

Meet Their Need and They Will Read

“Meet their need, and they will read.”

- Individual needs vary: ⇨
- Learning Style?
 - Secondary diagnoses?
 - ABA strategy in place?
 - Vision issues?
 - Apraxic or non-verbal?
 - Etc.

But the need for using Methods, Motivation,
and Materials designed for the learner
with Down syndrome remains unchanged.

What about a Dual Diagnosis of DS/Autism?

We teach to the autism.

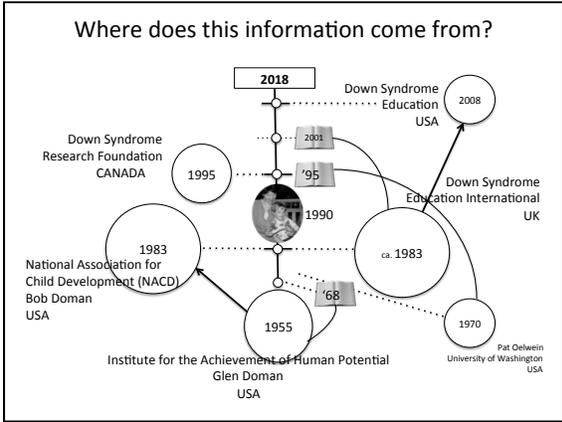
Please refer to:

*The Sie Center for Down Syndrome
at Children's Colorado
in Aurora, Colorado*

Tip For Educators:

- Don't wait until a child with Down syndrome shows typical reading readiness signs.
- These skills will gradually come with reading support.
- I.e., don't wait until the child can
 - read his/her own name,
 - recite the alphabet
 - know some/all letter sounds
 - recognize some/all letters
 - re-tell a story,
 - recognize that progression of text is left to right, top to bottom, etc.

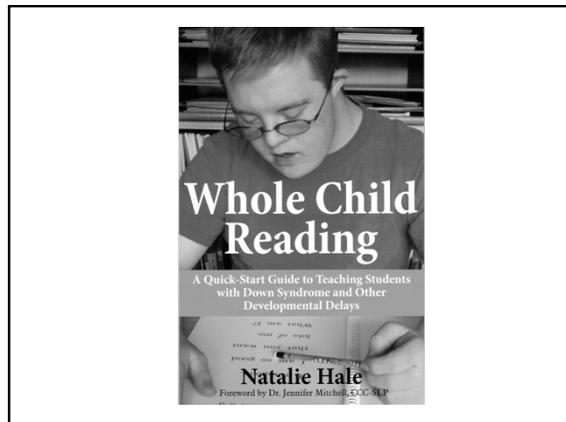
Source of This Information



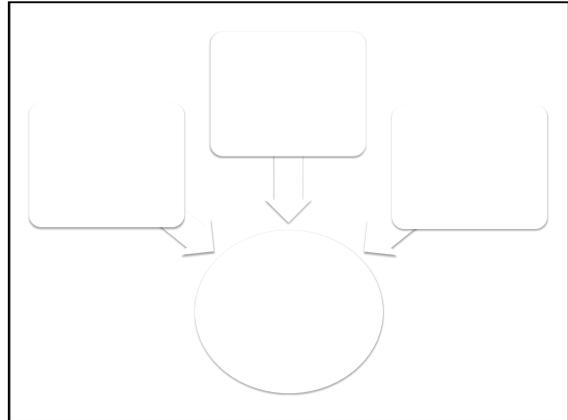
So How Do We Teach
So That Children Can Learn?

Go in through the Heart

“Go in through the heart
and teach to the brain.”



911



Blair,
33

•
•
•

massive
white board

 = USC Trojans

How do we
“Go in through the heart”?



Engage.



Personal Pages



Personal Books



Modified Books



Lotto Games

Why is it so important
to “Go in through the heart?”

Why is motivation so
critical?

Because of the 11th Commandment.

The Eleventh Commandment:

- *special needs anything that interests them not;*
- *Verily, they shall be interested only in that in which they are interested,*
- *and shall not be interested in any other thing.*
- *Woe be unto those who do not revere and abide by this commandment.*
- *Amen.*

...and “Teach to the brain”

Why is that so
critical?

...take a look at the neurology
behind that 11th Commandment!

“The New Brain Science of Learning”
 Dr. Martha Burns TEDxEnola

The Neurochemistry behind learning involves the HOW of Teaching.

The WHAT of Teaching	The HOW of Teaching
Symbol development	Keep the student INTERESTED,
We educate the left hemisphere	ENGAGED,
Reading, math, sciences, etc	MOTIVATED,
	INTERACTIVE

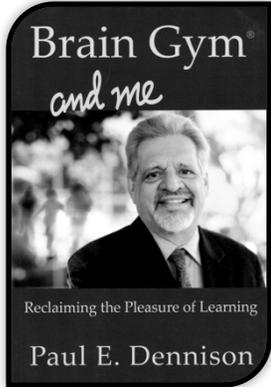
LEFT BRAIN RIGHT BRAIN

NEUROMODULATORS!!!
 These are the guys you want onboard.

