TSHA SI DISABILITY DETERMINATION GUIDELINES FOR FLUENCY DISORDERS

REVISED 2020

Fluency Guidelines Revision Team

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*The SI Disability Determination Guidelines have been prepared by the Texas Speech-Language-Hearing Association (TSHA). Please note that they are **guidelines**. TSHA has no regulatory or administrative authority and there is no requirement to use the guidelines. They are provided by TSHA as a public service to enhance the quality of SLP services in public schools.*

**District-specific forms are not included in this manual.

General Information

*The SI Disability Determination Guidelines have been prepared by the Texas Speech-Language-Hearing Association (TSHA).
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Purpose and Intended Use of the Disability Determination Guidelines

The purpose of the Disability Determination Guidelines for Fluency Disorders is to provide a structure within which the speech-language pathologist (SLP) can use consistent, evidence-based evaluation practices consistent with the law to:

- Provide information to teachers and parents regarding the nature of fluency and disorders of fluency and, when indicated, provide classroom intervention recommendations based on data collected by the Student Support Team (SST).

- Complete a comprehensive evaluation of a student's fluency following a referral with fluency concerns for a Full and Individual Evaluation (FIE) for special education.

- Identify whether a fluency disorder is present.

- Determine if the presence of a fluency disorder results in a disruption in academic achievement and/or functional performance, and document the need for specially designed instruction by the SLP.

- Make recommendations to the Admission, Review, Dismissal (ARD) Committee regarding eligibility for special education services and support based on speech impairment (SI).

These guidelines are intended to be used in combination with the information provided in the *Texas Speech-Language-Hearing Association (TSHA) Disability Determination Guidelines for Speech Impairment, 2020,* with the understanding that use of the tools in these fluency guidelines require additional, specialized training. SLPs should become familiar with the information in that manual and be aware that information from both manuals is essential to completing a comprehensive evaluation of fluency.

Information for Parents, Guardians, and Teachers

What Is Stuttering?

Stuttering is a complex disorder involving interactions among what the child does, how he feels, and what he thinks (Bennett, 2006; Smith & Kelly, 1997). The child might have breaks in the forward flow of speech, such as repeating a sound or syllable of a word, stretching the beginning sound, or being unable to say a word at all (Guitar, 1998).

The child may begin to avoid and fear speaking; express frustration at being unable to talk; or use other behaviors to help get speech moving, such as blinking his eyes, nodding his head, or stamping his foot. The child may express his thoughts through questions or comments such as "Why can't I talk?" or "My mouth is broken." Not all children will exhibit negative feelings or thoughts about their speech. As the disorder progresses, the likelihood of developing negative attitudes toward communication increases (Vanryckeghem & Brutten, 1997).

Causes of Stuttering

The cause of stuttering is still unknown; however, stuttering appears to be a physical rather than psychological disorder. There are several factors that may influence the development of stuttering in children: A family history of stuttering, gender, age at the time of onset, and/or the presence of other speech and/or language disorders (Conture, 2001; Felsenfeld, 1998; Louko, Edwards, & Conture, 1990; Yairi, 1997; Yairi & Grinager Ambrose, 2005).

Is My Child at Risk for Stuttering?

Many children between the ages of 18 months and 5 years go through periods of developmental nonfluency as their language skills are expanding. Normal nonfluency is characterized by interjections such as "uh, uh, uh, uh…" and whole word and phrase repetitions. Typically, children going through these developmental periods are relatively unaware of the disfluencies and do not express any concerns about their talking.

If your child has breaks in fluency such as repetitions, prolongations and blocks; struggles when trying to talk; or avoids certain social or academic situations due to speech, he may be at risk for stuttering or other disorders of fluency. The following is a list of possible risk factors:

- Family history of stuttering (Felsenfeld, 1998);

- Male (Yairi & Grinager Ambrose, 2005);

- Disfluency present for a year or more (Yairi, 1997);

- Number of repetitions increases dramatically over a short period of time (Yairi, 1997);

- Noticeable increase in loudness or pitch during moments of nonfluency (Bennett, 2006);

- Presence of clustering—that is, more than one type of disfluency on a single word, such as "ma mam--------may I have a cookie?" (LaSalle & Conture, 1995);

- Greater than three iterations per disfluent episode (the number of times a sound or syllable is produced, such as "ba ba ball" = two iterations, whereas "ba ba ba ball" = three iterations; Ambrose & Yairi, 1995);

- Visible signs of struggle and awareness (Yairi & Grinager Ambrose, 2005); and

- Presence of other speech and language disorders (Louko, Edwards, & Conture, 1990).

Data Collection for Student Support Team

Health Information

Health information forms are essential to completing a comprehensive evaluation but are district-specific and therefore not included in this manual.

Pre-Referral Considerations and Intervention Recommendations

Pre-referral considerations and intervention recommendations are provided on the following page.

Pre-Referral Considerations and Intervention Recommendations

The following suggestions may be given to classroom teachers and/or parents/guardians as recommendations prior to referral for an FIE for Special Education Services. The SLP should check for level of understanding of each recommendation through the school referral committee meeting.

Student:_____Date of Birth: _____

Person Responsible:_____Date of Meeting: _____

Consideration or Recommendation:	Dates of Attempts	Specific Results
1. Determine if more than one language is spoken in the home and if the level of fluency varies depending upon the language used.		
2. Discuss the characteristics and risk factors for the development of fluency disorders with the parent(s) and teacher.		
3. Determine if the student has previously received services for a fluency disorder.		
4. The teacher may talk with the student and/or the student's parents/guardian about the student's communication difficulties and ask how to help the student communicate more easily in the classroom.		
5. The teacher may make accommodations in the classroom based on input from the student and parent. For example, the teacher may give the student extra time to respond, avoid finishing the student's sentences, and call on the student when the desire to respond has been noted.		
6. The teacher may consult with the SLP regarding recommendations to support the student's communication in the classroom.		
7. The teacher reports back to the committee on which accommodations have been helpful and further recommendations are made based on this information.		

Additional Comments

Parent and Teacher Information

General student information from the teacher and from a parent is essential to completing a comprehensive evaluation but is district-specific and therefore not included in this manual.

Parent/Guardian Fluency Observation forms and Parent/Teacher Fluency Concerns checklists in English and Spanish are provided in the following pages.

Parent/Guardian Observations of Fluency Concerns

Student's Name _____ Date of Birth _____

Person Completing the Form _____ Date _____

Please complete the following form to the best of your knowledge. Information you provide will greatly assist us in the pre-referral/evaluation process.

Question	Yes	No
At what age did your child begin having difficulty speaking smoothly? _____		
Does anyone else in your family stutter? If yes, list relationship to child: _____		
Has your child's speech changed since that time? If yes, describe: _____		
Does your child have difficulty saying any sounds in particular? If yes, describe: _____		
Does your child's difficulty speaking seem to come and go? If yes, describe: _____		
Do strangers have difficulty understanding your child's speech?		
Do you feel your child is aware of his speech difficulties? If yes, describe: _____		
If your child were to be enrolled in speech therapy, what would your goals be for him? _____ _____		
What specific questions or concerns do you have about your child's communication skills? _____		

Additional Comments (continue on the back of this page, if needed):

Padre/Guardián: Observaciones Acerca de la Fluidez

Nombre del alumno _____ Fecha de nacimiento _____

Persona que está llenando este formulario _____ Fecha _____

Por favor llene este formulario. La información que usted nos dé nos ayudará mucho en poder llevar a cabo el proceso de la evaluación.

