



## Homework Modifications for Students with Down Syndrome

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**Down Syndrome Connection**OF THE BAY AREA









### ACCOMMODATIONS

Changes the HOW of learning

Same content, different methods

Student is held at grade-level standards

Appropriate for students with a 504 plan or IEP

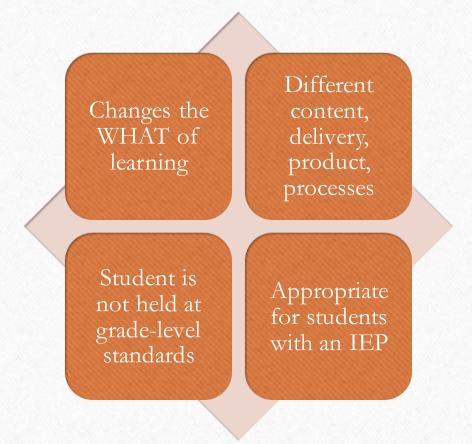








### MODIFICATIONS











## Students with Down syndrome need Accommodations AND Modifications

- 1. Quantity
- 2. Time
- 3. Level of support
- 4. Input
- 5. Output
- 6. Difficulty
- 7. Participation
- 8. Alternate goals
- 9. Substitute curriculum









### Accommodation vs Modification

#### Accommodation

- **Reading:** Provide books in alternate formats, such as Braille, large print, audio formats, and digital text.
- Math: Provide fewer problems on a worksheet (student completes all problems, but on multiple worksheets)
- **Testing:** Allow test to be taken in a room with few distractions
- **Grading:** Weigh daily work higher than tests for a student who performs poorly on tests due to the disability

#### Modification

- **Reading:** Provide alternate books with similar concepts but at an easier reading level.
- Math: Reduce cognitive demands; focus on mastery of more functional math concepts
- **Testing:** Use recognition tests (truefalse, multiple choice, or matching) instead of essays
- **Grading:** Permit student to rework missed problems for a better grade. Use a pass-fail or an alternate grading system









## Universal Design for Learning

Teachers create lessons and activities that incorporate the following:

- Multiple means of representation Information and content are presented in various ways, such as through visual, audio and tactile materials
- Multiple means of action and expression Students can demonstrate their understanding of the material in numerous ways, such as written, spoken, artistic or digital presentation.
- Multiple means of engagement Teachers provide different ways for the student to engage and remain motivated during the lesson.



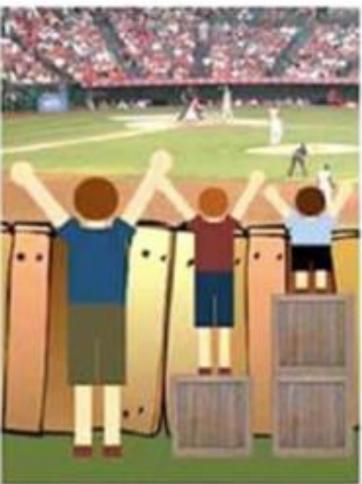




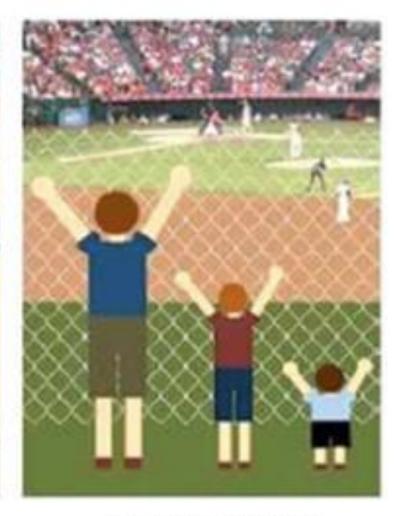




Equal, static instruction. (c.f. "Traditional Instruction")



equitable, support based on student need. (c.f. "accommodations and modifications")



Flexible learning experiences, such that variable learners have access. (c.f. UDL)