- DOPAMINE
 -
 -
 -
- ACETYLCHOLINE
 -
 -
 -
- NOREPINEPHRINE
 -
 -
 -

Prepare the Learner
 with
Brain Gym

**About
 the brain
 and learning...**




Understand
Brain likes
What does
What can
What reg
What does

We are here to learn it can be.

Hydrate.
 The brain is electric,
 and water conducts electricity.
 It's a no-brainer.

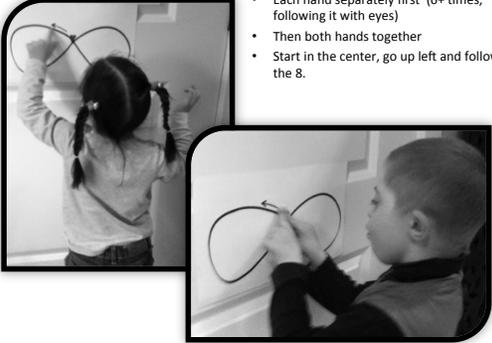


Before learning...



Crossovers or Cross-Crawl

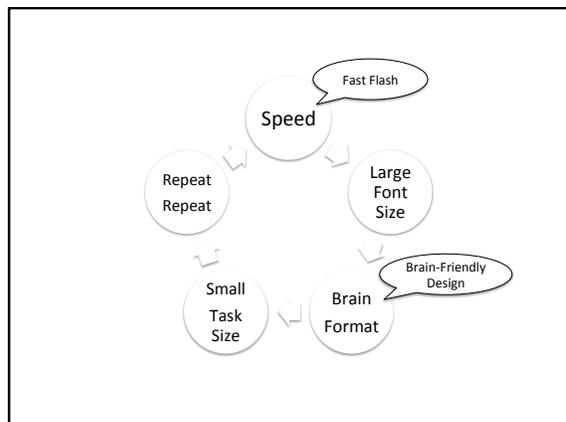
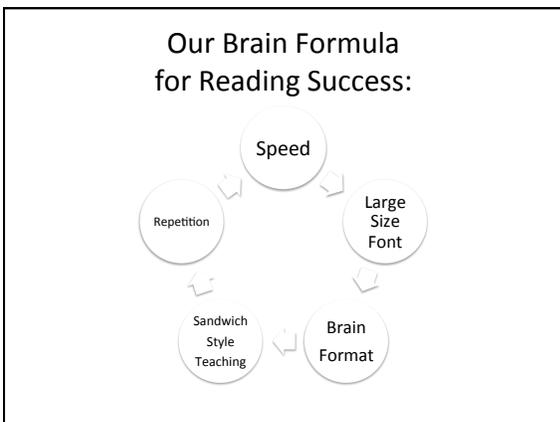
Lazy 8's

- Each hand separately first (6+ times, following it with eyes)
- Then both hands together
- Start in the center, go up left and follow the 8.

Super Brain Yoga

1. Right arm on top
2. Grip the ear lobes
3. Inhale as you bend the knees
4. Exhale as you straighten
5. Ten times is good
6. Not too fast

So what is a Brain-Friendly Design?

- to look/where not to look.
- **NO VISUAL CLUTTER:** Keep it simple with lots of white space.
- **BREAK UP TEXT WITH PICTURES.** This keeps “overwhelm” to a minimum.
- **LARGE FONT SIZE. This bears repeating!**
- **DOUBLE SPACING BETWEEN ALL WORDS.** The brain doesn’t have to figure out where one stops and the next starts.
- **KEEP EACH PAGE SIMPLE.** You will need to use more pages than typical to cover a topic.

Recap: Brain-Friendly Design

-
-
-
-
-
-

For emergent readers

2		I like Olaf.	3
4		 I like Olaf.	5

For more advanced readers

	Olaf is a funny snowman. Anna and Elsa like to play with him and skate together. They laugh and have so much fun with him!
--	--

BASICS

We Teach Reading for Meaning

- We do not focus on rules of phonics
- We teach phonemic awareness as almost incidental to the “Real Deal,” the Real Deal being
- The fact that we want to find out what’s in a book, a magazine, an article, etc.

We follow
3 BASIC GUIDELINES
 for teaching learners with
 special needs:

- small task size
- frequency
- duration

Should We Do
 1-on-1 Pullouts For Reading?

YES.

--The UK's Down Syndrome Education International
 (RLI: *Reading and Language Intervention*)

--Special Reads for Special Needs, USA

WHY?

Experience, experience.