Pregunta	Sí	No
¿A qué edad empezó su niño(a) a tener problemas con el habla? _____		
¿Hay alguien más en su familia que tartamudea? Si marcó "Sí", ¿Quién es? _____		
¿Ha cambiado el habla de su niño(a) desde que empezó a tener problemas con el habla? Favor de explicar si marcó "Sí". _____		
¿Hay algún sonido en particular que su niño(a) tiene dificultad pronunciando? Favor de explicar si marcó "Sí". _____		
¿Parece que la dificultad del habla de su niño(a) a veces mejora y luego empeora? Favor de explicar si marcó "Sí". _____		
¿Se le dificulta entender el habla de su niño(a) a la gente desconocida?		
¿Piensa que su niño(a) sabe que tiene problemas del habla? Favor de explicar: _____		
Si inscribiera su niño(a) en terapia del habla, ¿cuáles serían sus objetivos para él(ella)?		
¿Tiene alguna preocupación o pregunta sobre el habla de su niño(a)? _____		

Comentarios adicionales:

Parent and Teacher Checklist of Fluency Concerns

Student's Name: _____   Date: _____

Person Completing the Form: _____

Date of Birth: _____   Relationship to Student: _____

Please check all that apply to the student's speech:

☐ Shows visible signs of frustration, such as getting angry, upset, or anxious during/ after disfluency, and may even avoid talking.

☐ Avoids situations in which teasing or embarrassment may occur.

☐ Disfluency tends to come and go. Please explain:

_____

☐ Prefers to use gestures or written communication due to difficulties with speech.

☐ Disfluency appears to be affecting self-esteem and attitude toward self.

☐ Disfluent speech causes negative reactions from listener.

☐ Whole word and/or phrase repetitions   *Examples: "Can – can – can we go to the park?" or "Can we – can we go to the park?"*

☐ Sound or syllable repetitions   *Example: "W – w – when can we go to the park?" or "Whe – whe – When can we go to the park?"*

☐ Sound prolongations   *Example: "Leeeeeeeeet's go to the park!"*

☐ Blocks (no sound is produced for a period of time)   *Example: "I want to go to the …… park."*

☐ Interjections   *Example: "I want to uh-uh-uh go to the park."*

☐ Avoids eye contact while speaking.

☐ Secondary characteristics are present while speaking   *Examples: Eye blinks, hand or foot movements, facial grimaces (other)*

_____

☐ Switches one word or phrase for another.

☐ Associated language, voice quality (changes in pitch or loudness), articulation concerns.

Additional Comments

Lista de Preocupaciones Sobre la Fluencia para Los Padres y Los Maestros

Nombre del Alumno _____ Fecha de nacimiento _____

Persona que está llenando este formulario_____ Fecha _____

Relación con el alumno _____

Favor de marcar todos los que le correspondan al problema del habla de su niño(a):

o Muestra señas visibles de frustración, como enojo, preocupación, o ansiedad durante/después de su disfluencia, y quizás evita hablar.

o Evita las situaciones donde se pueden burlar de él (ella) o puede ser avergonzado(a).

o La disfluencia tiende a parar y volver. Favor de explicar:

o Prefiere usar gestos o comunicarse por escrito, debido a su dificultad con el habla.

o La disfluencia de su niño(a) parece estarle afectando la autoestima o la actitud que tiene hacia sí mismo.

o El no poder hablar bien causa reacciones negativas de los que están escuchando.

o La palabra entera y/o frases enteras son repetidas: *Ejemplo: "¿Podemos – Podemos – Podemos ir al parque?" o "¿Podemos ir – Podemos ir al parque?"*

o Sonidos y/o sílabas que son repetidos: *Ejemplo: "¿C – C – Cuando podemos ir al parque?" o "¿Cuá – Cuá – Cuándo podemos ir al parque?"*

o Sonidos prolongados: *Ejemplo "¡Vaaaaaaaamos al parque!"*

o Bloques (no hay pronunciación de sonido por mucho tiempo): *Ejemplo "Yo quiero ir… al parque."*

o Intercesiones: *Ejemplo "Yo quiero ir uh-uh-uh-uh-uh al parque."*

o Su niño(a) evita contacto visual cuando habla.

o Características secundarias están presente cuando habla: *Ejemplo: Abre y cierra los ojos, hace gestos con la boca, movimiento con sus manos y pies.*
Otros _____

o Cambia una palabra o frase por otra.

o Preocupaciones asociadas de lenguaje, calidad de voz (cambios del tono), o articulación.

Comentarios adicionales:

Teacher Observation of Fluency Concerns

Student's Name:＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿ Date of Birth: ＿＿＿＿＿＿＿＿＿＿

Teacher's Name:＿＿＿＿＿＿＿＿＿＿＿＿＿＿ Date: ＿＿＿＿＿＿＿＿＿＿＿＿

Please complete the following form to the best of your knowledge. Information you provide will greatly assist us in the pre-referral/evaluation process.

Question	Yes	No
When did you first notice that the student was having difficulty with speech? ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿ ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿		
Do you think the student's speech problem is affecting academic success? If yes, describe: ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿ ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿		
Do you think the student is concerned about speech? If yes, describe: ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿ ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿		
Do you think the student's speech is affecting teacher relationships? If yes, describe: ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿ ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿		
Do you think the student's speech is impacting peer relationships at school? If yes, describe: ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿ ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿		
Additional Comments (please use the back of this page, if needed): ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿		

Student Support Team Deliberations for Special Education Referral

Student support team deliberations are essential to completing a comprehensive evaluation. The forms are district-specific and therefore not included in this manual.

Results of Classroom Interventions

Results of classroom interventions, including the student's response to focused interventions, are essential to completing a comprehensive evaluation. The forms are district-specific and therefore not included in this manual.

