perspectives on Working with Young People and Adults. Cheasman, C., Everard, R., Simpson, S., (eds.).Pp267-302. J&R Press Ltd. Croydon.

Harris, R. (2009) Act Made Simple: An Easy-To-Read Primer on Acceptance and Commitment Therapy (The New Harbinger Made Simple Series.)

Saltzman, A. (2014). A Still Quiet Place. A Mindfulness Program for Teaching Children and Adolescents to Ease Stress and Difficult Emotions. New Harbinger: Oakland, CA.

Sedley, B. (2015). Stuff that Sucks: A Teen's Guide to Accepting What you Can't Change and Committing to What You Can. Robinson

Evolving Document: Research & Evidence in Support of 5 Areas of Focus in School-Age Fluency Treatment *Page 1*

Attentive	Assertive	Confident	Effective	Proactive
➢Many CWS can talk about their talking abilities and themselves as talkers *(Clark et al., 2012; Vanryckeghem et al., 2005; Vanryckeghem & Brutten, 2007)* ➢"Speaking is difficult" perception of CWS differentiates CWS-CWNS *(Clark et al., 2012)* ➢CWS notice stuttering more; increases with age *(Ambrose & Yairi, 1994)* ➢Compared to normally fluent peers, **school-age children** viewed as less popular, and are more likely to be rejected and bullied *(Davis, Howell, & Cooke, 2002; Langevin et al.,1998, 2003; Stewart & Turnbull, 2007; Blood et al., 2010)* ➢Increased **sensitivity** and high self expectations *(Riley & Riley, 2000)*	➢ Compared to normally fluent peers, **school-age children** viewed as less popular, and are more likely to be rejected and bullied *(Davis, Howell, & Cooke, 2002; Langevin et al.,1998, 2003; Stewart & Turnbull, 2007; Blood et al., , 2010)* ➢ Negative emotional reactions and avoidance of speaking situations *(Yaruss & Quesal, 2010; Vanryckeghem et al., 2001; Stewart & Turnbull, 2007)* ➢ Mindfulness techniques can be useful for treating anxiety symptoms in school-age children (Goodman, 2005; Greco et al., 2005; Semple, Reid, & Miller, 2005)	➢ Compared to normally fluent peers, **school-age children** viewed as less popular, and are more likely to be rejected and bullied *(Davis, Howell, & Cooke, 2002; Langevin et al.,1998, 2003; Stewart & Turnbull, 2007; Blood et.al, 2010)* ➢ Negative thoughts and feelings regarding their communication difficulties *(Andrews & Cutler, 1974; De Nil & Brutten, 1991)*	➢ Bothe, A. K., Davidow, J. H., Bramlett, R. E, & Ingham, R. J. (2006): -Regulated breathing and airflow *(de Kinkelder & Boelens, 1998; Ladouceur & Martineau, 1982)* -Form of stuttering modification *(Ryan & Ryan,1983)* ➢ Ratner *(2010)* evidence review-prolonged speech (fluency shaping); GILCU (Gradual Length and Complexity of Utterances, preferably with parents and with either a DAF device or an EMG device *(Ryan & Ryan, 1983, 1995)* ➢ Boey, (2008) Speech Language may be delayed typical, or advanced; comparing language as normal CWS to CWNS: - syntactic, semantic and phonological processes develop slower than those of CWNS;	➢ The whole family is the client; all are impacted by the problem; Majority of siblings would like to be more involved in therapy. CWS feel less close to their parents and trust them less than CWNS and were frustrated by how parents managed their stuttering *(Bielby, 2014)* ➢ Reinforcement from other (s) impacts tx success *(Harrison, Bruce, Shenker, & Koushik, 2010; and Koushik et al., 2009; Rousseau, Packman & Onslow, 2005; Koushik & Shenker, 2005 Lincoln, Onslow, Lewis & Wilson, 1996; Rousseau, Packman & Onslow, 2005; Ingham, 1980; Ryan & Ryan, 1983)*

Research & Evidence in Support of 5 Areas of Focus in School-Age Fluency Treatment *Page 2*

Attentive	Assertive	Confident	Effective	Proactive
➢Negative thoughts and feelings regarding their communication difficulties *(Andrews & Cutler, 1974; De Nil & Brutten, 1991)* ➢Negative emotional reactions and avoidance of speaking situations *(Yaruss & Quesal, 2010; Vanryckeghem et al., 2001; Stewart & Turnbull, 2007)* ➢ Preschool children*:* •**Higher activity level** (e.g., Eggers et al., 2010; Embrechts et al., 2000) •**Negative affect** (e.g., Eggers et al., 2010) •**Less adaptability to change** (e.g., Anderson et al., 2003) •**Lower inhibitory control** (e.g., Eggers et al., 2010) •**Less able to flexibly control their attention/shift attention** (e.g., Karass et al., 2006) ➢ *Donaher (2014)* CWS with ADHD (4-26%)			➢ CWS exhibit more "unevenness" in the development of language, vocabulary, articulation ➢ *(Donaher, 2014)* CWS with ADHD (4-26%) may demonstrate pragmatic language issues; lack of awareness of listener perspective; timing and quantity of speech issues: Initiating prior to formulating ideas, issues with interrupting, monopolizing, relevancy filtering & responding adequately to conversational partner cues; Higher-level language comprehension and executive functioning Sequencing, organization, and cohesion of language Poor topic maintenance Following through with a detailed or multi-step plan ➢ *Alm & Risberg, 2007*: adults who stutter noted history as children; much higher then the general population	➢ Systematic transfer of fluency across settings is part of evidenced-based practice for this population *(Shenker, 2005;* Andrews et al, 1980; 1983; Cordes, 1998; Thomas & Howell, 2001)*)* ➢ *Langevin, Narasimha & Prasad (2012):* positive benefits regarding a stuttering education and bullying awareness and prevention program for school-age children in Grades 3 through 6 ➢ *Miller et. Al, (2007)* Children with SPD-difficulty achieving-maintaining appropriate range of emotional and attentional responses ➢ Executive functioning difficulties: lack of situational awareness, forethought, planning, and execution (Ward)