- Gather Facts About Learner (remember to focus on strengths!)
- Facts about the class, lesson, teaching style
- Identify mismatches between student facts
   & class/lesson/teaching style facts
- Brainstorm potential solutions to mismatches between facts
- Differentiate Content & Materials
- Differentiate Products & Assessments
- Differentiate Processes of Learning





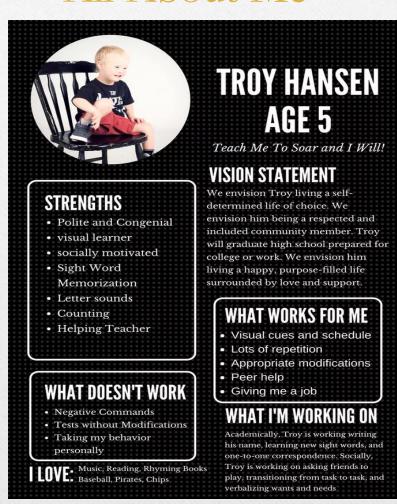






# Know you student AND his/her IEP Goals!

#### "All About Me"



#### IEP "Cheat Sheet"

| Student Name                          | STUDENT INFORMATION |  |
|---------------------------------------|---------------------|--|
| A STATE OF THE PROPERTY OF A STATE OF | Birthday (Age)      |  |
| SPECIAL ALERTS                        |                     |  |
| :                                     | Grade Level         |  |
| :                                     | Disability          |  |
|                                       |                     |  |
| RELATED SERVICES                      | DAILY LIVING SKILLS |  |
|                                       | 1                   |  |
| ABILITI                               | ES NEEDS            |  |
| Reading                               |                     |  |
| Writing                               |                     |  |
| Math                                  |                     |  |
| Social<br>Skills                      |                     |  |
| MODIFICATIONS & MANAGE                | MENT                |  |
| MODIFICATIONS & MANAGE                | NCH I               |  |
|                                       |                     |  |
|                                       |                     |  |
|                                       | 7                   |  |
| TESTING ACCOMMODATIONS                | 5                   |  |
|                                       |                     |  |
|                                       |                     |  |
|                                       |                     |  |
|                                       |                     |  |







- Know what the goal is for your learner
- Relate content to prior knowledge and interests
- Remember that "equity" isn't the same as "equality"
- Have the student's work be as close as possible (in appearance and topic) as the other students
- Know the common types of curriculum adaptations







- Although learning standards may be at a different grade level than those of same-age peers, educators still need to take the time to use high-quality content.
- Students with disabilities can be challenged to think deeper and use higher level thinking skills with appropriate supports as needed.
- "Productive Struggle"



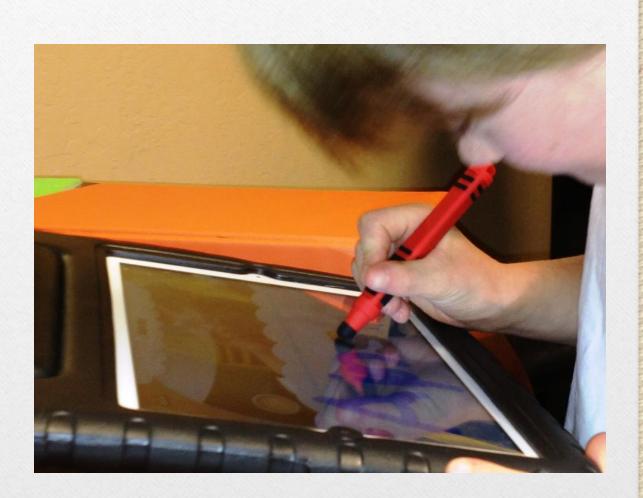






## Integrate Technology

- Find out what motivates and provides access for your learner.
- Examples: picture boards, choice cards, speech generating devices, books on tape, calculators, Ipads and applications, word processors, etc.
- Integrate technology throughout the day.



Allow multiple means of engagement with the curriculum.