Fluency Evaluation

Flow Chart for Conducting a Fluency Evaluation
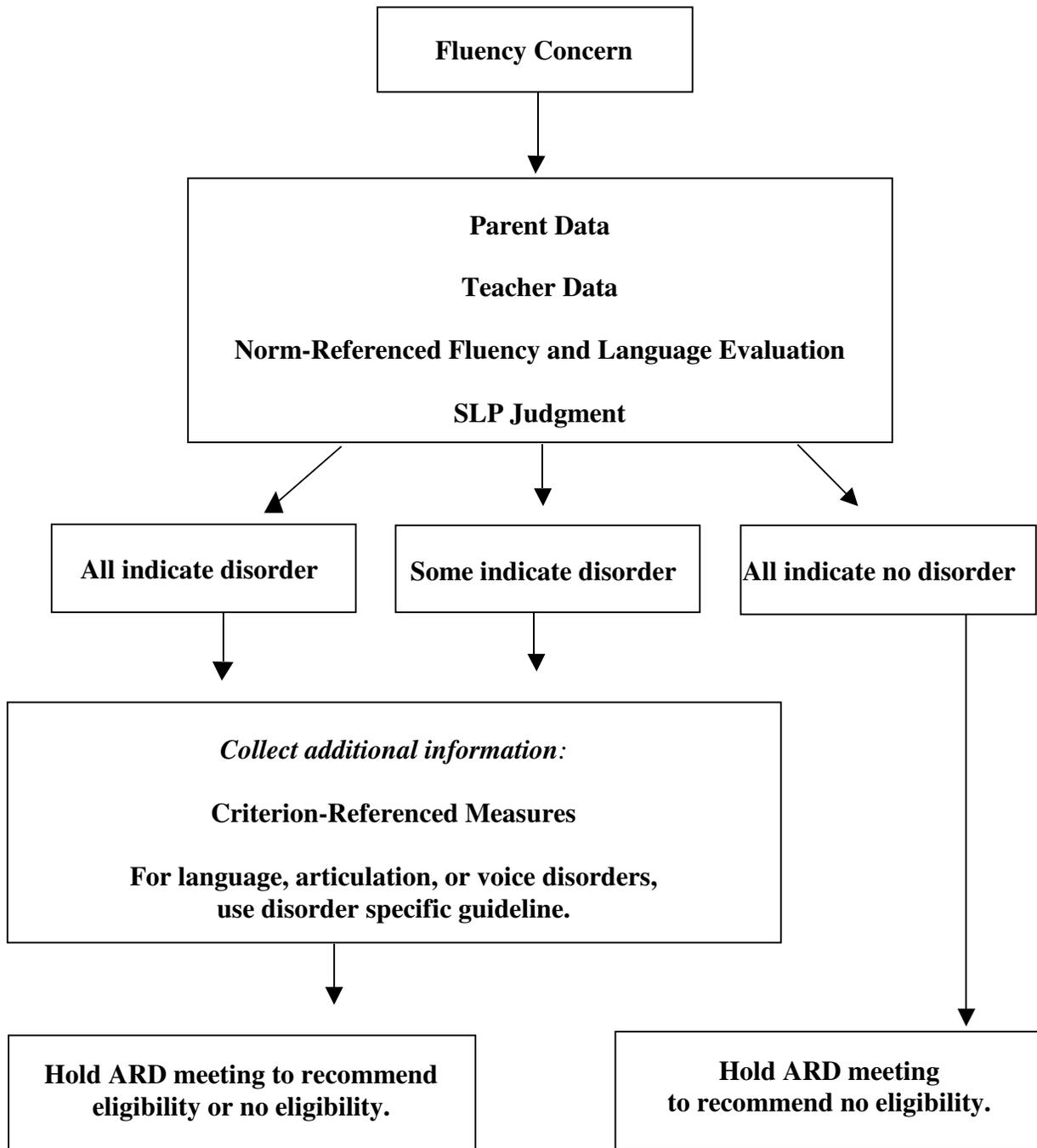
Fluency Concern

Parent Data

Teacher Data

Norm-Referenced Fluency and Language Evaluation

SLP Judgment

All indicate disorder

Some indicate disorder

All indicate no disorder

Collect additional information:

Criterion-Referenced Measures

For language, articulation, or voice disorders, use disorder specific guideline.

Hold ARD meeting to recommend eligibility or no eligibility.

Hold ARD meeting to recommend no eligibility.

Disability Determination Step-by-Step

1. The teacher, parent, or student brings concerns to the school referral committee.

2. The school referral committee completes the Teacher/Parent Checklists of Fluency Concerns.

3. The school referral committee discusses the concerns of the parent and/or teacher, and:

    a. Provides pre-referral considerations and recommendations for the teacher and parent. In the case of a child exhibiting breaks in speech fluency, the school referral committee reconvenes after the implementation of the recommendations and determines if referral for a full and individual evaluation of the student is needed.

    OR

    b. Makes a referral for special education evaluation if the student has an obvious disability.

4. A Guide to the Admission, Review, and Dismissal Process and Notice of Procedural Safeguards is given to the parents. The school referral committee gives Notice and obtains Consent for the evaluation.

5. The SLP reviews parent and teacher data and completes the fluency evaluation.

6. The SLP uses the Disability Determination Criteria and Adverse Effect on Educational Performance Checklist to determine the presence of a disorder, the educational need, and the need for a specialized service provider.

7. The SLP writes the Full and Individual Evaluation Report that summarizes the findings.

8. The Admission, Review and Dismissal Committee (ARD) convenes to determine eligibility and to propose an Individual Education Plan if the student meets eligibility.

Audiotape/Videotape Release Statement

I hereby give consent for my child,＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿, to be videotaped and/or audiotaped for the purpose of a speech-language evaluation.

I understand that all audiotapes and videotapes are confidential and will only be used for assessment and/or instructional purposes.

Date ＿＿＿＿＿＿＿＿＿＿＿＿

＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

Signature of Parent or Guardian

Guidelines for Administering Standardized Tests for Fluency

1. It is important to follow the standardized instructions in the manual.

2. Deviations from standardized procedures must be reported and results interpreted in light of those deviations.

    Note: Instruments that provide severity ratings or cut-off scores should be <u>considered</u> in the eligibility decision but should not represent the sole determinant of eligibility.

    Since fluency severity can be affected by speaking context, conversational partners, and a variety of other factors, these factors are especially important when making diagnostic decisions. However, tools that use a limited number of speaking samples and observations cannot be viewed as providing a comprehensive picture of a student's fluency. It is recommended that multiple observations and speaking samples be used when determining eligibility. Due to the cyclical nature of stuttering, **students may appear less severe on these norm-referenced measures than more typical communication interactions.**

Commonly Used Fluency Evaluation Tools

Assessments of Speech Behaviors

Pragmatic Stuttering Intervention for Adolescents and Adults (Tanner, 1995) provides a detailed description of procedures for conducting assessments for students aged 13 through adult (21-year-olds). It includes numerous assessment protocols, stuttering history record forms, and a variety of ways to document disfluencies. The assessment approach explained in this manual is especially useful for helping to identify any specific sound error patterns the student may have. (For example, the student may have trouble on all of the fricative sounds or all sounds that are produced at the level of the larynx.) Forms to assist with assessing the pragmatic components of stuttering are also included in this manual.

Pragmatic Stuttering Intervention for Children (Tanner, 1994) provides a detailed description of procedures for conducting assessments for students from 7 through 11 years of age. It includes numerous assessment protocols, stuttering history record forms, and a variety of ways to document disfluencies. The assessment portion of the manual is helpful in identifying any social issues that may be a component of the student's fluency disorder.

Stuttering Severity Instrument, 4th Edition (Riley, 2009) measures frequency, duration, and physical concomitants of disfluency in preschool-age children through adults. It is for readers and nonreaders and provides behavioral severity levels of very mild, mild, moderate, and severe. Of all of the "standardized" fluency measures, the *SSI-4* is most often recommended due to its wide use and the consistency of its administration procedures. However, research has shown that this measure has problems with reliability (Lewis, 1995).

The Stocker Probe for Fluency and Language (Stocker & Goldfarb, 1995) measure helps differentiate normal nonfluency from stuttering in young children. It uses objects to elicit responses and five distinct levels of increasingly complex linguistic demands. It may also be used to help plan and implement therapy.

Attitude Scales

A-19 Scale (Grimms & Guitar, 1977) is a scale for assessing attitudes about speaking in children ages kindergarten through 4th grade. Children are asked to answer *yes* or *no* to questions asked by the speech-language pathologist. The higher the student's score, the more likely it is that he or she has developed negative attitudes about communication.

Assessment of the Child's Experience of Stuttering (ACES) (Yaruss, Coleman, & Quesal, 2006) provides insight into the components of a student's knowledge of stuttering and its impact on communicative and social interactions at school. The measure is for 1st through 12th grade students. As of September 27, 2006, the draft scoring summary provides a severity score based on the impact rating from the child's perception of stuttering.

Communication Attitude Test Revised (CAT-R) (Brutten, 1985) assists in the evaluation of a student's attitude about stuttering, as well as how the disorder may or may not interfere with peer and teacher interactions. It is for school-age students who are able to read. This measure has a mean score for children who stutter versus a mean score for children who do not stutter.