- individual learning styles
- individual rates of progress
- secondary diagnoses
- vision issues, often undiagnosed
- non-verbal, apraxic, etc.
- individual rates of ability to focus
- family differences in time available to teach the learner
- vastly different interests, crucial to "high interest materials"

TEACH LETTER SOUNDS FIRST
 before letter names.

...WHY?

W

"wuh"

W

"duh-buhl-yew"

Then we teach sight words,
 both high interest
and high frequency,
 by sight recognition.

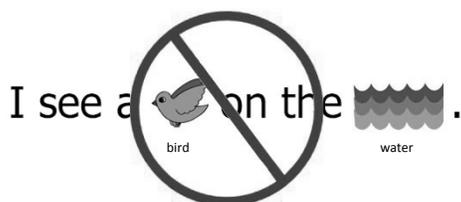
Why?

In this way, we capitalize on the visual learning strengths known to be common with learners with Down syndrome, and avoids their learning weaknesses.

What learning weaknesses?

Learners with DS typically have...

- Difficulty discriminating sounds
- Poor short term memory
- Poor auditory memory
- Fluctuating hearing loss throughout life
- Deficits in auditory processing, which impact phonological awareness (discriminating and blending sounds, as well as keeping the order of sounds in short term memory)



No Rebus, please.

Well, why not?

- not the words.
- “Reading” a picture is infinitely easier for a child than reading a new word. Why should they bother?
- Once the attention is on the picture, it is difficult for the child to switch tracks. (distraction)
- Right Brain function: remembers pictures
- Left Brain function: remembers words, details, processes information
- Use of Rebus slows reading progress rather than enhancing it.
- Use of Rebus also gives a false impression of reading success.

Let's talk about...

- Decoding
- Fluency
- Generalizing
- Comprehension

Decoding

Decoding Help

- Letter **SOUNDS first**: app *StarfallABC*
- Flip books, games teaching phonemic awareness: *reallygoodstuff.com*
- Experience
- Experience
- Experience
- Repetition
- Repetition
- Repetition

Fluency

- Don't interrupt for more than 2-3 seconds
- Keep a running record of stumbles
- Work those errors later
- Repeat a sentence (paragraph) 3 times
- Join in the 3rd time for encouraging speed

Magic Decoding Card



Small task size!

Generalizing

One brilliant tool...



What about Comprehension?

When a child learns to read for meaning, comprehension follows naturally.

This is how previous generations learned to read.

Comprehension

1. Referential comprehension
2. Inferential comprehension

There is no comprehension without fluency and speed.

Comprehension Fun 1 

The puppy did not want to read.
He wanted to go for a walk.
When he listened to a story, he
felt asleep.

Who did not want to read?

What did the puppy want to do?

When did the puppy fall asleep?

Comprehension Fun 1
(Without Color Prompts) 

The puppy did not want to read.
He wanted to go for a walk.
When he listened to a story, he
felt asleep.

Who did not want to read?

What did the puppy want to do?

When did the puppy fall asleep?

special reads.com

Resource:

Strategies That Work 3 (3rd Edition)
(Book) by Harvey & Goudvis

1. Short, High Interest Text
2. Teach Active Reading rather than Passive Reading
3. Sticky Notes: This is what happened; Huh?; What I think about this; etc.
4. Student reads the sentence aloud twice; then once again silently to herself
5. Early Training: use several color highlighters to code questions and answers
6. Teaching reading comprehension is mostly about TEACHING THINKING.

Strategies

What is the methodology behind this

“In through the heart,
teach to the brain”
approach?

Methodology

- Fast Flash Technique
- Sandwich Style Teaching
- Errorless Testing

+

- High Interest Materials
- Brain-Friendly Layout

Fast Flash



Cards Per Second:

one or two

two

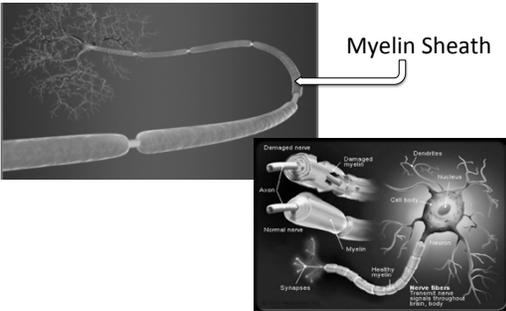
How many cards in a group?

one two three four five

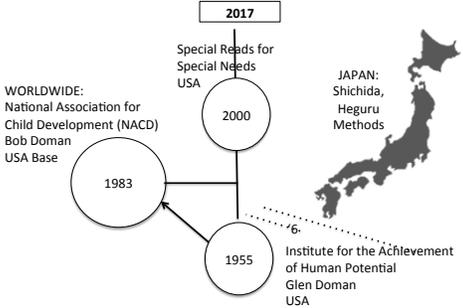
Flash the group how many times?