## Multimodal Communication

- Accept and incorporate all forms of communication: gestural, verbal, approximations, choice boards, etc.
- Model and encourage the use of the student's main mode of communication.
- Incorporate performing and visual arts: drama, dance, song, college, photo albums, etc.
- A STUDENT MUST BE ABLE TO COMMUNICATE IN ORDER TO PARTICIPATE!











## Modifications

Modifications make the curriculum achievable! It involves combinations of altered content, conceptual difficulty, educational goals and instructional methods.

### Utilize a Strengths Based Approach Start by thinking about what they CAN do

| Can't                                  | Can   |  |
|--|---|--|
| Can't write                            | Can type, use tiles, user Clicker app, copy, dictate, highlight, circle |  |
| Can't speak                            | Can point or use AAC  |  |
| Can't add/subtract<br>/multiply/divide | Can use manipulatives or calculator                                     |  |
| Can't read                             | Can listen to a peer read, listen to audio book, understand visuals     |  |
| Can't learn all of it                  | Can learn the big idea, key vocab                                       |  |





## Stages of Modification

Can the student do what the rest of the class is doing?

If not, then determine the following:

- Can the student be given extra cues or prompts (such as highlighted text, or verbal and/or visual prompts from teacher) to accomplish the goals of the lesson? If not, then:
- Can the student get assistance from a peer to complete the lesson? If not, then:
- Can the student work in a cooperative learning group with adult assistance? If not, then:
- Can the student work on the same lesson with direct adult assistance? If not, then:
- Can the student work on a modified version of the lesson, accomplishing the most important objectives of the lesson? If not, then:
- Can the student work on an alternate activity that accomplishes the goals of the lesson?
- Can the student work with the same/similar materials but with an alternate learning goal tied to their IEP goals (ex: find and highlight all the 5s on a math worksheet)









## Reading Adaptations

#### **Accommodations:**

Larger print, audiobooks, read with sibling, use AAC to participate in reading aloud

#### **Modifications:**

- Comprehension worksheets highlight answers in the text, can color code to each question
- Ask concrete questions and provide prompt of two contrasting choices
- Search for adapted books online <a href="http://www.ric.edu/sherlockcenter/wwslist.html">http://www.ric.edu/sherlockcenter/wwslist.html</a>
- ReadWorks.org to find lower level reading passages with comprehension questions related to a topic/theme

| Macbeth                    |  |
|----------------------------|--|
| Match the character to the | description.   |
| Macbeth                    | Three old women who<br>make spells. They can<br>see into the future. |
| Duncan                     | She is married. She wants her husband to be King.                    |
| Lady Macbeth               | He is a soldier and a Lord. He wants to be King of Scotland.         |
| The Witches                | He is a kind, good<br>man who is King of<br>Scotland.                |









## Writing Adaptations

- Use markers instead of pencil/crayon
- Utilize a slant board
- Trace over highlighter
- Provide boundaries to write in
- Dictate to a scribe

or composing

- Provide a word bank
- Clicker Sentences or Clicker Connect App (low tech version: use sentence strips)
- · Keep the primary goal in mind, is it handwriting, spelling,









## Writing Modifications

### Reduce Cognitive Demands

#### Demands of journal writing

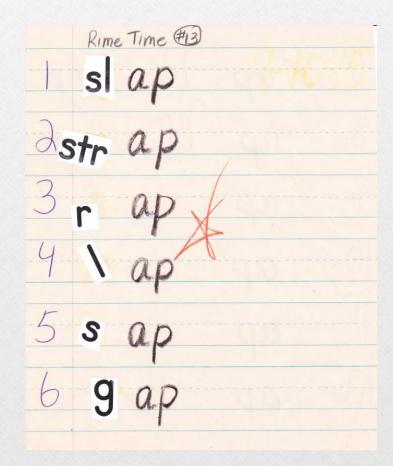
- 1. Come up with an idea (picture prompts)
- 2. Turn idea into a complete sentence (sentence starter)
- 3. Spell words (Clicker Sentences app, sentence strips cut up, dictate)
- 4. Write each letter (Clicker app, copy, trace highlighter, dictate)







