

“Quick Facts” for Teachers



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williamssyndrome
ASSOCIATION

Students with Williams syndrome have extraordinary gifts and unique challenges - in life and in the classroom. Their uneven learning profile of verbal strengths coupled with non-verbal difficulties make IQ scores a poor indicator of capability. Additionally, challenges with filtering out background noise and attending to difficult tasks often require special consideration in the classroom. On the flip side, their friendly, endearing personality, and excellent verbal skills often result in children with WS becoming the unofficial “Mayor” of the school, known to everyone and loved by many.

Williams Syndrome Learning Profile

Strengths

- Emotional connection to materials
- Learns best with audio and dynamic visual supports
- Can learn most anything when it is presented with rhyme, rhythm, or cadence
- Very Social
- Generally, very few significant behavior concerns; responds well to social stories and consistency
- Very Participatory
- Excellent with Role Play
- Eager to please adults
- Excellent expressive and receptive language
- Generally can decode at or near grade level when provided consistent phonics-based instruction.

Weaknesses

- Hyperacusis/Sensitive Hearing
- Visual spatial & visual perceptual skills
- Fine Motor & Visual Motor
- Abstract Reasoning
- Perceptual Reasoning (concepts of time)
- Math skills (often require accommodation throughout school years)
- Handwriting (sometimes shows little improvement - even with intervention)
- Attention and focus (short attention span but not necessarily hyperactive)
- Difficulty modulating emotions - may have high anxiety related to a variety of topics (fire drills, alarms, balloons popping, whistles, power tools, etc.)
- Difficulty sustaining friendships
- Poor understanding of Pragmatic language
- Reading Comprehension lags behind decoding skills



Classroom Strategies

Developmental of students with Williams syndrome vs. Development of their Peers

PRESCHOOL - WS

- Sensitive hearing
- Many milestones behind schedule:
- Walking at age 2-3
 - Talking at age 3-4
 - Toilet trained at age 4-5
 - Poor Fine motor skills
 - Overly friendly & social
 - Often picky eaters
 - Autistic tendencies for some
 - Love of music often appears
 - Preference for musical toys
 - May be a “late talker” - note that receptive language is generally higher than expressive

PRESCHOOL - Typical Peers

- Asks questions, Repeats rhymes
- Begins to use scissors
- Engages in fantasy play
- Repeats three numbers
- Builds tower of 9-10 cubes
- Toilet trained
- Less negative, More friendly
- Draws “almost perfect” circles
- Learning to share/take turns
- Makes a bridge with cubes
- Learning to follow rules
- Demonstrates hand washing
- Says sounds a, m, b, p, n, l, w
- Runs easily, Rides a tricycle
- nine word sentences
- Vocabulary of about 900 words

Accommodate to Close the Gap?

- Adaptive scissors
- Headphones to help with noises
- Use stickers/stamps/labelmaker (focus on cognitive vs. mechanical)
- Social stories to help with social skill development & anxiety
- Visual schedules to decrease anxiety
- May need to support communication - always support at the level of RECEPTIVE language NOT expressive language

Heavy emphasis on therapy to develop skill sets

- Occupational Therapy for fine motor skills
- Physical Therapy for gross motor skills
- Speech Therapy for language
- Reading Intervention for early phonics
- Social Work for development of social skills
- *Music Therapy can help too!*

ELEMENTARY - WS

- Mild to Moderate learning disabilities
- Poor spatial skills
- Shoe tying; buttoning very difficult
- Severely impaired math skills
- Good verbal skills: Excellent story tellers
- Reading skills develop later but progress well w/phonics
- Comprehension behind decoding

- Poor motor skills: printing/handwriting/drawing
- Poor Attention Span and difficulty focusing - especially on new/difficult task
- Hard to block out unrelated sounds or movements
- Need emotional component for concentration
- Auditory learning style
- Very concrete interpretations
- Desire to keep adults happy
- Everyone is friendly, few are true friends
- Friendships with WS peers extremely helpful if available

ELEMENTARY - Typical Peers

Kindergarten, First, and Second graders are very active and don't sit still for long; they enjoy moving around the classroom. They are very talkative. Their attention span is short and they may have a hard time finishing what they start. These students are very curious and they tend to get excited and love to learn. Most students are very honest at this age and they love to play.

Third, Fourth, and Fifth graders can be very competitive and tend to get noisy and excited.



They value fair play and expect adults to adhere to rules. Many students are peer-conscious and may be very concerned about what classmates think. They like participating in group activities. They are often inquisitive and need to express their opinions. Boys and girls begin to discover one another and begin to interact.

