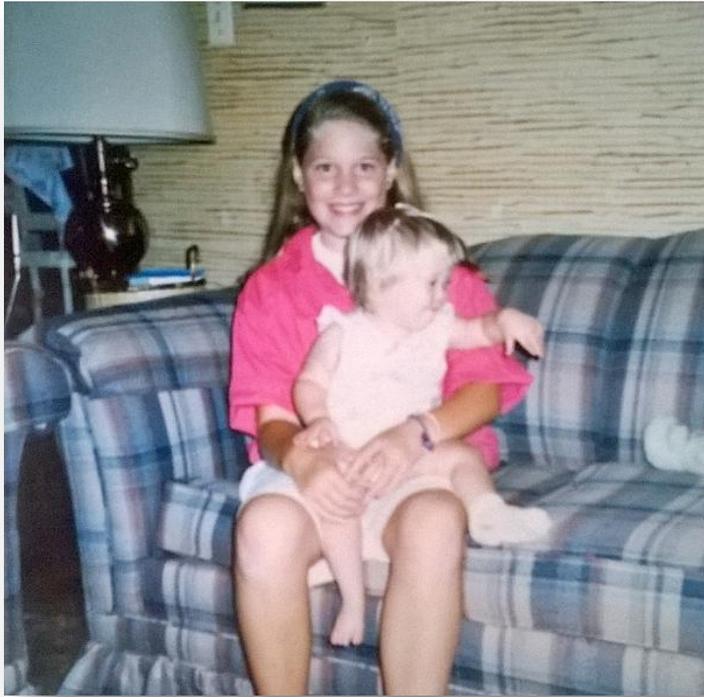


Foundations for Communication in Children with Down Syndrome

Jennifer Bekins, MS, CCC-SLP



- Evaluations & treatment planning based on best practices and standard of care
- Education and advocacy
- Transition planning
- Care coordination, support, and assistance throughout childhood