- Build words with magnetic letters/letter tiles
- Fill in a missing letter (first, last, vowel, etc.) (can utilize label sheets if can't write)
- Circle the correctly spelled word
- Shorten spelling list (10 words, 5 words, etc)
- Utilize alternate spelling list related to IEP phonics goal

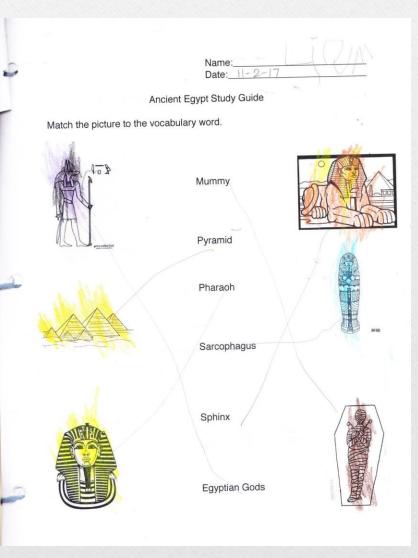






They may not learn everything the other students learn about the topic and that is OK, they will learn something.

- Focus on the main ideas and key vocabulary
- Make assessments that reflect their learning goals
- Aim for active participation and engagement





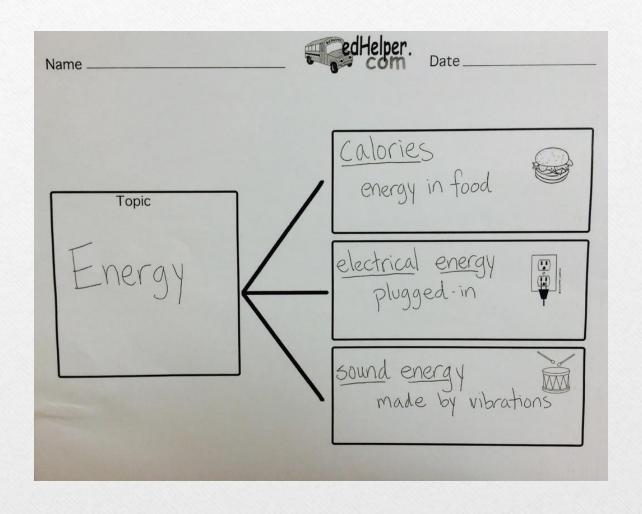






## Science and Social Studies

Utilize graphic organizers, visuals, word banks, simple sentences



| Energy Quiz                          |  |  |  |  |
|--------------------------------------|--|--|--|--|
| There are different types of energy. |  |  |  |  |
|                                      |  |  |  |  |
| 1are energy from food.               |  |  |  |  |
| 2. Drums makeenergy.                 |  |  |  |  |
| 3. Things that plug-in useenergy.    |  |  |  |  |
| word bank: calories sound electrical |  |  |  |  |



Don't forget about the community library and YouTube!

