

Communication All Day Long! AAC in the Classroom

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ASHA Disclaimer:

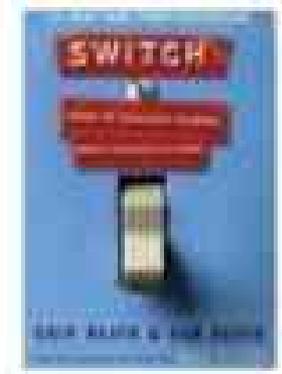
Caroline Ramsey Musselwhite

- **Relevant Financial Relationships:** Caroline Musselwhite is the owner of AAC Intervention and receives compensation as such. During her presentation she will be referencing her company and actual case studies. She has authored many books and software items and receives royalties and or consulting fees for these publications through her company, Don Johnston Inc. and the Attainment Company. She has consulted with other companies including AbleNet, Assistiveware, and Panther Technologies. She has consulted with nonprofit groups such as FAST and Angelman Syndrome Association.
- **Relevant Nonfinancial Relationships:** Caroline Musselwhite is a founding member, Executive Board Member, and Board of Directors Member of the International Society for Augmentative and Alternative Communication (ISAAC).

SWITCH: Key Concepts

- Tired, confused brains!!
- **Rider** = rational side
 - Has the reins
 - Tends to analyze (or over-analyze)

How-To's
At AAC
Intervention



Chip & Dan
Heath

- **Elephant** = emotional side
 - Really big! Goes where it wants
 - Has the passion (but is into instant gratification!)

Stories &
Videos &
TryIts

- **Smoothing the Path** = make it EASY!

Tips &
Tricks

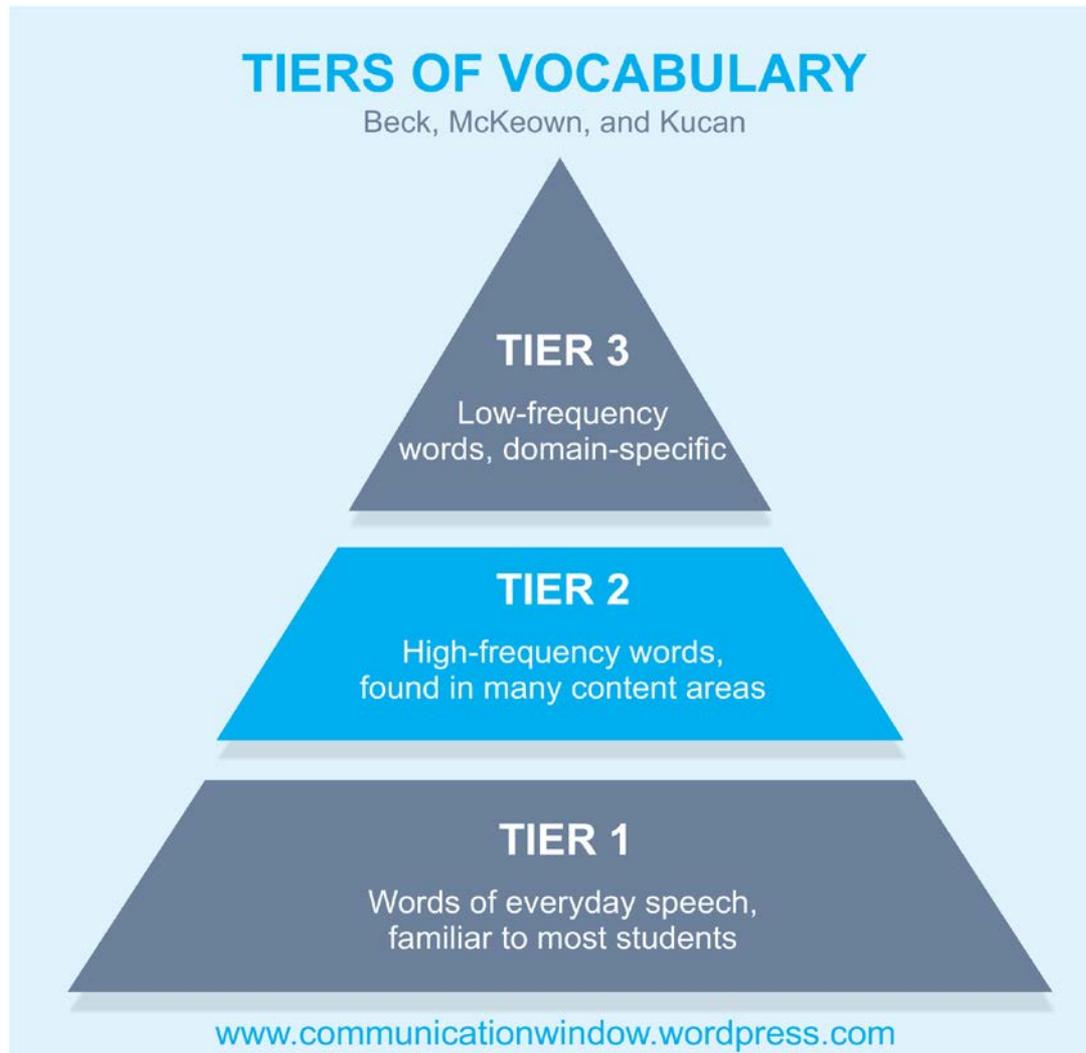
By Chip & Dan Heath

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AAC in the Classroom: What Do We Need?

- **AAC System Always Available:** Yes, ALL day!!
- **Smart Partners** – people who know the language on the system
- **Peer Supports** – peers are great modelers . . .
And great problem-solvers!
- **Creativity** – Need to find ways to encourage use of AAC across all activities

A Framework for Thinking about Vocabulary from the Literacy World



Tier 1 Words

- Basic Words
- Students need to know them
- Sight words
- Don't require instruction
- AAC terms: core vocabulary +
- Examples: I, it, want, will, have, happy, clock, baby, movies

Tier 2 Words

- Somewhat high frequency in academics
- Are cross curricular
- Important for understanding texts
- May have multiple meanings
- Allows student to give rich descriptions about concepts
- Allows student to be specific
- These words increase their level of communication
- AAC terms: general academic core/content
- Examples: merchant, tend, fortunate, maintain, hasty, absurd, required, performed

Tier 3 Words

- Very low frequency of use
- Specific to a domain/field of study
- Found far more often in informational texts
- AAC terms: fringe vocabulary
- Examples: igneous, metamorphic, osmosis, Boer War, mitochondrion, sine

Descriptive Teaching Method

Gail Van Tatenhove

A process for teaching
and reinforcing
the use of core language
- high frequency words -
in the classroom
throughout the entire school day

www.gailvantatenhove.com

Descriptive Teaching Method: Gail Van Tatenhove

Instead of programming more and more words into the AAC device for vocabulary for each new area of the curriculum, the student communicates those new ideas with high frequency, re-usable words already in his/her vocabulary system.