Accommodations to Close the Gap

- Ensure broad exposure to grade level content and intervention at instructional level
- Touch Math
- Capitalize on RtI intervention time – Orton Gillingham for phonics instruction
- Adaptive scissors, etc.
- Headphones to help decrease interference
- Use stickers/labelmaker (cognitive vs. mechanical)
- Social stories to help with social skill development
- Utilize audio books
- Introduce computer EARLY (KG) to ensure strong development of composition skills

Therapies Continue!

- Occupational Therapy for fine motor
- Physical Therapy for gross motor
- Speech Therapy for language
- Reading Intervention for early phonics
- Social Work for development of social skills
- *Music Therapy can help too!*

MIDDLE SCHOOL - WS

- Development & maturity falls further behind “typical” peers
- Academic skills lag
- Difficulty “fitting in”
- Social skills less appropriate
- Interests not as varied as peers
- Increased anxiety and depression
- Don’t understand why they’re different
- Decreasing activity levels
- Continue to acquire new skills



MIDDLE SCHOOL - Typical Peers

- Wide range of intellectual development
- Begin to transition from concrete/manipulatory stage to abstract thought
- Intellectually at-risk; face decisions with potential to affect major academic values with lifelong consequences
- Prefer active over passive learning experiences; favor interaction with peers
- Willingness to learn things; enjoy solving real life problems
- Egocentric; argue to convince others;
- exhibit independent, critical thought
- Personal, social concerns dominate; Academic goals secondary
- Experience phenomenon of metacognition- ability to know what you know & do not know
- Intensely curious

Accommodations to Close the Gap

- Continue to develop strong computer skills
- Refine skills according to school processes
- Digital submission of assignments; Email
- Alternate Access – Alternate Output
- Video & web based supports to increase comprehension
- Audio books
- Therapies/Other:
- Increase Social Work Supports
- Continue Speech Therapy for executive function & receptive language
- Ensure students are participating in school affiliated sports/extra curricular activities
- Ensure student is HIGHLY involved with same age typical peers

HIGH SCHOOL - WS

- Development & maturity falls further behind “typical” peers
- Academic skills lag
- Difficulty “fitting in”
- Social skills less appropriate
- Interests not as varied as peers
- Increased anxiety and depression
- Don’t understand why they’re different
- Decreasing activity levels
- Can continue to acquire new skills

HIGH SCHOOL - Typical Peers

- Desire to understand the purpose & relevance of instructional activities
- Internally and externally motivated
- Self-imposed cognitive barriers poor self-confidence from years of academic failure
- May have “shut down” in certain cognitive areas Will need to learn how to learn and overcome barriers to learning
- Establish immediate and long-term goals
- Want to assume individual responsibility for learning and progress toward goals
- Interested in co-educational activities
- Desire adult leadership roles and autonomy in planning
- Want adults to assume a chiefly support role in their education
- Developing a community consciousness
- Need opportunities for self-expression

Accommodations to Close the Gap

- Develop strong computer skills
- Refine skills according to school processes
- Begin use of email – submit assignments digitally
- Implement Alternate Access – Alternate Output
- Video & web based supports to increase comprehension
- Continue use of audio books

Therapies/Other

- Increase social work supports
- Continue speech therapy for pragmatics
- Ensure students are participating in school affiliated sports/extra curricular activities
- Ensure student is HIGHLY involved with same age typical peers

10 Strategies to use right now...

1. Assess reading instruction methods and ensure that student is receiving intensive phonics instruction.
2. Assess assignment demands to ensure that the mechanics of writing are not interfering with the child demonstrating what they know. When possible, allow the child to answer orally or use a computer to drop & drag or type the answer.
3. Place student at the front of the room near the teacher or somewhere where the teacher can make frequent eye contact. This will tap into the child’s need to please and decreases inattentive behaviors
4. Increase progress monitoring of math skills - student may top out in some skills (coins, time) and continue to make progress in other areas. Provide instruction according to progress data.
5. Ensure that the student is receiving speech therapy to increase vocabulary and pragmatic language comprehension. This directly impacts their ability to under

- stand instructions given in the classroom and increases reading comprehension.
6. Ensure the child has clear, concise directions as to what their “job” is for any group work. The child may not be able to garner this information from the typical group conversation or from the initial instructions given to the group.
 7. Provide audio versions of stories to increase the child’s comprehension and ability to sequence a story.
 8. A visual schedule or checklist is especially helpful with reducing anxiety and decreasing the ever-present “what’s next?” question.
 9. Pre-teach gym and/or outdoor games. The child may struggle with learning the “rules” in the typical fashion and may need the added instruction in order to participate fully.
- And Most Importantly...
10. Enjoy them! This child will be one of the brightest spots in your day. :)