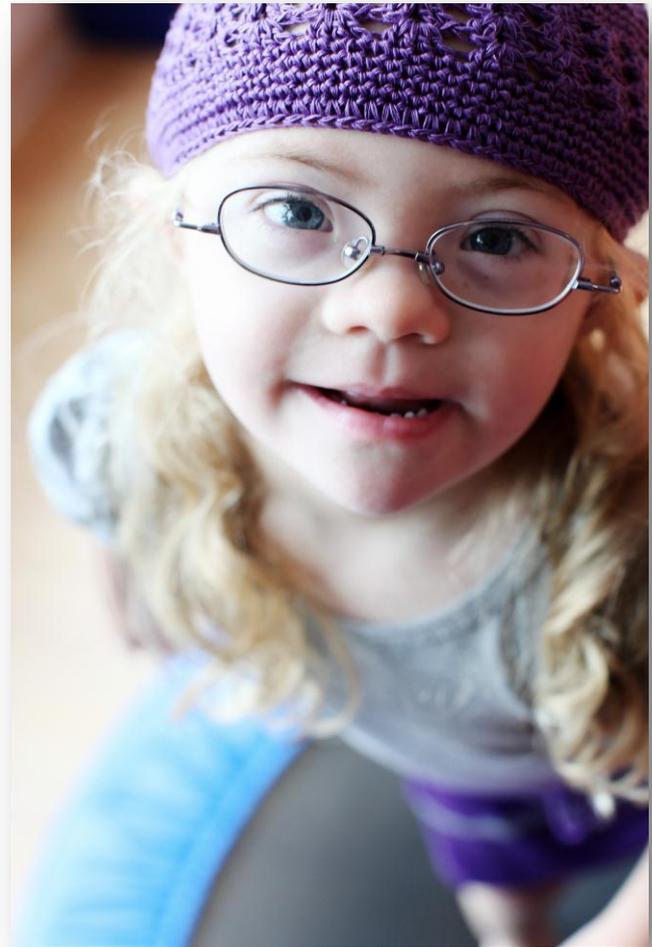


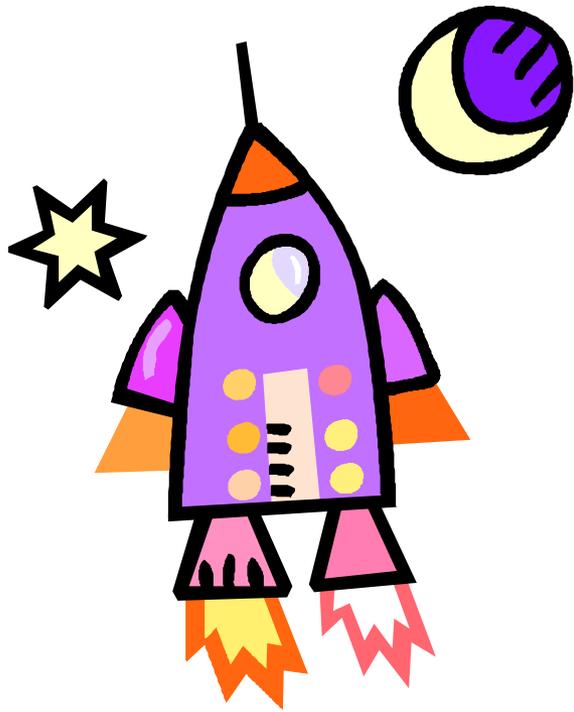
“Differences are not intended to separate, to alienate. We are different precisely in order to realize our need of one another”

Desmond Tutu



- Medical
- Social
- Role of therapy
- Family needs
- Other aspects?





While there are similarities in how many children with Down syndrome communicate, each child has his or her own trajectory.

Strengths

Social understanding,
empathy, & social skills

Self help and daily living
skills

Visual short-term memory

Visual learning a strength

Reading

Needs

Hearing & Vision

Speech & Language

Verbal Short-Term Memory
& Working Memory

Learning from listening

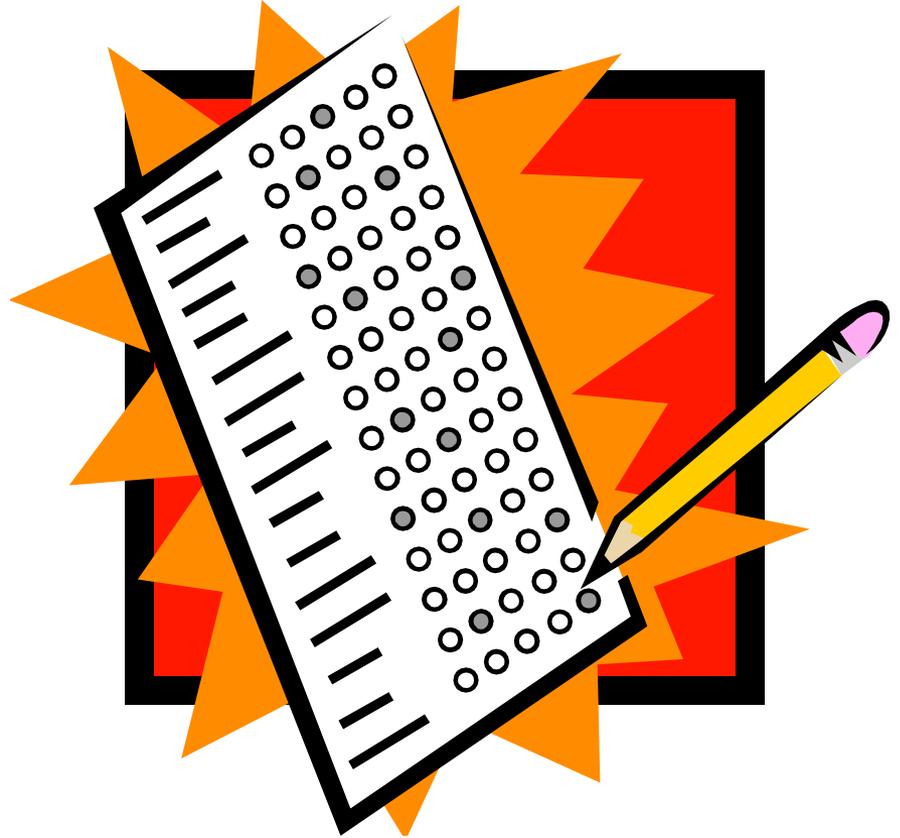
Numbers

- Use strengths to encourage learning
- Bridge the gap between comprehension and verbal expression
- Early social skills support cognitive and language learning
- Use visual supports to help bypass difficulties with auditory and memory issues