Shift Instructional Language From Referential to Descriptive

Referential Language

Unit-specific vocabulary

Many new words

Elicit quick single word responses

Expect correct/incorrect responses

Descriptive Language

Plain language

Use familiar words to describe new concepts

Elicit multi-word responses

More than one correct response

Key Strategies

- Plan A: This is **interactive**; Expect a response that is:
 - Active
 - Generative
 - Using speech and AAC device
- Plan B: **Model, model, model**
 - Using student's AAC system!
 - Talk Aloud to show where you find the words
 - Okay . . . Describing words . . . More . . .



Vocabulary Considerations for AAC Devices

- **Problem with academic vocabulary on AAC device:** Here today—gone tomorrow!!!
 - Vocabulary may not be used after the unit is over
 - Amount of space taken up on device with academic vocabulary
 - Motor demands
 - Simply saying the vocabulary word on the AAC device doesn't ensure a deep understanding
- **Solution:** Consider having AAC words that students can say ALL of the time to TALK about the target vocabulary word

Ask These Questions:

- **1)** Is this word only for a single unit of study, or will it be used across many units
- **2)** Will this word be used AFTER the unit is over??
- If the answer to either question is NO, consider using light tech supports, such as lists

Instead of Always **Pre-Teaching** . . . Teach **During** Shared Reading!

Mr. K: "There is hot lava everywhere.' Wow! LOOK OUT!"
(pauses)

Jake: "What?"

Mr. K: "Hot lava!' DO NOT touch!"
(points)

Mr. K: "So hot! Red hot!" *(pauses)*

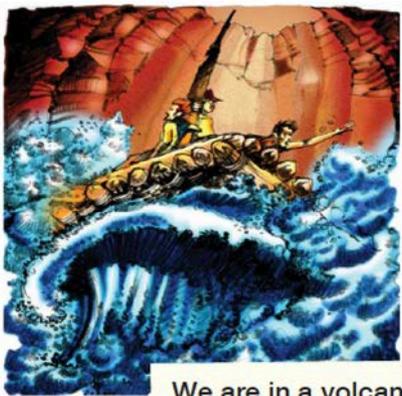
Ellie: "Hot."

Mr. K: "Right Ellie. Hot red lava!
It Goes DOWN. It's IN the volcano."

Readtopia: Journey

www.donjohnstoninc.com

38 Chapter 10: The Way Out



We are in a volcano.
The volcano is going to erupt!



There is hot lava everywhere.

Vocabulary Mining – Tier 2 Words!

Words Words Words!!

WHAT AND WHY: I often caution against adding content words to AAC devices, instead suggesting using Gail van Tatenhove's strategy of Descriptive Language Teaching. This strategy uses 'Tier 1 Words' (basic or core words) to describe less frequent words such as 'igneous' or 'mummy.' However it may be very helpful to teach and/or add rich Tier 2 words (general academic vocabulary: words that are high frequency but may have multiple meanings, such as 'cluster', 'sympathy', 'absurd, and 'judge'.) For students engaged in academics, these Tier 2 words may help them define less frequent words and write more successfully.

HOW TO 'MINE FOR TIER 2 WORDS:

- Select words from books that students are reading. For example, we were reading a story from *20000 Leagues Under the Sea/ Readtopia*. Two words that some students didn't know were 'harpoon' and 'famous.' We used core words to describe 'harpoon' but added 'famous' to devices for two students. The rationale was:

- 'Famous' can be used across many subjects (history, science, ELA)
- 'Famous' can be used to describe many words and people



- As we read a book from *Prehistoric Pals* (Oceanhouse Media, I noted some Tier 2 words. We played Vocabulary Password (Tip # 3, 2017), then asked the student if she wanted us to add any of the words. You can see the words she selected in the chart to the right. All of these words have been used repeatedly when describing characters and animals.

| | |
|--|------------------------------|
| READING - Mine for new words ✓ ANCIENT ✓ CALM ✓ REPTILE Chase ✓ CALES - Story Redline | PREHISTORIC PALS Dinosaur |
|--|------------------------------|

DOES IT WORK?

Yes, but only if partners MODEL the new words. Multiple people must model the words in context so that students will use them. Below is an example of how a student used the word 'creature' that had been mined from previous reading.

| | | | |
|---------|---|--|---|
| 2-17-18 | Lit Group - scavenger hunt for Mom going to Nepal | ANIMAL; FAVORITE; CHILDREN; YUCK; GROSS; CREATURE | We had talked about Yeti last week in therapy |
|---------|---|--|---|

Van Tatenhove, G. (2009). Building Language Competence with Students Using AAC Devices: Six Challenges. *Perspectives on Augmentative and Alternative Communication*, 18(2), 38-47.