3

The neurology of learning



Fast Flash used as a basic technique:



Speed + Size = Brain-Friendly

The trouble is that we have made the print too small.

The trouble is that we have made the print too small.

The trouble is that we have made the print too small.

The trouble is that we have made the print too small.

About those Flash Cards...

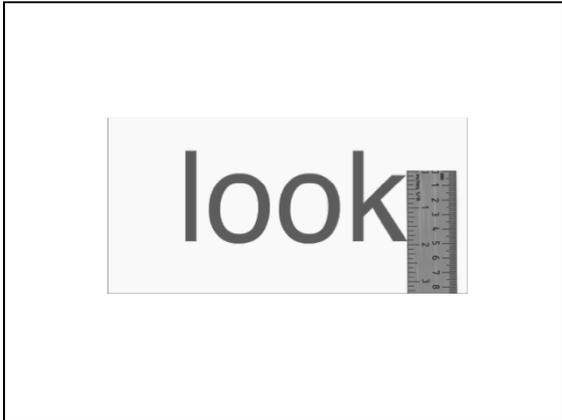
make them big



and

make them red

like this later



Understanding The Visual Pathway
As It Relates To Learning To Read

Maturing the Visual Pathway is a Practiced Process.



The Immature Pathway

If there is no practice,
not only is there no progress;
There is no process.

It's a jungle out there.
So how do we mature the visual pathway?

Assuming that there is no neurological defect in the visual pathway, we are concerned with this very complex process:



- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

"We can say that reading consists essentially of creating an interface between vision and the spoken language system.

"The child already has a language system and visual system; but it needs to create an interface."

*-Prof. Stanislas Dehaene
You Tube Video: "How the brain learns to read."*

We begin to create that interface quickly with fast flash.

Review: Fast Flash Details

- 5 cards in a group
- Add more groups gradually
- Flash a group 3 x in succession
- **2 cards per second** if possible!

Why so **big**?

There is a vast difference in the amount of visual pathway maturity needed to recognize:



As the visual pathway develops:

- large type goes to
- smaller type, which goes to
- smallest type, without a problem

FAST FLASH TIPS

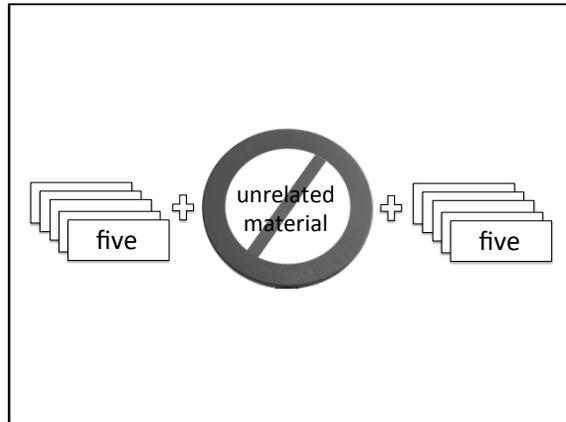
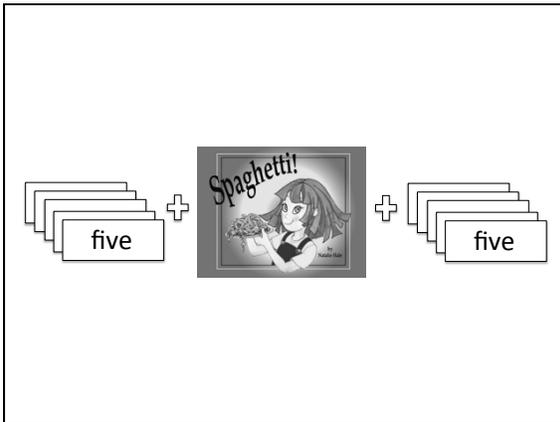
- Sit directly across from the child, not alongside
- Watch the child's eyes for attention and tracking
- Mix in at least 2 high interest words into a group of 5 (e.g., a group of 5: Woody, eat, in, Buzz, the)
- Start with one group of 5; add another group and then another, as the learner is ready
- Keep the words fresh and varied: pull some out and insert new ones if you sense boredom
- Pull learned words and replace with new ones

What if the child won't focus?

- Slap the cards down on the table, same speed, 3x
- Check your content: 2:5 high interest? 3:5? Why should he look at the cards? Does he need a 5:5 ratio?
- Turn off the lights, give her a flashlight pen
- How fast are you moving the cards?
- Are you using red ink?
- Try 2-inch high lowercase letters
- Is there a visual problem?
- Has he had enough energy-releasing movement before sitting?

Sandwich Style Teaching





Flash cards must relate to the “Filling” in the Sandwich!

We teach reading for meaning.

Period.

Testing

“Errorless” Testing



We test children in ways that **Avoid Failure** and **Maximize Success** and confidence.