Communication Attitude Test for Preschool and Kindergarten Children Who Stutter (KiddyCAT) (Vanryckeghem & Brutten, 2007) assists in the evaluation of preschool and kindergarten student's attitude about stuttering. This measure has a mean score for children who stutter versus a mean score for children who do not stutter.

Cooper Personalized Fluency Control Therapy for Children (Cooper & Cooper, 2003) kit assists with assessing the affective, behavioral, and cognitive components of fluency disorders in children from preschool age through 12 years old. The manual includes reproducible, functional assessment protocols and therapy goals and activities.

Cooper Personalized Fluency Control Therapy for Adolescents and Adults (Cooper & Cooper, 2003) kit is similar to the one for children and includes a programmed fluency assessment protocol on a disk. Assessment procedures for students aged 13 through 21 years (adult) are discussed in chapter 2 of this manual.

Scale of Stuttering Severity (Williams, Darley, & Spriestersbach, 1978) uses a subjective 7-point rating scale to determine the student's level of severity. This scale uses observable behavioral characteristics such as frequency counts, facial grimacing, and associated movements as the basis for these judgments. This scale may be used by SLPs, graduate student clinicians, teachers, peers, and family members.

The School-Age Child Who Stutters: Working Effectively with Attitudes and Emotions…A Workbook (Chmela & Reardon, 2001) includes a variety of paper-pencil tasks that are helpful for documenting a student's present levels of feelings and beliefs about their stuttering, as well as how these attitudes may affect their overall communication abilities.

Disclaimer: TSHA does <u>not</u> specifically endorse any of the above products. They are included as they are easy to find and commonly available at many schools.

SLP Fluency Evaluation Observation Checklist

Student's Name:_____ Date of Birth: _____

SLP's Name:_____ Date:_____

Types of Speaking Situations, Locations, and Partners Observed:

_____

_____

Please check all of the following that apply to the student's speech.

☐ Shows visible signs of frustration, such as getting, angry, upset, or anxious, during/after disfluency, and may even avoid talking

☐ Avoids situations in which teasing or embarrassment may occur

☐ Speech disfluency interferes with choices regarding classes and/or extracurricular activities

☐ Frequent absences due to stress over speech

☐ Disfluency tends to come and go—please describe:

_____

_____

☐ Prefers to use gestures or written communication due to difficulties with speech

☐ Disfluency appears to be affecting self-esteem and attitude toward self

☐ Disfluent speech causes unfavorable reactions from listeners…specific example(s):

_____

_____

☐ Whole word and/or phrase repetitions during conversation   *Examples: "Can – can – can we go to the park?" or "Can we – can we go to the park?"*

☐ Syllable repetitions   *Example: "Whe – whe – when can we go to the park?"*

☐ Sound repetitions   *Example: "W – w – when can we go to the park?*

☐ Sound prolongations   *Example: "Leeeeeeeeeet's go to the park!"*

☐ Blocks (no sound is produced for a period of time)   *Example: "I want to go to the .... park."*

☐ Interjections   *Example: "I want to uh-uh-uh go to the park."*

☐ Avoids eye contact while speaking

☐ Secondary characteristics are present while speaking   *Examples: eye blinks, hand or foot movements, swallowing, other* _____

☐ Associated language, voice quality (changes in pitch or loudness), articulation concerns—please describe: _____

_____

Fluency Evaluation Procedures

A variety of speaking tasks are arranged in a hierarchy of increasing linguistic complexity, ranging from simple descriptions to narrative discourse. The student should move along the continuum until fluency breakdowns are evident. It is strongly recommended that these procedures are videotaped so that fleeting secondary characteristics, struggle behaviors, and other relevant factors can be observed and documented.

Student Interview

Below are sample questions to ask students about their fluency and themselves. Not all students will feel comfortable answering these questions honestly. It is sometimes more effective to play a game, such as checkers, while asking these questions in a non-threatening, casual way.

Do you know why you are here?   Is talking ever hard for you?

When is it hard for you to talk?   When is it easy for you to talk?

Is there anything you do to talk better?   Is there anything that's really hard for you to say?

Do you know what happens when you get stuck?

Would you like me to try and help you with your talking?

Play a Game

To see how a student manages fluency in a less structured setting, it is often helpful to play a familiar game together. If the student appears to be uncomfortable with the interview process, this activity can be combined with the student interview section.

Monologue/Describing Activities

Ask the student to describe a picture, favorite T-shirt, pet, their best friend, or favorite teacher. Use the pictures from the *Stuttering Severity Instrument for Children and Adults, Third Edition* (Riley, 1994), to facilitate descriptions.

Place five or six items such as a pair of scissors, comb, spoon, fork, screwdriver, or toy, in a box and pull them out one at time. Ask the student to describe each object. Say, *"Pretend I don't know what any of these things are. Can you describe or tell me about these things so I can figure out what they are?"* Give an example so that the student understands the task.

Ask the student to describe items that are verbally presented such as a bird, a cat, an apple, and a car following an example. Say, *"A dog is an animal that has four legs and barks, and you can have one for a pet"*. You may also use the Oral Vocabulary Subtest from *the Test of Language Development—Primary, Third Edition* (Newcomer & Hammill, 1997).

Compare/Contrast

Ask the student to explain how five or six items are the same and different. If the child is young, use toys or real items to elicit responses. Say, *"Now we are going to talk about how things are the same, alike; and how they're different, not alike. For example, an apple and an egg are alike because they are both good to eat. That is how they are the same. An apple and an egg are not alike, or different, because an apple has a skin and an egg has a shell. Now you tell me, how are a_____and a_____alike? Not alike?* Prompts: apple/banana, car/bicycle, lake/swimming pool.

You may also use the Relational Vocabulary Subtest from the *Test of Language Development—Primary*, *Fifth Edition* (Newcomer & Hammill, 2019) or the Generals Subtest from the *Test of Language Development—Intermediate, Fourth Edition* (Newcomer & Hammill, 2008). It should be noted that these subtests do not ask how the items are different.

Explain a Procedure

Ask the student to explain how to make a peanut butter and jelly sandwich, scramble an egg, get ready for school in the morning, or change the oil in a car. An alternative is to ask the student to describe an event such as the best vacation or birthday party ever, a favorite television show or movie, or a school field trip. You may also use the *Preschool Language Scale, Fifth Edition* (Zimmerman, Steiner, & Pond, 2011) as a way of probing this skill.

Telling or Retelling a Story

For a young student, tell a simple, familiar story using pictures from age-appropriate books. When you're finished, ask the student to tell the story to you with the pictures. Readers may be asked to retell the story without the book, if appropriate. Another option is to use the stories from the <u>Goldman-Fristoe Test of Articulation-3</u> (Goldman & Fristoe, 2015). Older students may be asked to spontaneously tell/retell a story. It may be more appropriate to provide a topic, such as, "What did you do on summer vacation?" or "Tell me about your favorite movie."

Reading

If the child is a reader, choose a passage at least one level lower than the current grade. You may also use the reading section from the <u>Stuttering Severity Instrument, Fourth Edition</u> (Riley, 2009).

Talking on the Telephone

Ask the student to call a parent or sibling; a friend; and a stranger, such as someone at a retail store.

Apply Speaking Pressure

Ask the student to describe pictures representing conflict scenarios and ask him to problem-solve various solutions. During these dialogues, apply pressure by increasing your speaking rate, looking away while the student is talking, looking at your watch, appearing hurried, interrupting, and/or appearing to be engaged in another task.

Language Evaluation

For a small subgroup of students who stutter, language formulation and/or processing weaknesses may interfere with fluency. It is recommended that all students who stutter receive a full language evaluation to rule out concomitant or complicating language concerns.