Dr. Caroline Ramsey Musselwhite Tip # 4, 2018 www.aacintervention.com

Vocabulary Mining Tip

2018, Tip # 4

www.aacintervention.com

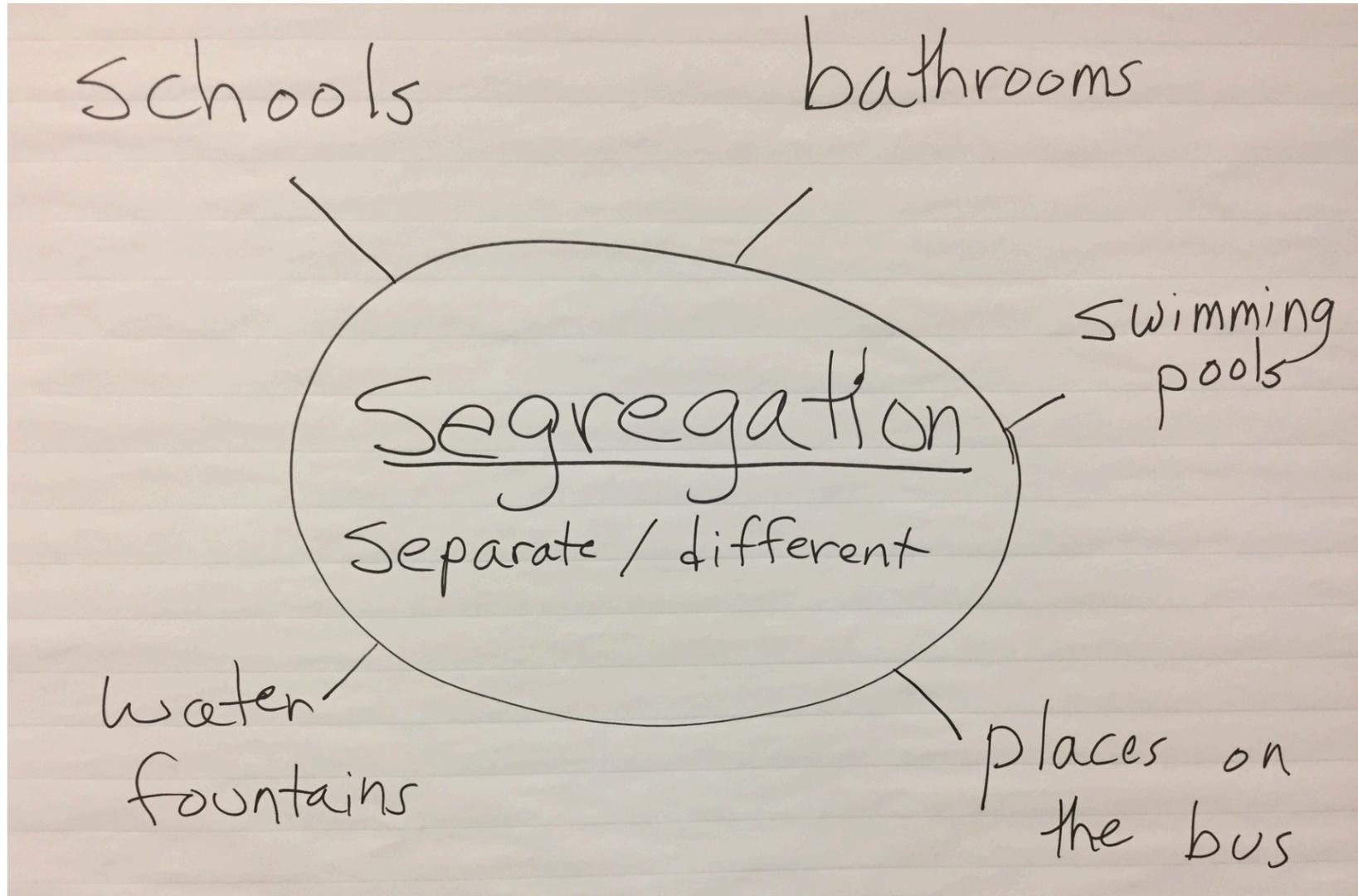
Mining from Literature: Tier 2 words

| | | |
|----------|--|--|
| <p>C</p> | <p>READING</p> <ul style="list-style-type: none">- Mine for new words√ANCIENT√CALM√REPTILEChase√SCALES <p>- Story Retelling</p> | <p><i>PREHISTORIC PALS</i></p> <p><u>Tyrannasaurus</u></p> |
| <p>C</p> | <p>READING</p> <ul style="list-style-type: none">- Mine for new words- DANGER- BUMP- √TICKLE: LOVE / STOP- √PORCUPINE: ANIMAL / WOODS- √FIERCE: ANIMAL / FIERCE- Story Retelling | <p><i>PREHISTORIC PALS</i></p> <p><u>Stegasaurus</u></p> <p><u>Ev found L for lion</u></p> |

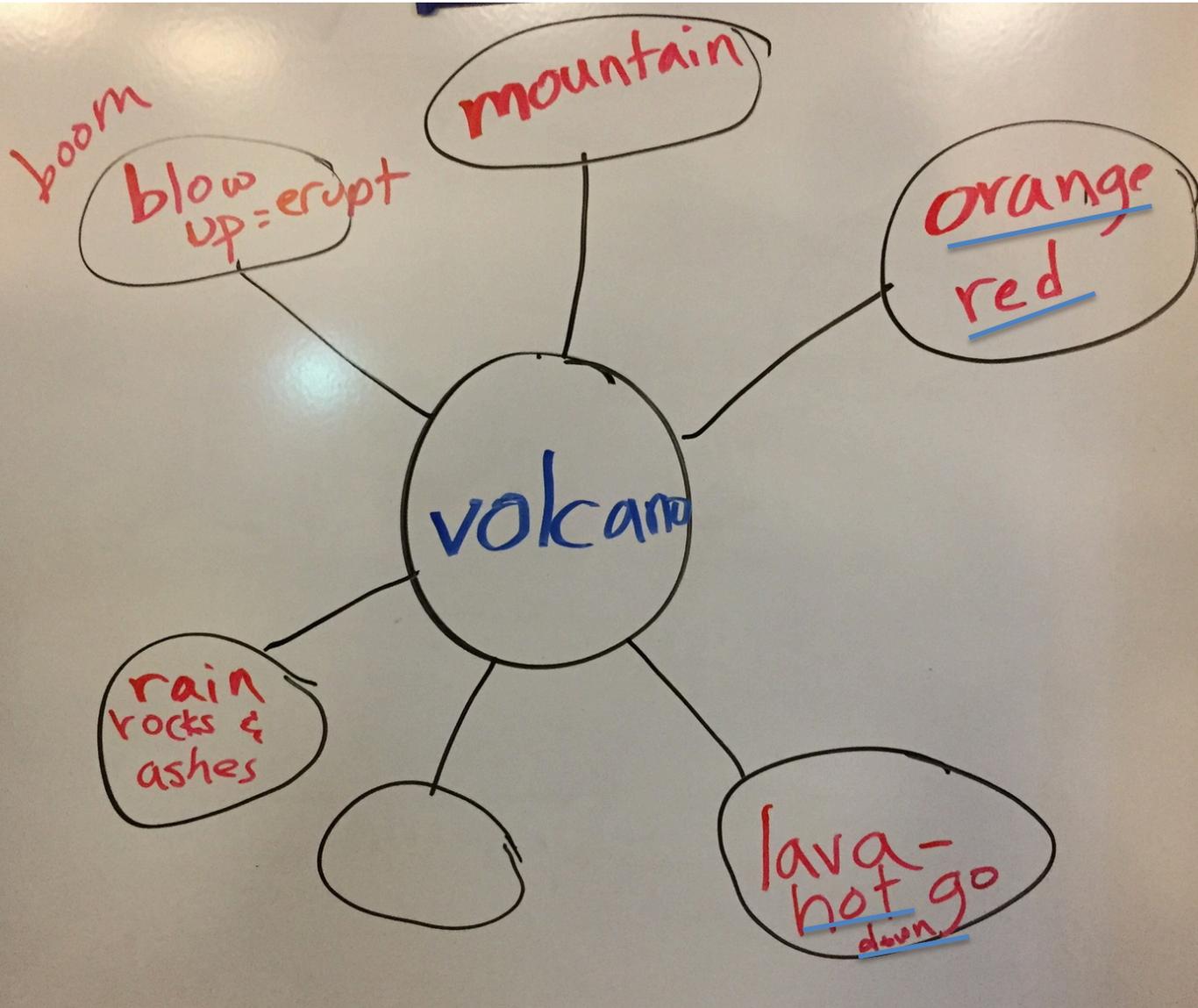
General Rules

- A concept can't be pointed at:
go slowly
- Ask open-ended questions:
concepts have many right answers
- Ask peers to help:
peers benefit from generating the language