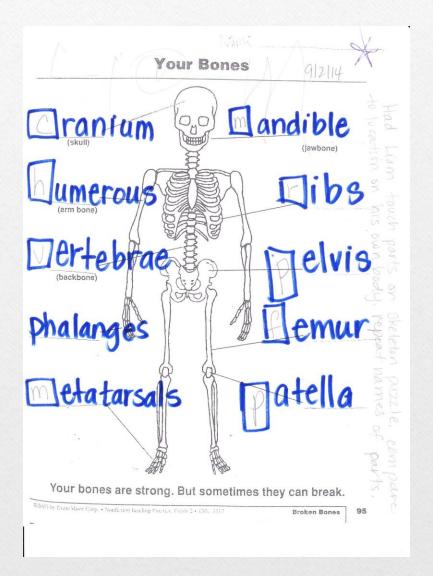


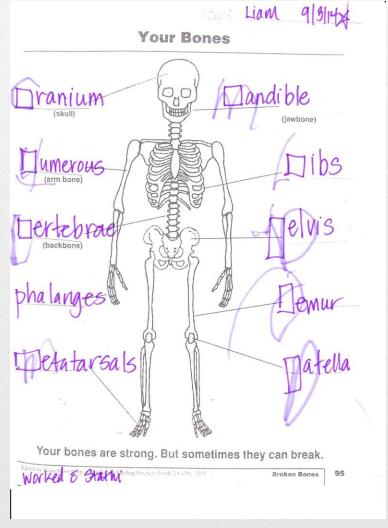


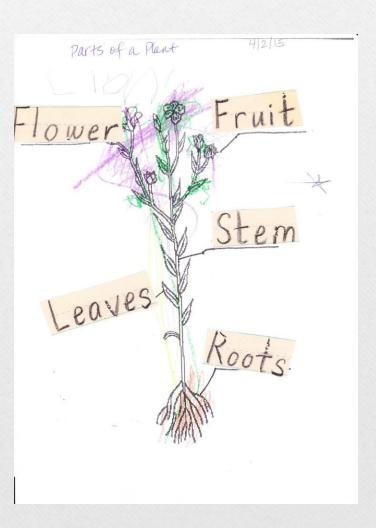


## Science and Social Studies

Use blank sticky labels, side by side modeling, and break task down one step at a time















## Math Modifications

Use manipulatives, number lines and hundreds charts (Numicon manipulatives)





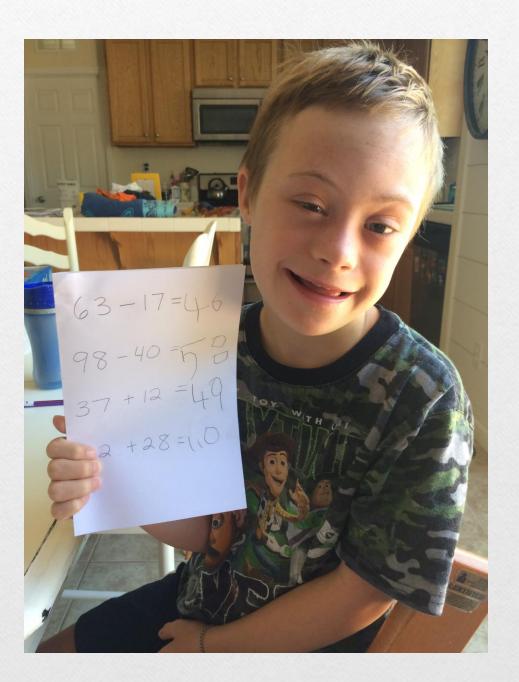






## Math Modifications

Introduce calculator in Kindergarten or First Grade (Talking Kids Calculator app)











## Math Modifications

#### Reduce Cognitive Demands

Demands of math word problem

- 1. Read the problem (parent/sibling read out loud)
- 2. Determine which numbers to use (highlight or circle)
- 3. Write equation (dictate to scribe, have already written)
- 4. Solve equation (manipulatives, calculator)
- 5. Write answer (prepared sticky labels, number tiles, copy, trace,
- dictate)





# Learning Approaches that Support Students with Down syndrome

#### Reading and Language:

- RLI: <a href="https://www.down-syndrome.org/en-us/resources/teaching/rli/">https://www.down-syndrome.org/en-us/resources/teaching/rli/</a>
- See & Learn: <a href="https://store.dseusa.org/collections/see-and-learn">https://store.dseusa.org/collections/see-and-learn</a>
- Special Reads for Special Needs: <a href="https://specialreads.com/">https://specialreads.com/</a>

#### Math:

- Numicon: <a href="https://global.oup.com/education/content/primary/series/numicon/?region=international">https://global.oup.com/education/content/primary/series/numicon/?region=international</a>
- Touch Math: <a href="https://www.touchmath.com/">https://www.touchmath.com/</a>
- Making Math Real <a href="http://www.makingmathreal.org/">http://www.makingmathreal.org/</a>