Articulation Evaluation

Since many students who stutter may also have articulation and/or phonological difficulties, it is recommended that articulation and oral motor abilities be evaluated at this time.

Observation of Vocal Quality

The student's vocal quality should be observed as part of the evaluation.

Documentation of a Fluency Disorder and Adverse Effect on

Educational Performance

Disability Determination Criteria for a Fluency Disorder

Evaluations	Disability Determination Criteria
Assessment of Speech Behaviors Analysis of Speech Sample *Pragmatic Stuttering Intervention for Adolescents and Adults* (Tanner, 1995) *Pragmatic Stuttering Intervention for Children* (Tanner, 1994) *Stuttering Severity Instrument, 4th Edition* (Riley, 2009) *The Stocker Probe for Fluency and Language* (Stocker & Goldfarb, 1995) **Attitude Scales** *A-19 Scale* (Grimms & Guitar, 1977) *Assessment of the Child's Experience of Stuttering* (Yaruss, Coleman, & Quesal, 2006) *Communication Attitude Test Revised (CAT-R)* (Brutten, 1985) *Communication Attitude Test for Preschool and Kindergarten Children Who Stutter (KiddyCAT)* (Vanryckeghem & Brutten, 2007) *Cooper Personalized Fluency Control Therapy for Children* (Cooper & Cooper, 2003) *Cooper Personalized Fluency Control Therapy for Adolescents and Adults* (Cooper & Cooper, 2003) *Scale of Stuttering Severity* (Williams, Darley, & Spriestersbach, 1978) *The School-Age Child Who Stutters: Working Effectively with Attitudes and Emotions—A Workbook* (Chmela & Reardon, 2001) Other: _____	**Results of tests indicate the presence of a fluency disorder**. *And* Parent Data Teacher Data SLP Judgment in agreement *or* **The student exhibits *any* atypical disfluencies, such as prolongations, blocks, pitch or loudness changes during moments of disfluency, struggle, or secondary behaviors.** *And* Parent Data Teacher Data SLP Judgment in agreement *or* **The student exhibits significant covert stuttering tendencies that are adversely affecting his or her academic and extracurricular performance.** *And* Parent Data Teacher Data SLP Judgment in agreement **Documentation of adverse effect on educational performance resulting from fluency disorder** *The impairment must not be related primarily to limited exposure to communication-building experiences, the normal process of acquiring English as a second language, or dialect use.*

Fluency Disorder Summary—Younger Than Age 7

The purpose of this tool is to summarize the evaluation information so that a data-supported professional judgment may be made about a student's fluency.

Student: _____ SLP: _____
Date of Birth: _____ Date Completed: _____

Evaluation Data	Results	Data Support Concern	
		Yes	**No**
Parent data			
Teacher data			
Analysis of speech sample			
Assessment of speech behavior (severity rating from standardized test)			
Attitude scales			
SLP judgment			
The following behaviors will help differentiate normal nonfluency from stuttering:			
Length of time stuttering has been noticed (more than 12 months is a concern)			
Persistent stuttering-like disfluencies (prolongations, blocks, and/or part word repetitions)			
Pitch/loudness changes through the moment of stuttering			
Three or more repetitions of a sound/syllable/word			
Visible signs of struggle or tension when blocking			
Multiple types of disfluencies on one sound/word			
Family history (The research shows that males with a family history of stuttering and/or language impairments are at a greater risk for stuttering.)			
Fluent speech is atypical (The fluent speech of individuals who stutter is characterized by variable rate, atypical prosody, hard articulatory contacts, poor breath stream management, delayed onset of voicing, slower transitions from vowels to consonants, and longer vowels.)			

Professional Judgment

From ASHA (May, 2003): Valid methods for identifying a communication impairment are sometimes lacking (e.g., in multilingual children, children from nonmainstream cultures, or children with multiple disabilities that preclude standardized testing). At other times, a student may not strictly meet the established eligibility criteria, yet team members may believe that the student has a disability that adversely affects educational performance and requires special services. In such instances, the team should be allowed to use professional judgment to determine eligibility. Documentation should include standardized [norm-referenced] and criterion-referenced measures used to make the determination.

Fluency Disorder Summary—School-Age Children (7+ years)

The purpose of this tool is to summarize the evaluation information so that a data-supported professional judgment may be made about a student's fluency.

Student:_____SLP:_____
Date of Birth:_____Date Completed: _____

Evaluation Data	Results	Data Support Concern	
		Yes	No
Parent data			
Teacher data			
Analysis of speech sample			
Assessment of speech behavior (scores from standardized test(s)			
Attitude scale(s)			
SLP judgment			
The following behaviors typically indicate increased severity:			
Age of onset (after the age of 5 years is of particular concern)			
Development of avoidance behaviors			
Feelings of anger, frustration, or helplessness			
Three or more repetitions of a sound/syllable/word			
Visible signs of struggle or tension when blocking			
Multiple types of disfluencies on one sound/word			
Fluent speech is atypical (The fluent speech of individuals who stutter is characterized by variable rate, atypical prosody, hard articulatory contacts, poor breath stream management, delayed onset of voicing, slower transitions from vowels to consonants, and longer vowels.)			

Professional Judgment

From ASHA (May, 2003): Valid methods for identifying a communication impairment are sometimes lacking (e.g., in multilingual children, children from nonmainstream cultures, or children with multiple disabilities that preclude standardized testing). At other times, a student may not strictly meet the established eligibility criteria, yet team members may believe that the student has a disability that adversely affects educational performance and requires special services. In such instances, the team should be allowed to use professional judgment to determine eligibility. Documentation should include standardized [norm- referenced] and criterion-referenced measures used to make the determination.

Impact of a Fluency Disorder on Educational Performance

Speech or language impairment means a communication disorder that adversely affects a child's educational performance [34 CFR §300.8I (11)]. Educational performance includes academic achievement or functional performance or both.

- **Academic Achievement** – generally refers to a child's performance in academic areas (reading or language arts, math, science, history)

- **Functional Performance** – generally refers to skills or activities that are not academic or related to a child's academic achievement; often used in the context of routine activities of everyday living

The *Adverse Effect on Educational Performance Checklist for Fluency Disorders* is a tool to guide the SLP in addressing the second prong of the federal definition of Speech Impairment. If a communication disorder is established in stage I through the use of formal and informal assessment data, then the academic and functional implications that result from the fluency disorder must be addressed in stage II.

The SLP can document adverse effect of a fluency disorder on educational performance by collecting information from a variety of sources in order to complete the *Adverse Effect on Educational Performance Checklist for Fluency Disorders.* Sources of documentation can include grades, performance on state and district assessments, student work, observation of the student across school environments, teacher information, parent information, and student report.

Fluency Disorders' Adverse Effect on Educational Performance Checklist

Although many students who stutter are average students, have friends, and participate in extracurricular activities, this is not the case for all students with fluency disorders. Academic performance and participation in extracurricular activities are often significantly affected when a student has a fluency disorder.