Bubble Map



1-Minute Word Web

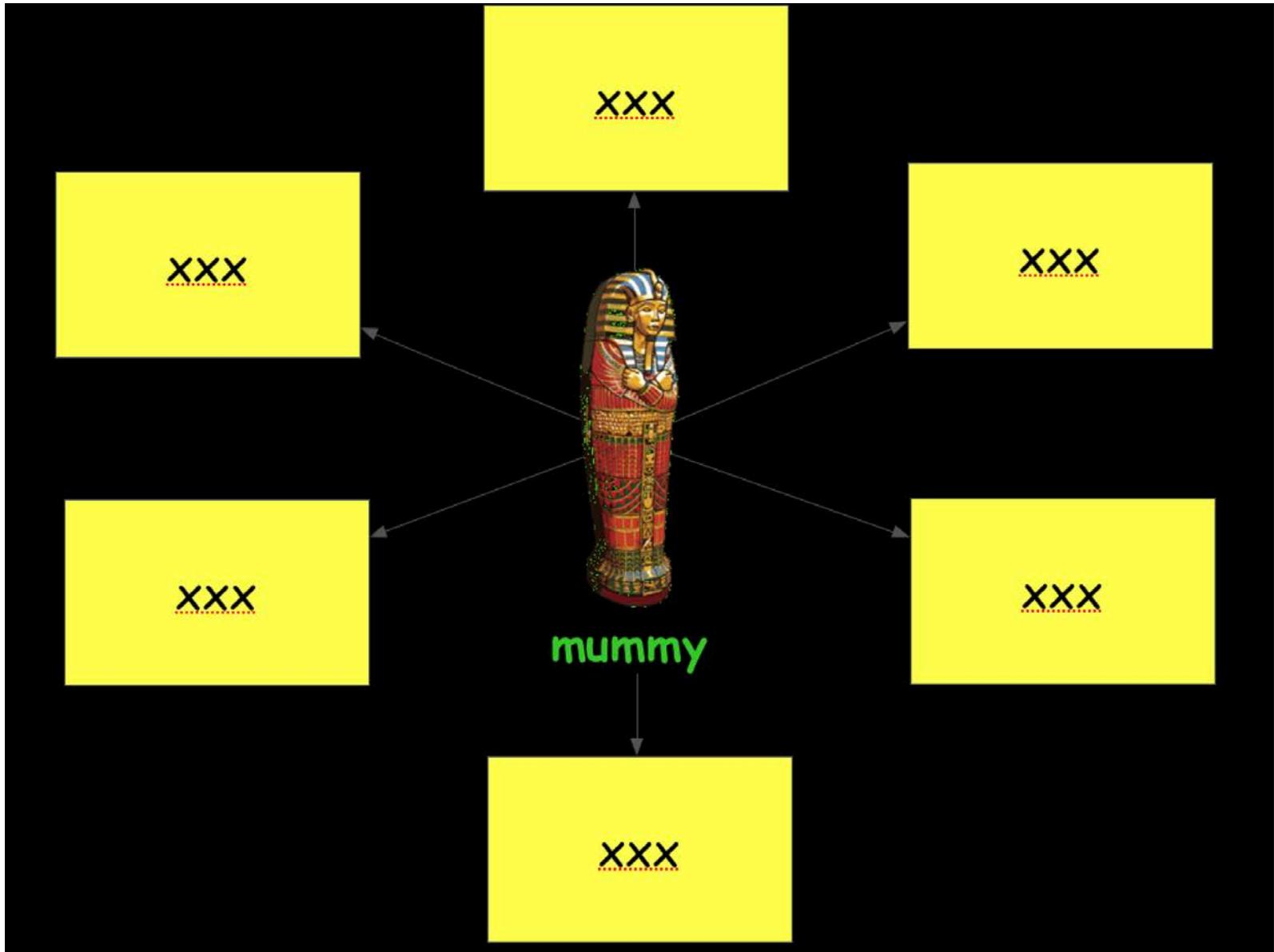


7th Graders:
3 with AAC
Devices

Words spoken
On AAC systems

Pick 1 word and do this before the shared reading!

Bubble Maps: Inspiration



Errors are **ESSENTIAL** to Concept Development

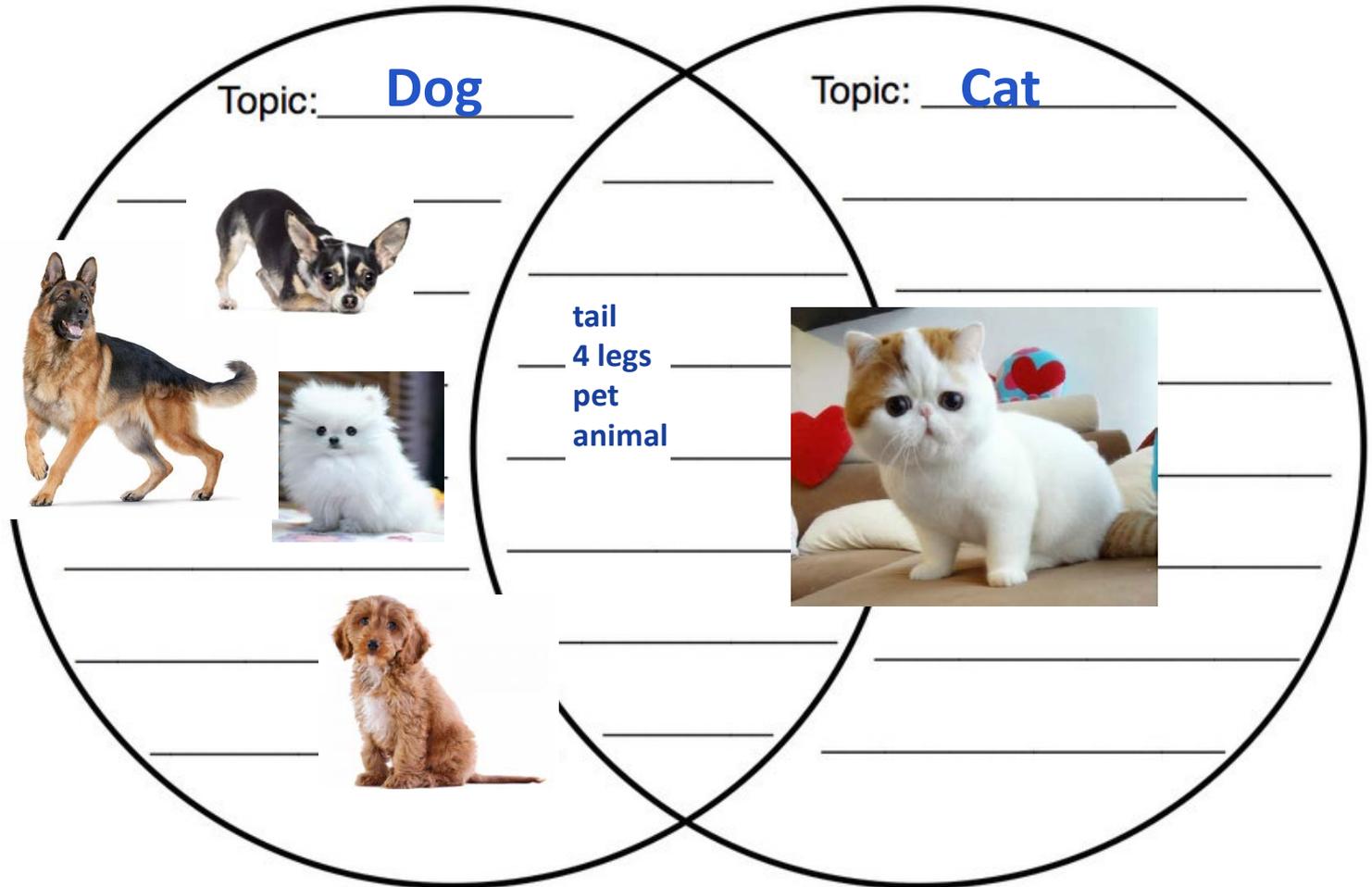
As much about knowing what

something **is**,

as what it **isn't**.