ERRORLESS TESTING TECHNIQUES
First defined by Patricia Oelwein

Step 1: Matching → Step 2: Selecting → Step 3: Naming

Move quickly through a test; give help quickly before discouragement sets in.

Teaching Is Not Testing; don't confuse the two.

Errorless testing is used to avoid the common “FOF syndrome”: Fear of Failure.

Matching

	Super
Super	Heroes

	Super	
Super		Heroes
Dora		Wiggles

More about matching...

As the learner advances,
move from matching words to words
to...

matching sentences to sentences
and...

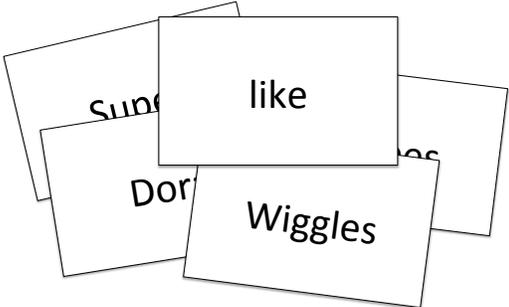
matching sentences to pictures

Selecting

Super	Wiggles
-------	---------

Super	Heroes
Dora	Wiggles

Naming



5 Components of Reading: without these, there is **no Comprehension**.

- **Phonemic awareness**: detect, separate, and join sounds
 - 44 phonemes in English
- **Phonics**: letters that produce those sounds (**Decoding** = phonics + phonemic awareness)
 - 26 letters
 - 44 phonemes

5 Components of Reading, cont'd:

- **Fluency**: speed with prosody
 - **Prosody**: recognition of punctuation, sing-song voice, pauses, etc.
- **Vocabulary**: relies on the learner's understanding and familiarity with a topic
- **Comprehension**

So how does the heart-brain method achieve orthographic reading?

- Phonics + Phonemic Awareness (decoding)
 - we teach letter sounds from the start
- Fluency
 - experience, experience, experience
- Vocabulary
 - ever advancing personal books, high frequency word books, modified books
- Comprehension
 - topics are of high interest

We can make this simple,

or we can make it hard.

Can a child with special needs learn to read only by knowing letter sounds, reading books on topics he loves, and having a great deal of reading experience?

Yes.

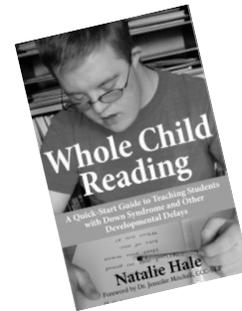
Decoding can and does happen through experience, just as it did for most of us prior to the last two decades.

Resources



"iSeries" of dozens of books

The latest from Woodbine House:



Tools

USE A POINTER! Why?

The pointer is a visual extension of the brain's focus.

- You will know if they are following correctly.
- With your pointer, you can guide them to the exact word you are reading.
- It keeps them correctly distanced from the book, rather than "nose to paper," which quickly becomes a habit.
- It's impersonal (no finger in-the-face.)



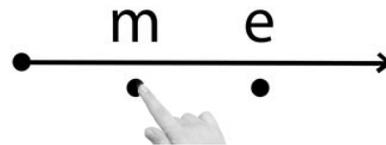
A pointer helps to establish the correct distance habit.



www.reallygoodstuff.com



Make it relate. Make it fun.



From the book
"Teach Your Child to Read in 100 Easy Lessons"

The Magic "Pull Card"

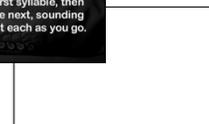
An Indispensable Tool For Advancing Readers

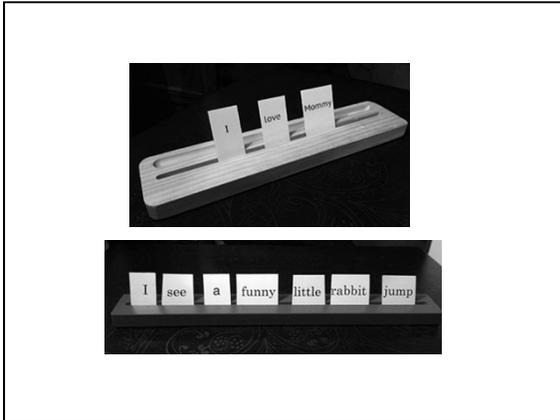


Magic Decoding Card



Small task size!