Academic Achievement	Yes	No
There is a direct, noticeable relationship between the student's communication disorder and academic performance or achievement		
The student uses avoidance strategies when reading aloud or speaking in class (e.g., circumlocutions and word substitutions).		
The student does not initiate conversations in cooperative learning groups.		
The student avoids asking questions or providing answers in class at the level commensurate with overall classroom performance.		
The student avoids oral presentations.		
Functional Performance	**Yes**	**No**
The student does not fully participate in extracurricular activities.		
The student's communication with others is ineffective due to the number and severity of disfluencies.		
The student's negative attitudes about speech result in reluctance to speak to adults in authority.		
The student demonstrates low self-esteem and reluctance to speak or interact with others		
Total		

Scoring

If the answer to at least 4 of the statements is *yes*, it is likely that the student's fluency disorder results in an adverse effect on educational performance

Sources of Documentation of Adverse Effect

Grades	
State, District, Local Assessments/Tests	
Student Work	
Observation	
Teacher/Parent Information	
Student Self-Report	
Other	

Reporting Evaluation Information

Reporting Evaluation Information

The plan for a Full and Individual Evaluation (FIE) should be discussed at the initial Admission-Review-Dismissal (ARD) meeting, specifically what criteria will be used to determine the student's eligibility for services.

In addition, it is important to note in the report that a student may be recommended as eligible for fluency services under the following two conditions:

1. **The student is eligible for services based on assessment of speech behavior using standardized tools:** A fluency disorder is clearly present and criterion-referenced measures are not needed to determine eligibility for services. Although criterion-referenced measures (analysis of speech sample) are not necessary for determining eligibility for certain students, these procedures are useful for determining therapy goals, as well as documenting progress. It is recommended that criterion-referenced measures be used with all students who are suspected of having a fluency disorder.

<div align="center">OR</div>

2. **The student is eligible for services with a combination of standardized and criterion-referenced measures and attitude scales:** The student is not clearly eligible without criterion-referenced measures being implemented and the data analyzed. The use of these procedures may be helpful for students who are not meeting their academic potential due to tendencies such as not speaking in class, avoiding certain extracurricular activities, or showing a reluctance to discuss any school-related problem (such as receiving a "B" versus an "A" on a paper or oral presentation when expecting an "A") with teachers due to their fluency disorder. The use of criterion-referenced measures is important for students who have a tendency to hide their stuttering due to high degrees of apprehension and fear about their communication abilities.

Please Note: The SLP must have also collected data from additional sources (family, teacher, or student) that support his or her recommendation, for the student to be eligible for services.

Re-Evaluation Checklist for
Fluency Disorders

Re-Evaluation Checklist for
Fluency Disorders

For re-evaluation, the SLP will follow district guidelines to collect assessment data. In addition, the following information may need to be updated.

❑ Fluency Case History Form Update

❑ Parent Observation of Fluency Concerns

❑ Parent/Teacher Checklist of Fluency Concerns

❑ Teacher Observation of Fluency Concerns

❑ Speech-Language Pathologist Fluency Observation Checklist

❑ Assessment of Speech Behavior (Severity Rating from Standardized Test)

❑ Speech Sample Analysis

❑ Attitude Scale(s)

❑ Review of the IEP, student's progress in therapy, and present level of academic achievement and functional performance

❑ Student's progress in the general education curriculum

❑ Fluency Eligibility Criteria

❑ Fluency Eligibility Checklist (age-specific)

❑ Draft of new IEP goals and objectives **OR** prepare for dismissal

Appendices

Scale for Rating Severity of Stuttering

Speaker:_____Age:_____Sex:_____Date:_____
Rater:_____Identification:_____

Instructions: Indicate your identification by some such term as "speaker's clinician," "clinical observer," "clinical student," or "friend," "mother," "classmate," et cetera. Rate the severity of the speaker's stuttering on a scale from 0 to 7, as follows:

0   No stuttering

1   Very mild—stuttering on less than 1% of words; very little relevant tension; disfluencies generally less than one second in duration; patterns of disfluency simple; no apparent associated movements of body, arms, legs, or head.

2   Mild—stuttering on 1% to 2% of words; tension scarcely perceptible; very few, if any, disfluencies last as long as a full second; patterns of disfluency simple; no conspicuous associated movements of body, arms, legs, or head.

3   Mild to moderate—stuttering on 2% to 5% of words; tension noticeable but not very distracting; most disfluencies do not last longer than a full second; patterns of disfluency mostly simple; no distracting associated movements.

4   Moderate—stuttering on about 5% to 8% of words; tension occasionally distracting; disfluencies average about one second in duration; disfluency patterns characterized by an occasional complicating sound or facial grimace; an occasional distracting associated movement.

5   Moderate to severe—stuttering on about 8% to 12% of words; consistently noticeable tension; disfluencies average about 2 seconds in duration; a few distracting sounds and facial grimaces; a few distracting associated movements.

6   Severe—stuttering on about 12% to 25% of words; conspicuous tension; disfluencies average 3 to 4 seconds in duration; conspicuous distracting sounds and facial grimaces; conspicuous distracting associated movements.

7   Very severe—stuttering on more than 25% of words; very conspicuous tension; disfluencies average more than 4 seconds in duration; very conspicuous distracting sounds and facial gestures; very conspicuous distracting associated movements.

The *Scale of Stuttering Severity* is reprinted with permission limited to its appearance in these guidelines from Williams, D. E., Darley, F. L., & Spriestersbach, D. C. (1978). *Diagnostic Methods in Speech Pathology*, 2nd ed. New York, NY: Harper & Row.

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How to Count Disfluencies

Adapted from ASHA's IDEA and Your Caseload: A Template for Eligibility and Dismissal Criteria for Students Ages 3 through 21, Revised Edition*, May 2003.*

Group A:

1. **To analyze** *frequency of stuttering,* use the following procedures to measure the types of disfluencies:

   Collect and transcribe a 200-syllable spontaneous communication sample in each of a variety of settings, using audio or videotape. Videotape is preferable for analyzing secondary characteristics and struggle behaviors. The 200 syllables should only represent the intended message. Do not count repetitions as syllables. Revisions are counted as part of the 200-syllable sample. The transcription should also include the instances of stuttering.

   Count the number of occurrences of disfluencies, such as hesitations, interjections, revisions, prolongations, visible/audible tensions, etc. Count the number of instances of each type of stuttering and struggle behavior (audible/visible tension). Divide this number by the total number of syllables (200), and multiply by 100 to obtain the percentage of types of disfluencies (Campbell & Hill, 1992). Subtract this number from 100 to obtain the percentage of fluent speech.

   Note: A frequency analysis may also be accomplished by collecting and analyzing the number of stuttered words in a speech sample of 150 words (Riley, 1981). However, this method may penalize a speaker who uses multisyllabic words (Peters & Guitar, 1991).

<div align="center">OR</div>

2. **To analyze** *duration of stuttering,* use the following durational measurements:

   Collect a 10–15 minute speech sample of the student's conversational speech using video or audiotape. Videotape is preferable for analyzing secondary characteristics and struggle behaviors.

   Use a stopwatch to time 5 minutes (300 seconds) of the *student's* talking time.

   Review the sample and use a stopwatch to obtain the total number of seconds of disfluencies. Divide the total number of seconds of disfluencies by the total number of seconds in the speech sample and multiply by 100 to obtain the percentage of duration of disfluent speech (Bacolini, Shames, & Powell, 1993).

   If using a video sample, watch the video once again, noting the types of disfluencies and secondary characteristics listed on the Summary of Evaluation Findings.

Note: Costello and Ingham (1984) suggest the following other methods of analyzing duration within a speech sample*:

1. Use a stopwatch to time the length of 10 different stuttering moments at random within the sample. These moments of stuttering should be representative of the sample. To obtain the average duration of stuttering, divide the sum of the 10 stuttering moments by 10.

2. Choose the three longest stuttering occurrences and time each with a stopwatch. Record the results.

*Peters and Guitar (1991) prefer a 5-minute sample, rather than the 150-word sample suggested by Riley, to ensure a more complete sample for durational measures.