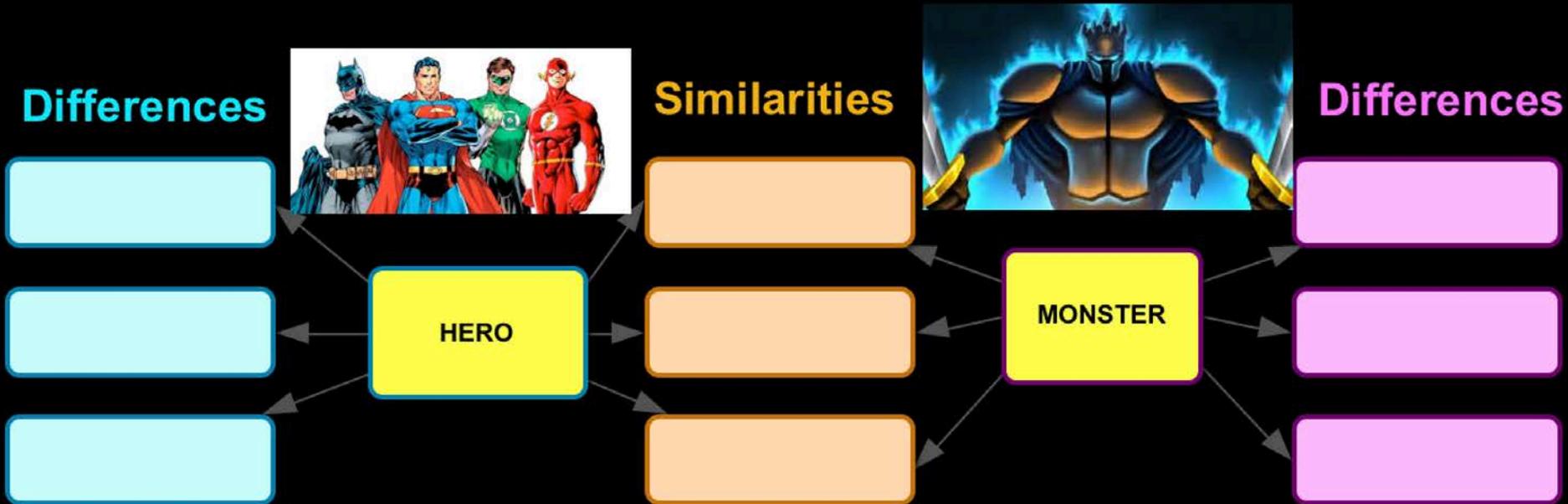
Name: _____ Date: _____

Compare and Contrast



Inspiration – Compare / Contrast

Compare and Contrast



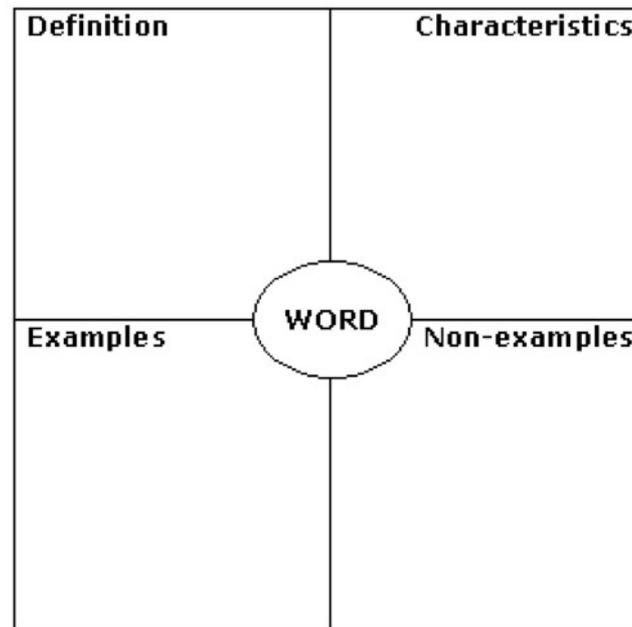
What are features that would help LG?

How would you tweak this?
Ancient / Modern

Frayer Model

- Give kid friendly definition
- Describe its essential characteristics
- Give examples of the vocabulary word
- Give non-examples of the vocabulary word

Frayer Model



Definition

Characteristics

Dictator



Examples:

Non-examples:

Short article: http://www.ducksters.com/biography/adolf_hitler.php

Definition - not okay;
bad for some people

Characteristics - laws;
rights;



Examples - Jim Crow Laws

sister gets to do something
jobs - some people get more
money
politics
sickness

Non-Examples -
good rules
my parents
good teachers
good friends

Vocabulary Exploration – Frayer Model

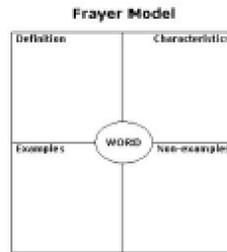
4-Part Analysis

WHAT: The Frayer Model was developed by Dorothy Meyer and colleagues at the University of Wisconsin. It is designed to support students in gaining a deep understanding of new vocabulary words.

WHY USE THE FRAYER MODEL: This model, in use for many decades, supports students by helping them:

- Define the word using kid friendly words
- Describe characteristics of the word
- Provide examples of the word, and
- Offer non-examples

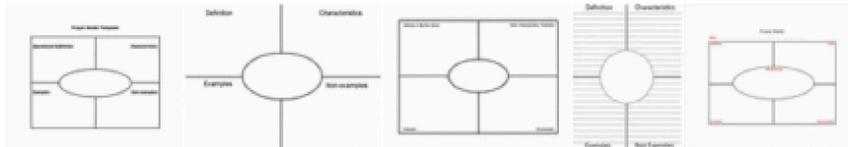
Each of these components is powerful in creating a deep understanding. For example, knowing what a thing is NOT can help us understand what it IS



MATERIALS FOR THE FRAYER MODEL:

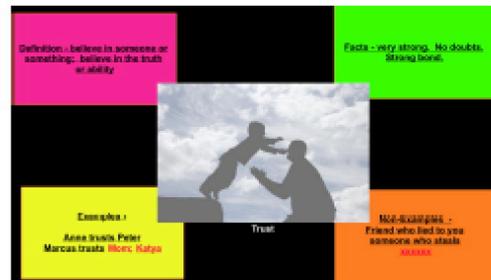
A quick internet search will find templates for using the Frayer Model in various formats, including Word, PDF, and Inspiration, such as the images shown below.