- Communication
- Vocabulary
- Grammar
- Speech



- Listen, process, manipulate
- Writing and anticipating upcoming text
- Decoding unfamiliar words
- Mental arithmetic



- Areas affecting speech
 - Hearing loss
 - Auditory processing
 - Verbal short-term memory
 - Motor concerns
 - Planning



- Shown to improve language outcomes in children with DS in adolescence
 - Larger vocabulary
 - Better articulation

Bonding



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- Engage in face-to-face interactions
- Encourage oral awareness and exploration
- Develop sound awareness and discrimination
- Social gestures and games
- Provide a variety of objects for play
- Read often
- Introduce sign language

- Encourage turn-taking play
- Encourage pretend play
- Sing songs and “follow-the-leader” games
- Read and point to pictures
- Continue signing
- Introduce sight word recognition*



- Explore printed word recognition programs
- Always leave time for a response
- Accept any attempt at a new word/sign
- Gather groups of objects to practice matching, naming, and categories

- Video

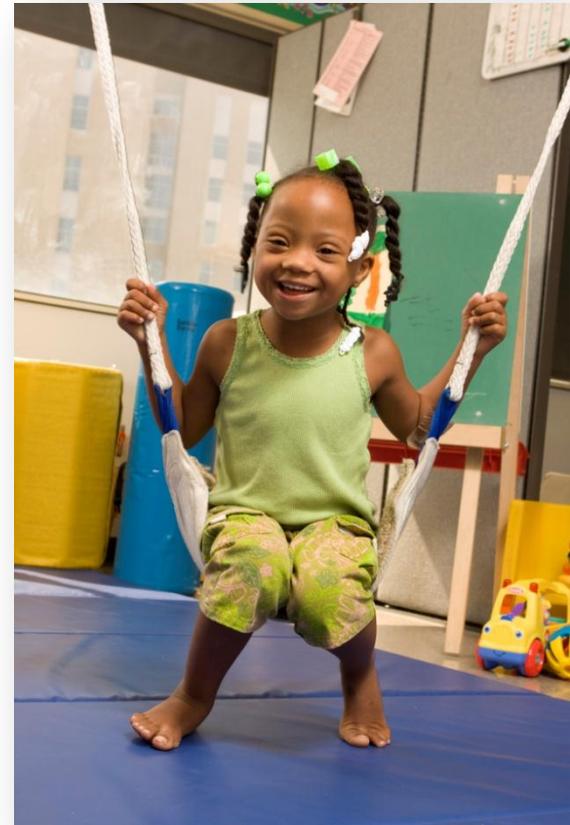
- Focus on speech and language skills
- Encourage peer interactions
- Use sight words as a cue for vocabulary development
- Model and expand utterances
- Use daily activities as a language experience
- Use “sound ” and early concept books to build articulation skills
- Behavior expectations

"Speech and language is central to all learning and the stage of the child's speech and language development will influence all aspects of the curriculum."

(Buckley, 1998)

- Two videos

- Use “show and tell” activities
- Practice giving and taking directions
- Discuss cause and effect relationships
- Build his/her ability to see absurdities
- Practice telling stories





- Look for ways to support learning
 - Visual Modifications
 - FM Systems
- Body Awareness
 - Public vs. private areas
 - Boundaries
- Direct social skills teaching –
 - Use role playing to develop “scripts”

- Find opportunities to use verbal speech:
 - Centers (in lower grades)
 - Group projects
 - On teacher errands with less familiar adults
- Focus on understanding the hidden curriculum
 - Expectations that are unspoken

- We all function better when we know what to expect!
- The classroom:
 - Exciting
 - Unpredictable environment



- Video

Strategies for Increasing Successful Communication

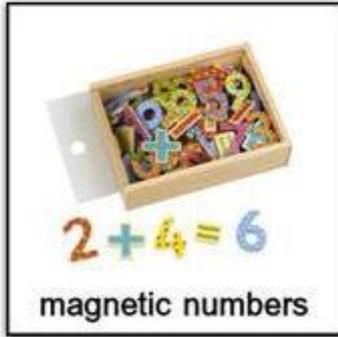
- Increase predictability
 - Increase attention to task
 - Reduce anxiety
 - Decrease behavioral challenge
 - Increase confidence to engage in activity

- **What** is happening, what is going to happen, and what are you supposed to be doing?
- **When** are you expected to start, stop or finish the activity?
- **Where** is the activity supposed to occur?
- **Why** are things happening as they are?