Group B

1. **To analyze *rate of speech*,** Costello and Ingham (1984) use the following procedure:

    Collect a 5-minute speech sample using speaking or oral reading. (You probably need 10 minutes of taping to get the 5 minutes of the student's talking/oral reading time.) Count the number of syllables (or words) in the intended message. Then, divide the number of syllables (or words) by the total number of minutes of the student's speaking/oral reading time in the sample to obtain a syllable-per-minute rating (SPM) or a word-per-minute rating (WPM). See Costello and Ingham (1984) for mean rates of speech.

    OR

2. **To analyze *speech naturalness*,** use the following procedure

    Collect a 5-minute speech sample. Use a 9-point naturalness scale to determine whether speech has a natural-sounding quality. To analyze speech quality, judgments of naturalness may be made by SLPs or naïve listeners (lay persons, graduate students). Review the sample (watch/listen) and at 15-second intervals make subjective judgments about the speech to determine whether it sounds highly natural or highly unnatural, despite the percentage of fluency. A total of at least 10 such judgments should be made. To calculate naturalness, add the number assigned at each rating and then divide that number by 10. The mean naturalness rating for adolescents/adults is 2.12 to 2.39 on the 9-point naturalness scale (Ingham, Gow, & Costello, 1985; Martin, Haroldson, & Triden, 1984).

Disability Determination Protocol
Fluency Disorders: Younger than age 7*

AREAS ASSESSED	NON-DISABLING CONDITION	DISABLING CONDITION
Risk Factors	☐ None present ☐ Time post-onset <12 mos.	☐ Family history of stuttering ☐ Male ☐ Time post-onset >12 mos ☐ Rise in pitch during stuttering ☐ Presence of clustering ☐ Concomitant disorders ☐ Presence of tense articulatory contacts ☐ Signs of awareness ☐ Rise in sound/syllable repetitions
Frequency of Disfluency	☐ 6–8 per 100 words	☐ 10 per 100 words
Frequency of: SERs (Rs, Rsy, Rw) SLDs (Rs, Rw, Rsy, P, B)	☐ 2 SERs per 100 words ☐ 3 SLDs per 100 syllables	☐ 6+ SERs per 100 syllables ☐ 11+ SLDs per 100 syllables
Secondary Features	☐ Not typically present	☐ 2x as many head and neck movements ☐ When present, they emerge rapidly ☐ May not be present
Continuity of Speech	☐ Fewer than 3 within-word disfluencies per 100 syllables	☐ More than 3 within-word disfluencies per 100 syllables
Clusters (2 or more disfluencies on the same word)	☐ few clusters	☐ A predominant feature of child's stuttering patterns (6x as many compared to single component stutters)
Iterations (number of times unit is repeated)	☐ 1–2 iterations in length	☐ 2+ repetitions ☐ 6x more multiple iterations compared to single repetitions
Functional Implications (Academic/Social/ Emotional)	☐ Disfluent behaviors have no impact on educational participation and social interaction.	☐ Disfluent behaviors have an impact on educational participation and social interactions.
Perception of Speaking Rate	☐ Speaking rate does not interfere with intelligibility of speech.	☐ Speaking rate does interfere with intelligibility of speech.
Listener Perception/ Reaction	☐ No awareness and/or concern conveyed.	☐ Listener is aware and conveys concern about disfluency.
Speaker Reaction	☐ Speaker does not appear aware or concerned.	☐ Speaker awareness interferes with educational participation and social interaction.

*This is a modified version of the Region XIX Speech Therapy Eligibility Task Force Fluency Document (unpublished document, 2007).

Disability Determination Protocol
Fluency Disorders: School-Age Children (7+ years)*

Areas Assessed	Non-Disabling Condition	Disabling Condition		
		Mild	**Moderate**	**Severe**
Risk Factors	☐ None present	☐ Family history of stuttering ☐ Male ☐ Time post-onset >3 years ☐ Progressive increase in stuttering ☐ Development of avoidance behaviors ☐ Visible signs of struggle ☐ Presence of concomitant disorders ☐ Recent relapse pattern		
Frequency of Disfluency	☐ None present	☐ 2–4/100 words ☐ 1–2 SLD/sample	☐ 5–12/100 words ☐ 3–4 SLD/sample	☐ 13+/100 words ☐ 5+ SLD/sample
Secondary Features	☐ Not present	☐ May/may not be present	☐ Present	☐ Present and distracting
Functional Implications	☐ Disfluent behaviors have no impact on educational participation or social interaction.	☐ Disfluent behaviors have an impact on educational participation or social interaction.	☐ Disfluent behaviors have an impact on educational participation or social interaction.	☐ Disfluent behaviors have an impact on educational participation or social interaction.
Perception of Speaking Rate	☐ Rate does not interfere with intelligibility of communication effort.	☐ Rate interferes with intelligibility of communication effort.	☐ Rate interferes with intelligibility of communication effort.	☐ Rate interferes with intelligibility of communication effort.
Listener Reaction	☐ No awareness or concern conveyed by listener.	☐ Minimal awareness or concern conveyed by listener.	☐ Listener is aware of disfluency and conveys concern.	☐ Listener is aware of disfluency and conveys extreme concern.
Speaker Reaction Perception of Stuttering	☐ Speaker is not aware of or concerned about disfluency.	☐ Speaker has minimal awareness or concern about disfluency.	☐ Speaker is aware/concerned to the extent that avoidances emerge.	☐ Speaker is aware/concerned to the extent that communication efforts are severely impaired.

*This is a modified version of the Region XIX Speech Therapy Eligibility Task Force Fluency Document (unpublished document, 2007).

Key to Abbreviations: SERs – Stuttering Event Repetitions; Rs – Sound Repetitions; Rsy – Syllable Repetitions; Rw – Word Repetitions; SLDs – Stutter-like Disfluencies; P – Prolongations; B – Blocks

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Assessing English-Learners

When suspecting a stuttering problem in an English-learner or bilingual speaker, a number of issues merit consideration during the assessment process.

- Family and cultural attitudes toward speech, fluency, and stuttering.

  There is quite a bit of variability in the health beliefs and practices across cultural groups. Through discussion and exploration, it is important that the clinician strive to understand how speech disorders and stuttering, specifically, are viewed by the client and family members. Some groups view stuttering as an emotional disturbance or a punishment by a spiritual figure (Bebout & Arthur, 1992). Such beliefs may impact the clinician's ability to diagnosis stuttering and will affect the nature of intervention.

- Bilingualism as a risk factor for stuttering.

  There is little empirical evidence to support the belief that bilingualism per se puts an individual more at risk for stuttering or impedes his/her ability to recover from stuttering (Van Borsel, Maes, & Foulson, 2001). More important to the differential diagnosis of chronic stuttering is a family history of stuttering and delays and/or disorders in the acquisition of first and/or second languages.

- Nature of disfluencies in both languages.