Frayer Model Pdf - Image Results



SAMPLE FRAYER MODELS:

The sample to the right shows use of the Frayer Model with *Inspiration* software for the word 'trust' as used in *The Diary of Anne Frank*. Items shown in red were contributed by Marcus, using his AAC device.



Frayer, D., Frederick, W. C., and Klausmeier, H. J. (1969). *A Schema for Testing the Level of Cognitive Mastery*. Madison, WI: Wisconsin Center for Education Research.



Frayer Web: Tip

How Can We Support MEMORY?



Egypt

by Maggie

Make a book, of course!!

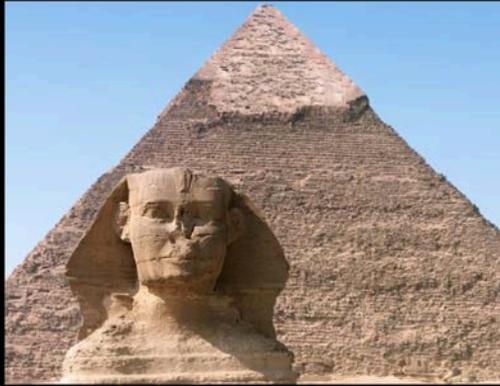


P is for pyramid.



P is for pyramid.
People made the pyramids.
Pyramids are big.

Maggie's Books



Egypt

by Maggie

- Clean background
- Simple text
- Attention to color

- Concept + image



Pyramid.



P is for pyramid.

- Words to describe.
- Predictable text.
- Could use the word IT to support modeling on device
- Students should help pick these words!

Connection to alphabet



A pyramid is old. A pyramid is dry.
A pyramid is hard.



A pyramid is an ancient structure built as
tombs for the Pharaohs.

- Deeper connection to word.
- Simplified dictionary definition

Books As Reports

- Accessible to student
- Provide visual supports
- Use a talking software / app
- Read it again and again – memory support