A structured timetable of daily and weekly activities will help your child understand what's going on and what to expect

- A picture schedule:
 - Can help compensate for weaknesses in receptive language
 - Can be checked and rechecked independently
 - Is much easier to understand than a purely verbal description of the day's events
- Schedules should be:
 - Customized to meet the needs of each child
 - Varied according to number of pictures and activities to ensure maximum comprehension and success

First



Then



- When providing information:
 - Present in a very concrete and specific way
 - State exactly *what* will happen and exactly *what* is wanted
 - Don't assume the child can "read between the lines"
- Avoid using negatives
- Tell the child what you want him/her to do
- Avoid use of abstract terms such as:
 - Wait
 - Maybe
 - Later

Social stories are useful
for:

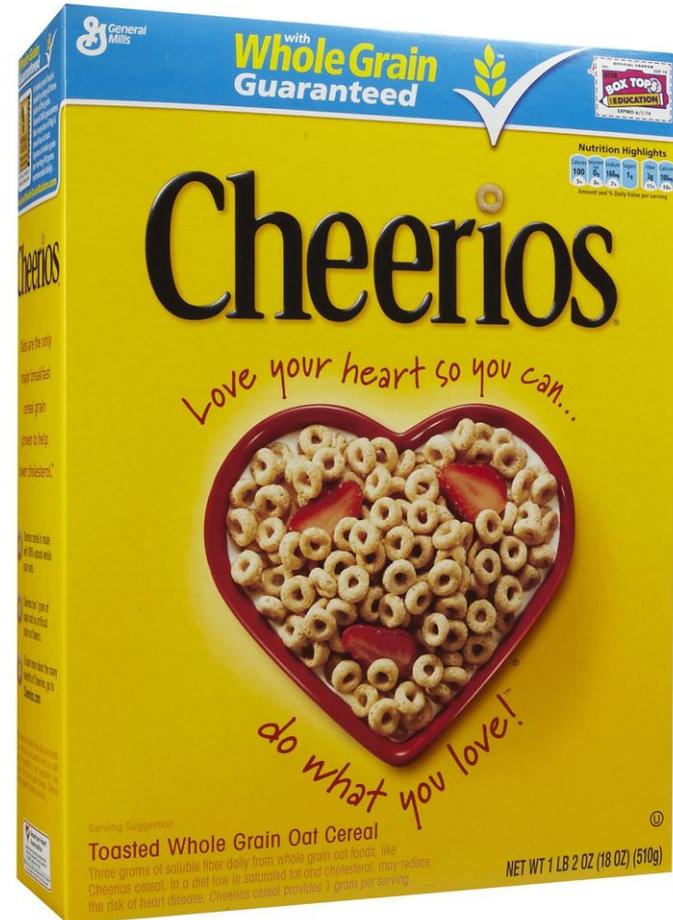
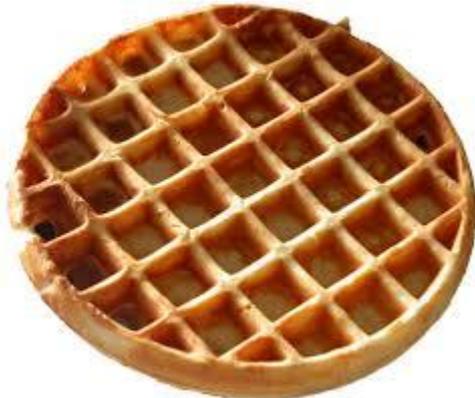
- Preparing for new situations
- Building scripts for interaction
- Providing visual support and repetition for learning and retention
- Helping with behavior