  Since disfluency patterns may differ in the languages spoken and these differences may provide insights as to the nature of the fluency problem (i.e., linguistically-based or chronic stuttering), it is important to assess fluency in both languages. Frequencies, disfluency type and nature, and stuttering loci should be examined in connected speech samples of both languages.

  o *Frequencies*: Disfluency rates may be higher in the less proficient language (Van Borsel et al., 2001). Recent information has indicated that non-stuttering bilingual children demonstrate overall increased frequency of stuttering-like speech behaviors as compared to their monolingual peers and produce more disfluencies in Spanish than English (Byrd, Bedore, & Ramos, 2015). If the client reports and/or the clinician observes significant differences in the disfluency frequencies in the two languages, the influence of language learning and/or loss merits consideration.

  o *Types and nature*: Stuttering types seem to be similar across languages (Bernstein Ratner, 2004). These types generally consist of within-word disfluencies, such as sound and syllable repetitions, blocks, and prolongations. These behaviors can be observed even when the listener does not speak the language of the speaker. If disfluency types predominantly are between words (e.g., revisions, interjections), the fluency problem may be linguistically-based rather than chronic stuttering. The clinician also should note the presence of struggle, tension, and/or extra movements during disfluencies. These behaviors are often associated with chronic stuttering.

    o *Loci of stuttering*: The phonemic and linguistic loci of stuttering may differ in the two languages spoken. More stuttering may occur at higher levels of linguistic complexity, including during code-switching moments (Bernstein-Ratner, 2004). Understanding the influence of language complexity on the client's fluency will provide insights about his language proficiency as well as potential linguistic fluency stressors. These insights are important considerations when planning and providing intervention.

        In summary, Boscolo, Bernstein Ratner, and Rescorla (2002) suggest that the following conditions may indicate a fluency problem associated with limited English proficiency rather than chronic stuttering:

- No secondary features during disfluent moments.

- Lack of a self-concept as a person who stutters.

- Locus of disfluency at positions of increased encoding difficulty in the less proficient language.

- Lack of stuttering in the stronger language.

For additional information see Watson and Kayser, 1994.

Assessing Cluttering

What is Cluttering?

        The ASHA website defines cluttering as: "Breakdowns in clarity that accompany a perception of rapid and/or irregular speech rate, collapsing of syllables and/or omission of word endings. Disfluencies are often revisions, interjections and/or unusual pauses in sentences rather than prolongations, blocks and sound repetitions. Other disorders such as learning disabilities, APD, Tourette's, autism, pragmatic language disorder, ADHD and stuttering may co-occur" (ASHA, n.d.). In addition to the above, people who clutter can exhibit any of the following:

- Limited awareness of their disfluencies at the time of speaking;
- Sloppy handwriting;
- Difficulty with organization of thoughts.

        The International Cluttering Association defines cluttering as: "Cluttering is a fluency disorder characterized by a rate that is perceived to be abnormally rapid, irregular or both for the speaker (although measured syllable rates may not exceed normal limits)" (International Cluttering Association, n.d.).These rate abnormalities are further manifested in one or more of the following symptoms:

- an excessive number of disfluencies, the majority of which are not typical of people who stutter;

- the frequent placement of pauses and use of prosodic patterns that do not conform to syntactic and semantic constraints; and

- inappropriate (usually excessive) degrees of coarticulaion among sounds, especially in multisyllabic words.

Considerations in a Cluttering Assessment

Due to the high co-occurrence of language disorders, language (including pragmatics) should be tested if cluttering is suspected. Written language samples should be collected to look for weak spelling, grammar mistakes, illegible handwriting and transposition or omission of letters.

Articulation should also be assessed. Speech intelligibility typically declines in people who clutter as the discussion becomes more informal or lengthy. Communication attitudes also need to be assessed.

Available Assessments

Predictive Cluttering Inventory (PCI, Daly & Cantrell, 2006**).** The Predictive Cluttering Inventory (PCI) is a checklist containing 33 symptoms associated with cluttering in four domains: Pragmatics, Speech Motor, Language-Cognition, and Motor Coordination-Writing Problems. Symptoms can be ranked on a seven-point scale (0 = *not present*, 6 = *always present*) in order to predict possible cluttering by evaluator observations. Since normative data has not been established for this tool, the preliminary research data suggests that a score of 120+ indicates possible cluttering components in speech and scores between 80 and 120 indicate symptoms of cluttering-stuttering.

Cluttering Severity Instrument* (**CSI**, Bakker & Myers, 2011) reissued June 2017. The Cluttering Severity Instrument (CSI) is the first formal instrument for assessing cluttering severity. An estimation of cluttering severity is useful for research, in clinical practice during initial assessments, and later in therapy to determine treatment progress, or termination.

*requires software download

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Resources

The following resources provide information for individuals and their families on stuttering, including what it is, how to treat it, and where to access support for individuals who stutter and their families. It should be noted that this is not a definitive list of resources for stuttering. These resources were included due to the ease and affordability with which they may be assessed. TSHA does not specifically endorse any of the following.

American Speech-Language-Hearing Association (ASHA) Special Interest Division 4:
Fluency and Fluency Disorders
10801 Rockville Pike
Rockville, Maryland 20852
800-498-2071
http://www.asha.org

This special interest group within the ASHA structure is open to any member of ASHA with an interest in fluency disorders. This division was responsible for the development and maintenance of standards and certification for becoming a fluency specialist. Special Interest Division 4 also publishes a quarterly newsletter and sponsors a leadership conference every year. Contact ASHA for more information on this group. For more information on how to become a fluency specialist or to find a specialist in your area, go to: http://www.stutteringspecialists.org.

Friends – The Association for Young People Who Stutter
Contact: Lee Caggiano
145 Hayrick Lane
Commack, NY 11725-1520
631-499-7504
http://www.friendswhostutter.org

Friends is a national organization that was created to provide a network of love and support for children and teenagers who stutter, their families, and the professionals who work with them. Friends publishes a bimonthly newsletter called Reaching Out. *This eight-page digest is filled with articles, reflections, stories, and information about the stuttering experience of young people, their families, and the professionals who work with them. It is upbeat, includes review of books and films, and will update you on your friends within the group. Subscriptions are $15 per year.*

International Fluency Association (IFA)
Howard Schwartz, Ph.D.
Chair, Membership
Department of Communication Disorders Northern Illinois University
334 Adams Hall
Dekalb, IL 60115
http://www.theifa.org

The IFA is the international organization for speech-language pathologists, researchers, and individuals who stutter. IFA sponsors a world congress every other year. The Journal of Fluency Disorders (JFD) *is the official journal of the IFA. Applications and information about annual dues can be obtained by contacting the membership chair, Dr. Howie Schwartz, at the address listed above. Membership in the IFA includes a subscription to the* JFD, *which is published quarterly.*

National Stuttering Association (NSA)
119 West 40th Street, 14th floor
New York, NY 10018
800-937-8888)
http://www.westutter.org

The NSA is a self-help group for persons who stutter (PWS), including children, adolescents, and adults. In addition to providing helpful information on stuttering via handouts and their website, the NSA hosts a yearly national convention, occasional regional workshops, and numerous local support group meetings across the state.

Speech Therapy Help
http://www.speechtherapyhelp.com

This website has information about stuttering and also provides an overview of how to treat the disorder therapeutically. Its sister site, http://www.speechtherapyforum.com, *includes reviews of a variety of games and other therapy activities that may be used with students who stutter.*

Stuttering Foundation of America (SFA)
3100 Walnut Grove Road, Suite 603
Memphis, Tennessee 38111-0749
800-992-9392
http://www.stutteringhelp.org

SFA is a resource for SLPs, PWS, and anyone with an interest in stuttering. This organization publishes information on stuttering for parents, adolescents, children, teachers, physicians, SLPs, and the public. SFA also sponsors National Stuttering Awareness Week every May, as well as annual workshops for school speech-language pathologists and a two-week workshop in Iowa for those wishing to specialize in stuttering. Books, pamphlets, and videos are available at a very minimal cost.

Stuttering Home Page
http://www.stutteringhomepage.com

This website has many links to many resources related to stuttering, including course syllabi, announcements about conferences and workshops, information on support groups, and research announcements. In addition, there is information just for kids and just for teens. The stuttering home page is a great resource for anyone interested in this disorder.