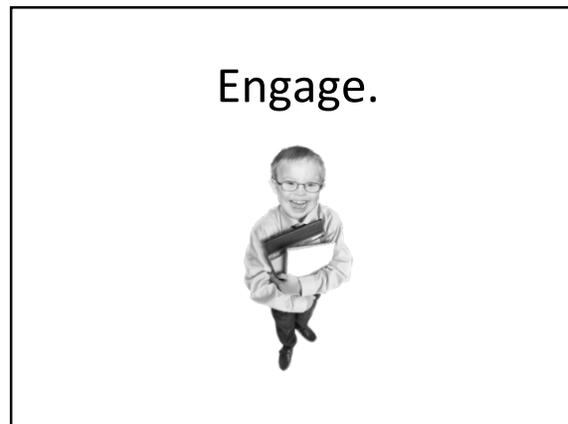
Focusing Help for ASD/Autism/
DS/ADHD/ADD

Sentence Building
Signing Text

Cook said, can you help

Sentence Building
Signing Text

And most important
tools for
“Going in through the heart”



- ♥ Personal Pages
- ♥ Personal Books
- ♥ Modified Books
- ♥ Lotto Games

Personal Pages

Personal Pages



The Super-Motivator!

- Fast
- Easy
- Kids love it
- Home & School Use
- Terrific tool for generalizing vocabulary



- ♥ Personal Pages
- ♥ Personal Books
- ♥ Modified Books
- ♥ Lotto Games

Personal Books



Dancing in a Personal Book Fortress...



And that leads us into...

♥ Materials:

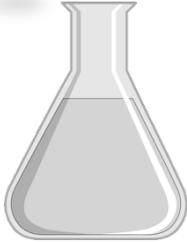
- plain bond paper; 28 # if possible (sturdier)
- your storyboard guide
- pencil, eraser
- pictures to download into pages
- computer & software (powerpoint, etc.)
- printer

 What's Your FORMULA ???

 Reading Level

 Age/Interest Level

 +  = your formula



Example: 

 Reading Level

 Age/Interest Level

Your Brain-Based Visual Format

Landscape Format 

Large Font Size, Sans Serif

2 or 3 spaces between words

How big should the font be?

32 point

72 Point

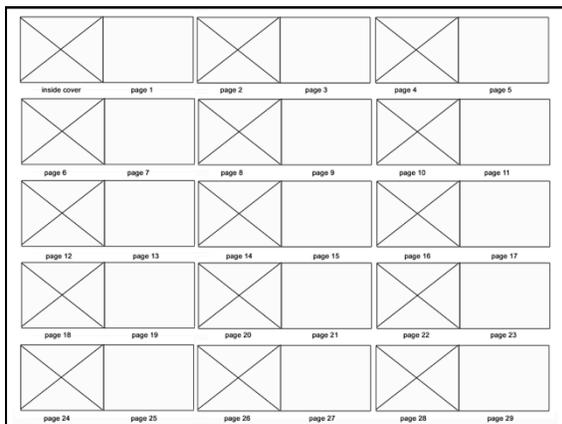
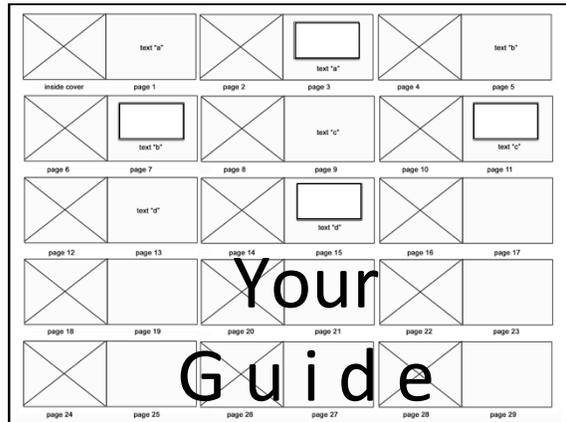
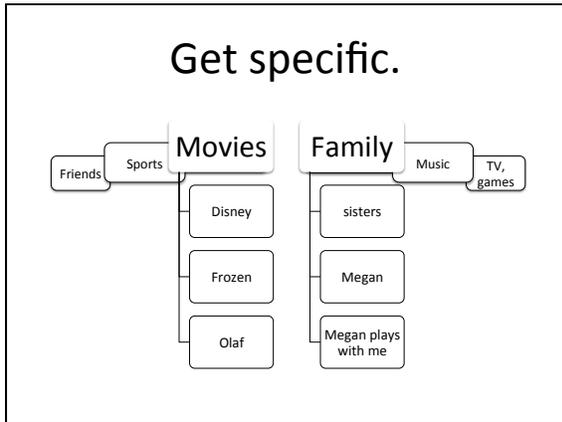
100 point

What's the best font to use?

PT Sans Caption

↓ ↓

I love you.



Remember the FORMULA !

○ Reading Level

○ Age/Interest Level

? + **?** = the formula

×

I like Olaf.