Research & Evidence in Support of 5 Areas of Focus in School-Age Fluency Treatment *Page 3*

Attentive

- (Jones et al., 2014) **Reactivity** (arousal of emotions, motor activity, and attentions; secondary to a novel stimuli)-more *negative* in their emotions/affect-more *emotionally reactive*, higher anger/frustration, and higher in motor activation; **Self-Regulation** (the ability to moderate the above tendencies; ability to shift attention from novel stimuli)
  less able to maintain or shift attention when appropriate; less effective at orienting attention;-less able to ignore irrelevant background stimuli; less adaptive to their environment; less able to **Self-Regulate** emotion

- *More reactive to environmental stimuli* and less likely to quickly habituate (regulate) to the stimuli (Schwenk et al., 2007)
- More *negative* emotion (Johnson et al., 2010; Ntourou et al., 2013)
- More *extreme high* than extreme low *behavioral inhibition* (Choi et al., 2013); correlates *with more stuttering*
- Emotional regulation strategies during prior non-speech tasks are predictive of stuttering during subsequent speaking tasks (Arnold et al., 2011; Johnson et al., 2010; Ntourou et al., 2013)
- Kraft, S. J., et al., 2018: help children who stutter with self-regulation; strategies that assist with aspects of effortful control are important to assist with positive therapeutic change

•Mindfulness Skills have the "potential to enhance children's…" -attention and focus, memory, self-acceptance, self-management skills, & self-understanding (Hooker & Fodor, 2008; Burke, 2009)

- Mindfulness techniques can be useful for treating anxiety symptoms in school-age children (Goodman, 2005; Greco et al., 2005; Semple, Reid, & Miller, 2005)
- Some evidence supports the impact of mindfulness on quality of attention (Rani & Rao, 1996; Semple, 2005)
- Mindfulness increases self-esteem and self-compassion (Saltzman, 2016)
- **Cognitive Behavioral Therapy** (Beck, 1995) has been reported in the literature (Zebrowski & Wolf, 2011) as a means to assist school-age children in developing healthier attitudes and feelings regarding communication

What should I do now?
Problem solve by reflecting upon the Basic Principles & defining them through latest evidence based research

Differential Evaluation-Differential Treatment:

- Were all components (child and environmental factors) addressed during the evaluation?
- Are there any other concerns or diagnoses outside of stuttering & are they being managed successfully?
- Did the evaluation include formal and informal measures?
- Are goals based upon desires of all relevant stakeholders? Can they be measured?

Relationship

- Are relationships between all parties positive?
- Does the child like coming to therapy?
- Is the child's relationship with him/herself positive?
- Are we exploring feelings and validating them? Listening and valuing? Providing information? Assisting in developing or maintaining healthy attitude and feelings regarding communication and stuttering?

Counterconditioning & Desensitization

- Is the child stuttering with less tension?
- Is communication facilitated with more ease? Is communication more competent across the 5 Areas of Focus?
- Have we developed and executed hierarchies of feared or difficult speaking situations?
- Is the child demonstrating less sensitivity to speaking? To stuttering?
- Is avoidance reducing or eliminated?
- Is the child's communication pattern more effective?

Modeling

- Are we modeling speech that is tense free with pauses and increased listening time?
- Are we modeling stuttering and ways of changing stuttering in a comfortable manner?
- Has the child taught others what he or she is being taught?

Guided Practice

- Are we guiding practice within therapy activities by manipulating variables (length, complexity, and context of language output, our model, reinforcement, meaningfulness of topic, and other sensory input such as people present, place, and listener reaction)?
- Have we taught the conversational partner what to look for & how to give feedback?

Reinforcement

- What are we reinforcing?
- Is our reinforcement geared towards positive attitude-speech changes?
- Is all reinforcement given in a positive manner?
- Is the rationale of what is being reinforced clear to the child?
- How is the child responding to the reinforcement?
- Are we systematically fading the reinforcement?

Self-Monitoring & Self-Reinforcement

- Are we asking the child to self-evaluate?
- Are we incorporating various types of feedback (audio & visual, audio or visual) to assist with self-monitoring?

Generalization & Transfer

- Are we aware of the nuances of these skills and what is generalizing?
- Are others aware, such as the conversational partner, of what these skills look like in real conversations?
- Are we using a rating scale to get feedback from others?
- Are we giving feedback each session during a naturalistic interaction?
- Are the goals of therapy related to what is observable across different conversational interactions (communicative behaviors as well as change in reactions to stuttering..ie..shifts in attitudes and feelings)
- Are we involving parents, teachers, others?

Gradual Dismissal, Follow Through, & Maintenance

- Was there a gradual dismissal from therapy?
- Did we make a plan to check in?
- Did we talk with the child and related others about relapse and a plan of maintenance?
- Is there an opportunity for ongoing support?
- Did we help the child and related others know when it might be important to come back to treatment?
- Does the child-others know that it is normal to possibly need more therapy as development occurs?

Integrating Child-related and Environment-Related Variables

- Is the manner in which the therapist is conducting therapy commensurate with the child's cognitive ability?
- Are behavioral components, both speech and avoidance of speech, being addressed as part of therapy as appropriate?
- Are negative attitudes and feelings being monitored and addressed?
- As the child's development has ensued, does therapy reflect those changes?
- Are environmental factors being considered as part of the treatment?
- Are contributing factors being addressed in the appropriate manner?