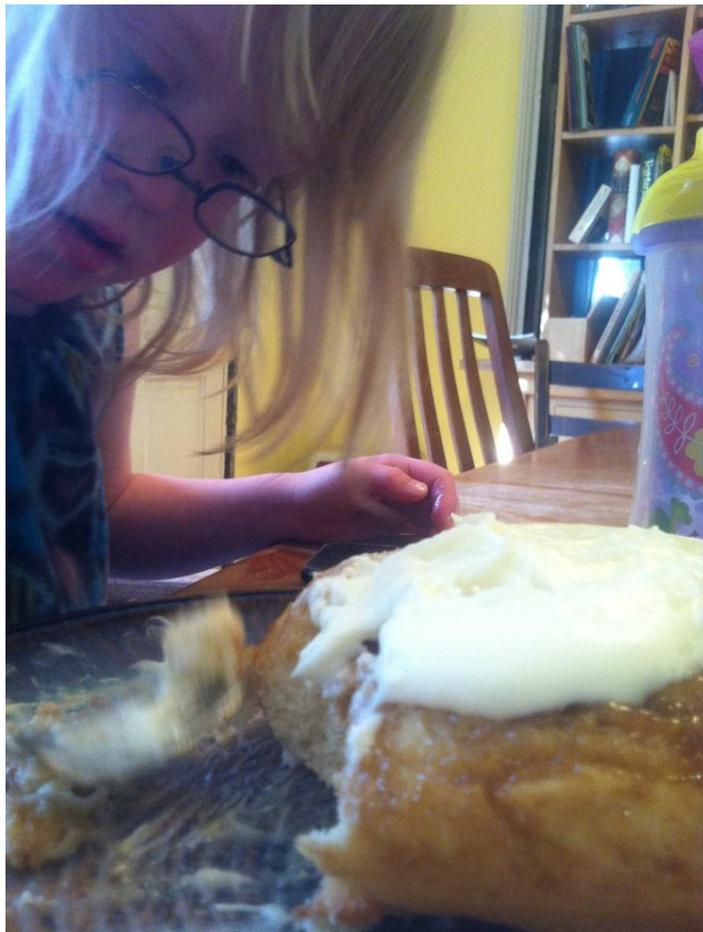
Annie Rides a Bike



Annie likes to ride her bike. She gets yogurt, Cheerios, and waffles at the store.



Sometimes Annie rides her bike to get
cinnamon rolls. Mmm...





Oh no! Annie is too big for her bike seat.
How will she ride?

She has a new bike to ride with Mama.
Look how much fun they have together!



The new seat sits right behind Mama.



See the seat? Click! We put on the seat belt so we are safe on our ride.

Here is Annie riding safely. She holds the handle bars just like Mama.



Look at Annie's feet! They stay on the pedals.

Annie likes to ride her bike. She is safe with her seat belt and it is fun!



Annie likes to learn new things. She has fun riding her bike.

- Sound & word discrimination games
- Memory games
- Encourage spoken language development

[More research on working memory in DS](#)



Low Tech

- PECS
- [Communication Skill Builder](#)



High Tech



- Developing social language is a **future-focused** goal
- Social communication is essential for education, relationship building, and success as a community member



- [Boston Hospital Speaker Series](#)
- [Down Syndrome Diagnosis Network](#)
- [Down Syndrome Education USA](#)
- [Down Syndrome Clinics](#)
- [Down Syndrome Research and Practice](#)
- [Lettercase](#)
- [Talk - Down Syndrome](#)(DS specific)
 - On speech in DS: [NDSC '14 Slides](#)
- [National Down Syndrome Congress](#)
- [National Down Syndrome Society](#)

- [See and Learn](#) language and literacy downloads specific to DS
- [The Learning Program](#) free language and learning downloads
- [Speaking of Speech](#) Free materials exchange
- [Mommy Speech Therapy](#) – great for parents
- [iPad/iTouch Apps for Special Education](#)
- [The Social Skills Picture Book](#)

- [Classroom Language Skills for Children With Down Syndrome: A Guide for Parents and Teachers](#)
- [Early Communication Skills for Children with Down Syndrome](#)
- [Fasten Your Seatbelt: A Crash Course for Brothers and Sisters on Down Syndrome](#)
- [Helping Children with Down Syndrome Communicate Better](#)
- [Woodbine Publishers Down syndrome series](#)
- [Working Memory and Learning: A Practical Guide for Teachers](#)

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