	I LIKE OLAF
2	3

	 I LIKE OLAF
4	5



	I like Olaf.
2	3

	 I like Olaf.
4	5




	I like Olaf.
2	3

	Olaf is friends with Anna and Elsa and they have fun.
6	7




	I like Olaf.
2	3

	Olaf and Anna play.
6	7



	Olaf is a funny snowman. He plays with Anna and Elsa in the snow. They have fun.
--	--



	Olaf is a funny snowman. He plays with Anna and Elsa in the snow. They have fun.
--	--

✓

	Olaf is a funny snowman. He plays with Anna and Elsa in the snow. They have fun.
2	3
	 Olaf is a funny snowman. He plays with Anna and Elsa in the snow. They have fun.
4	5

✓

	Olaf is a funny snowman. He plays with Anna and Elsa in the snow. They have fun.
2	3
	
4	5

How do we progress the reader through personal books?

Increasingly...

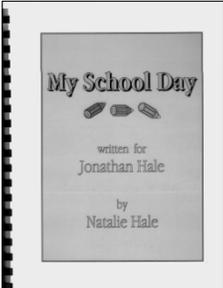
- ✓ • Longer sentences
- ✓ • Smaller type
- ✓ • More text on a page
- ✓ • Incorporate higher word lists

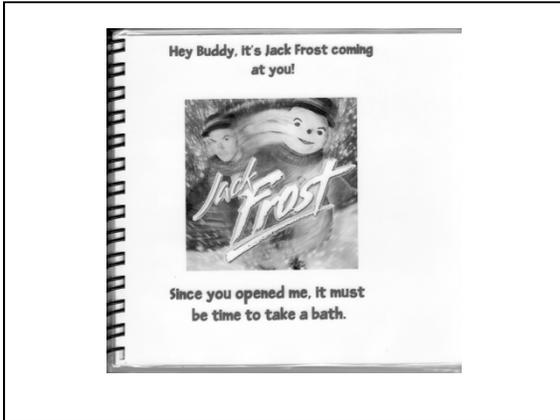
Samples of a Natural Progression:

Book 1 (age 5)	Book 2 (age 5 1/2)	Book 3 (age 6 1/2)
I play my drums every day. I play my tom-tom. Boom, boom! I play my bongos. Boom, boom! I play my Indian drum, too. Boom, boom, bang! I have so much fun!	I like my trains. I have four trains. I have a red train, a black train, a blue train, and a tan train. All my trains have a locomotive, a coal car, and a caboose. Wow! I like my trains.	I just love trains. I love them so much that I asked Santa Claus to bring me five trains for Christmas! He brought me one train. I was glad. It's a good one. I like it a lot. Do you know why I like trains so much? I'll tell you. I like trains because they are fun to play with. I like to watch them go fast and go slow.
		I like to watch the headlight on the locomotive as it goes around the curve. I like to listen to its whistle. My Mamaw gave me a train whistle for a present. I like to blow on it. It sounds just like a real train! I play with my trains every day. Hooray for trains! I like them!

Social Stories

A natural extension of personal books

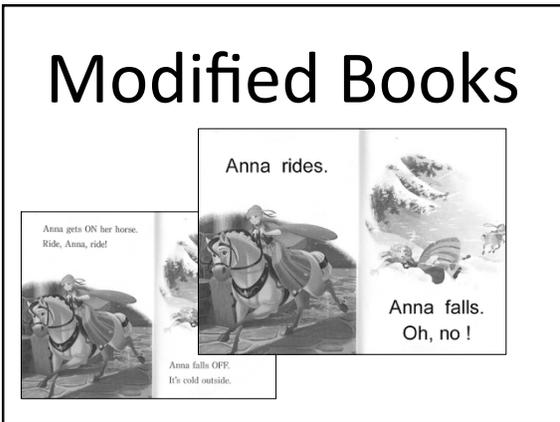
	<p>Getting out of bed is the hardest thing about going to school. Sometimes I hide in the covers.</p>  <p>I tell my marna that school is closed. If she doesn't believe that, I tell her I'm sick. If she doesn't believe that, I get dressed.</p>
--	--



Technical Stuff for Personal Books

- Tahoma, etc.
- LARGE FONT SIZE: 36 to 72 pt.
- DOUBLE SPACE between all words
- Keep sentence length and vocabulary appropriate to skill level of learner
- Target certain words and repeat, repeat, repeat their use
- Remember "Dick and Jane" books: repetition forever