Book Creator

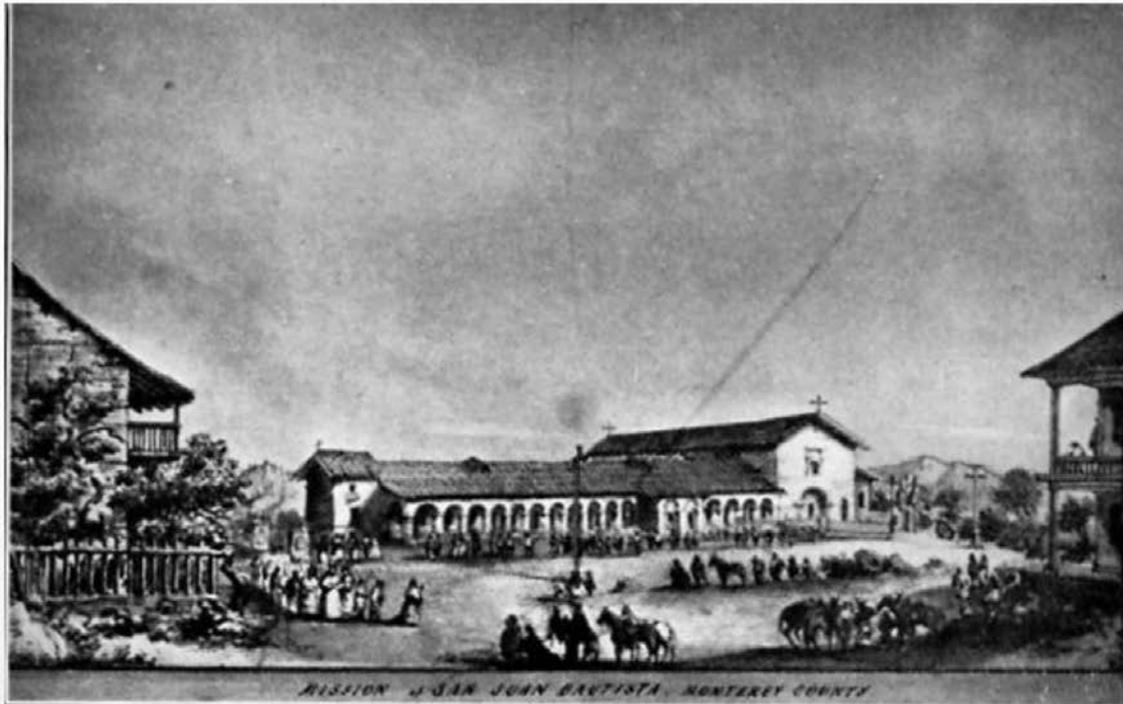
Make A Book



Pictello

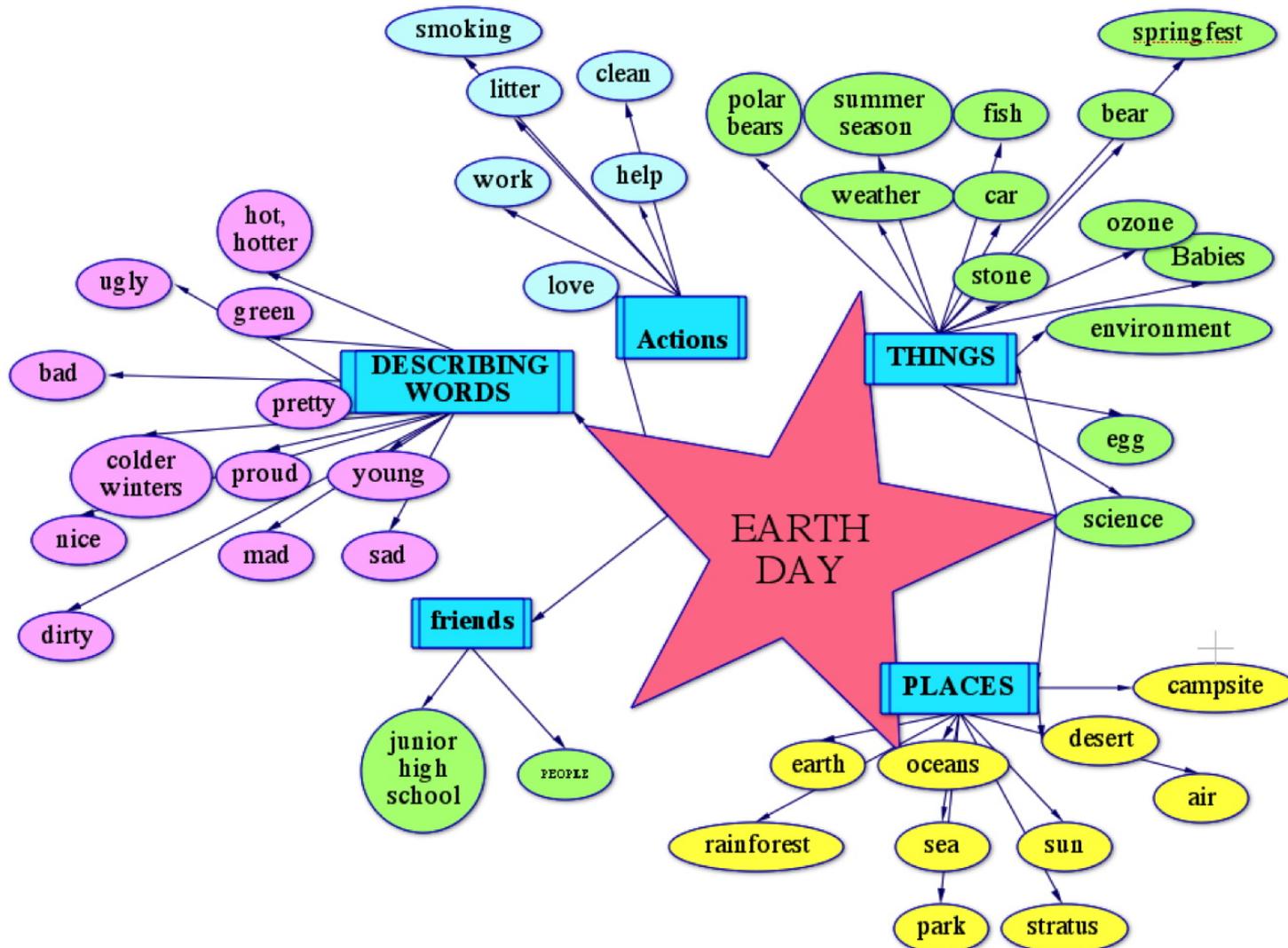


Mission San Juan Bautista was founded on June 24, 1797.



- Photos
- Text
- Speech (great voices)
- Humor

Brainstorm First, then pick letters



Great Review!

OK to leave out letters

Photo Response Using AAC: Make It Into A Book



PicCollage



- Each picture could be copied and used as a book page to review
- Narrate each page, adding information (e.g., The Yellow River looks funny. It really does look yellow. It is sad because many people got diseases and died.)
- What tools would you use?

Can We Chat Book

Can We Chat?
Co-Planned Sequenced
Social Scripts

A Make It / Take It Book
of Ideas and Adaptations



Caroline Ramsey Musselwhite
Linda J. Burkhart.

www.teacherspayteachers.com

OR, e-mail Caroline &
Ask for it (for free)!!

carolinemusselwhite1@me.com

What Are Social Scripts?

CC 4

- **Interactions**
(joke-telling, life stories, chit chat)
- **Beyond Wants and Needs**
(‘real conversations)
- **Support AAC users**
 - claim a turn
 - start & maintain a **conversation**

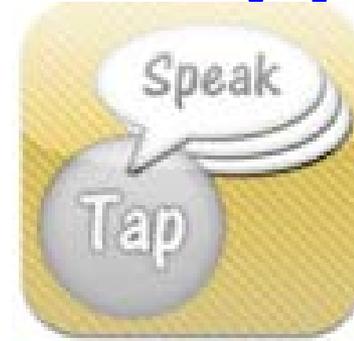
Sequenced Scripts

- Pre-planned steps
- Co-constructed by user and partner
- Goal of social interaction

Step-Listing Devices & Apps



Step by Step



TapSpeak Sequence app



Total Talk app



Pictello app

- multiple messages
- text
- sequenced messages
- videos

Goal - Make communication:

- Frequent
- Motivating
- Self-initiated
- Varied, to maintain interest
- Ongoing, with multiple turns
- With a range of partners, including peers
- A way to model a range of pragmatics
- Easy (do 'on the fly')

Remember Parallel Teaching!

Any student using sequenced social scripts **must** also have goals and activities for developing skills that help the individual use language that involves more personal choicemaking, and is more generative.

Especially for students who struggle with ACCESS!

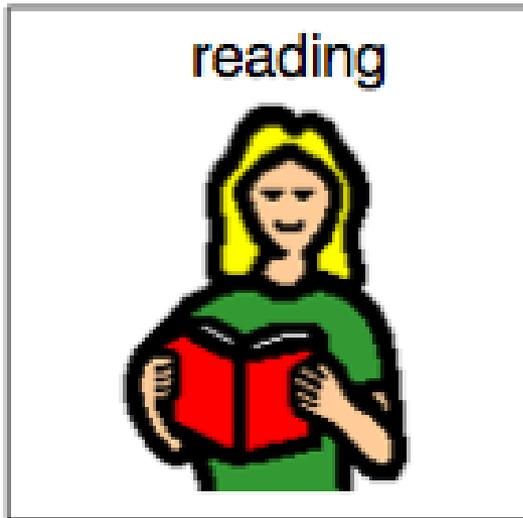
Or students who are learning the 'rules of engagement'

Types of Scripts

- **Action Scripts:** Tickling; playing trucks and cars; high five; backrub
- **Conversation Scripts:**
 - Chit Chat: What did you do last weekend? Who's cute?
 - Story Scripts: Telling about something that happened
- **Participation Scripts:**
 - Classroom activities: morning meeting, directions for science experiment)
 - Literacy scripts: Alphabet activities, phonological awareness, sharing writing

Book Listening

- 1 page per button / switch click
- student or partner turns page
- great for rehearsal
- student develops an 'ear print'



Reading to Younger Children

Tips & Tricks!

- read to a small group
- make sure it's loud enough
- include 'crowd control' comments!



Book on high tech device



Crowd control on step-listing

'Can you hear? ' 'Look at this!'

'Who wants to act it out?'

'Who wants to turn the page?'

Poetry Pal

- help pick a Poem-of-the-Week
- help record poem
- practice it
- perform it

Issue: The goal of the group is NOT
Using an AAC device . . .

Remember: By kindergarten, the
students are no longer learning to talk

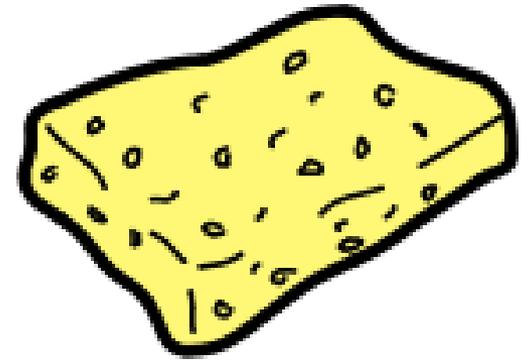
But talking to learn!! Soooooo,

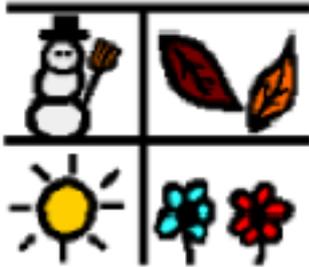
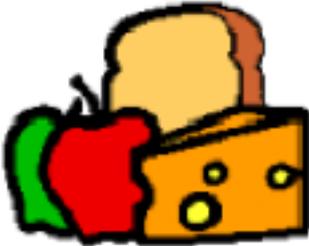
Dance with the
Girl you brought!