- ♥ Personal Pages
- ♥ Personal Books
- ♥ Modified Books
- ♥ Lotto Games

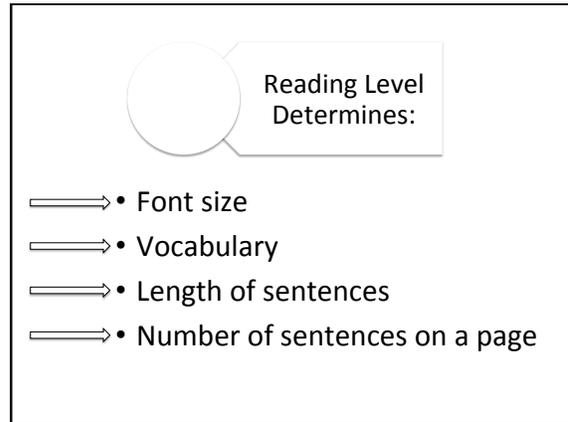
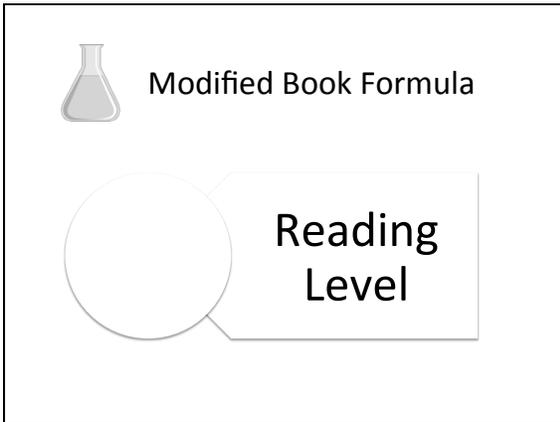


Let's choose a book to modify.

Requirements:

1. The child ♥ the topic
2. Text blocks are only 1 to a page; 2 at most
3. Pictures and layout are clear, not cluttered

- ### ♥ Materials:
- full page permanent label sheets (any office store)
 - post-it notes to use in planning the text before printing labels
 - ruler to get page measurements
 - computer
 - printer



Random House

Step Into Reading Series
www.stepintoreading.com

Bert loves pigeons, and pigeons love to coo. Can you guess who Elmo loves? Elmo loves you!

Bert loves pigeons.

He walks on two feet.
He reads books.

He watches TV.
He wants to be a chef!

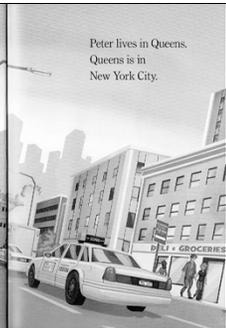
He walks.
He reads.

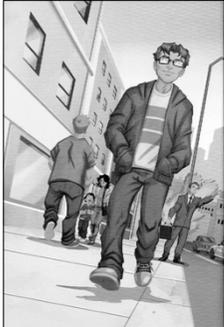
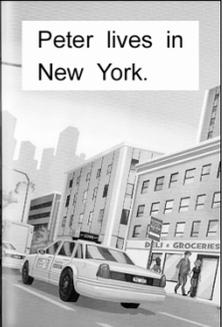
He wants to be a chef.

<p>Anna gets ON her horse. Ride, Anna, ride!</p> 	 <p>Anna falls OFF. It's cold outside.</p>
--	---

<p>Anna rides.</p> 	 <p>Anna falls. Oh, no !</p>
---	---

<p>This is Peter.</p> 	<p>This is Peter.</p> 
--	--

	<p>Peter lives in Queens. Queens is in New York City.</p> 
---	--

	<p>Peter lives in New York.</p> 
---	---

<p>The queen teaches Merida how to be a princess. She shows Merida how to play the harp. Merida is bored.</p> 	<p>The queen teaches Merida. Merida is bored.</p> 
--	---

- ♥ Personal Pages
- ♥ Personal Books
- ♥ Modified Books
- ♥ Lotto Games

Lotto Games

♥ Lotto Games ♥

- Personal
- Highly motivating
- Expands vocabulary beyond personal books
- 7 levels of difficulty: adaptable

Start with topics of family members, pets, favorite activities, etc....

The diagram shows a 3x2 grid of cards. The top row has a cat and a pig. The middle row has a bear and a rabbit. The bottom row has a dog and a bird. To the right of the grid is a separate set of cards with the words 'pig', 'cat', 'dog', 'bird', 'bear', and 'rabbit'. Dimensions are indicated: 11 inches for the height of the grid and 8.5 inches for the width. A note says 'Make a second set to cut into cards.'

♥ 7 Steps of Difficulty:

1. Picture to picture
2. Word to word, with prompts
3. Word to picture, with prompts
4. Picture to word, prompts
5. Word to word
6. Word to picture
7. Picture to word

Two photos show a child interacting with the Lotto game cards. In the top photo, the child is pointing at a card with a picture of a bear. In the bottom photo, the child is pointing at a card with a picture of a bear, with other cards visible below it.

Why bother with level 1, Picture-to-Picture? They could do that in their sleep.

Exactly.

- Because it preps the Visual Pathway.
- Because it gives him confidence. "I can do this!"
- Because it gives him a chance to get familiar with the photos or art you've chosen, and identify that picture with the corresponding word. All pictures are different.

A photo shows a child sitting at a table, looking at a grid of cards with pictures of animals. The child is pointing at one of the cards.

Our only goal is...



"I did it!"