Line Leader

- wait, wait, wait
- using 'sponge time'
- sneaking in literacy!



| | | |
|--|--|--|
| <p>letters</p> <p>Aa Bb Cc</p> <p>Dd Ee Ff</p> | <p>colors</p>  | <p>number of letters</p> <p>3, 5, 8</p> |
| <p>beats</p>  | <p>seasons</p>  | <p>sounds</p>  |
| <p>division</p> <p>21/3=7</p> | <p>pets</p>  | <p>favorite food</p>  |

Line Up Scripts

* * * *

Find the literacy scripts!

Interview Script Programmed on Step Listing Device

1. Hi there!
2. Got a minute
3. I am making a letter book and need your help
4. Do you have anything that starts with the letter “c” ?
5. Great! Can I take a picture of it?
6. Thanks so much!
7. Gotta go talk to someone else now.

Alphabet Action Man Script

1. It's time for Alphabet Action Man!
2. The first letter is D.
3. Danielle picked the word DANCE.
4. Okay, everybody, get ready.
5. Let's dance, dance, dance for D!
6. Say it in your head this time.
7. Let's dance, dance, dance for D!
8. Next letter . . . Gabi picked an M.
9. She picked the word MARCH.
10. Are you ready? (etc)

Alphabet Action Man!

Lose the Drill & Kill - Make it FUN!!

WHAT AND WHY: Too often, students with significant disabilities are taught the alphabet through flip cards and other boring, inauthentic tasks. The Alphabet Action Man Game is a quick activity for making alphabet instruction fun and meaningful.

WHO IS THIS FOR: This game is great for students who are learning the alphabet, but needing to connect letters to meaning. It's also great for students who find it difficult to attend to lengthy instruction. The game offers a quick chance to engage with the alphabet while taking a 'movement break.'

HOW TO PLAY IT:

1) When the students are starting to get antsy, let one student pick a letter. Note – be sure to let students pick from the entire alphabet. Sample ways to pick are:

- a) Alternative pencils (ex: Alphabet Flipboard)
- b) *Magnetic ABCs* app
- c) Alphabet page on their AAC device / app
- d) *Word Wizard* app

Note: Don't spend long picking a letter – this should be quick!!

2) Have two people call out an action to go with the letter. For example, if the letter is J:

- a) Teacher calls out 'Jog'
- b) Para calls out 'Jive'
- c) One student quickly votes for jog
- d) All students 'jog' as leader holds up letter J (on popsicle stick) and chants "Let's jog, jog, jog for J"



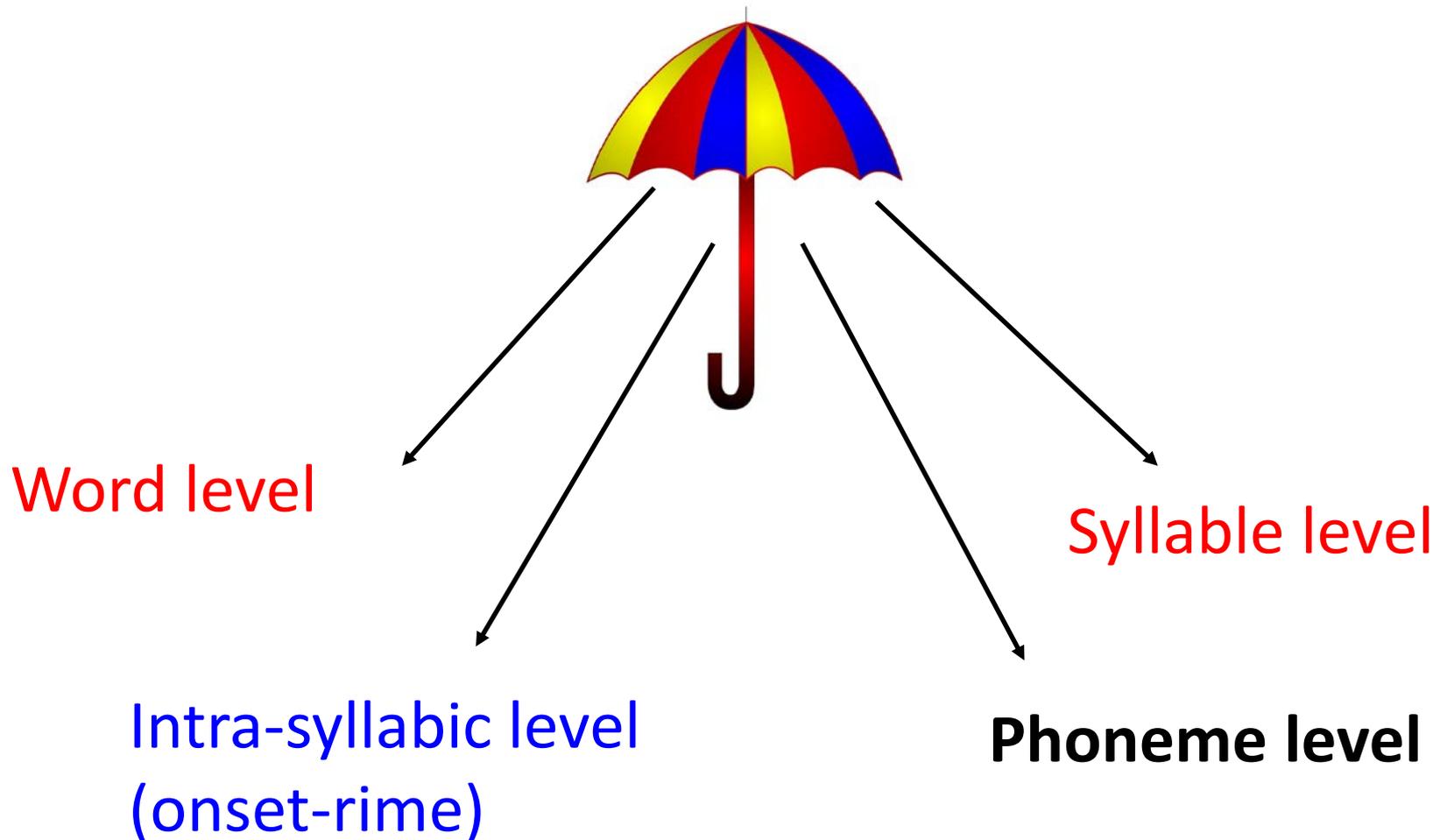
**REMEMBER! This should be quick and fun!
Play this for 2-3 minutes, several times a day**

Alphabet Action Man Tip

December, 2013 Tip

www.aacintervention.com

Phonological Awareness



Name Song

| | | |
|-------|------|---------|
| clap | tap | stretch |
| spell | tell | cheer |

Jessica

Name Song Directions

| Say This | Do This |
|--------------------------|---|
| Clap your name | "Jess – i – ca" (clapping each syllable) |
| Tap your name | "Jess – i – ca" (show 3 names and tap target name) |
| Stretch it til it's long | "Jess – I – ca" (move hands apart, showing each syllable) |
| Spell your name | "J – E – S – S – I – C – A" (show name, with large print. Point to each letter, but PAUSE before saying it) |
| Tell your name | Have student sign, say, or use a device to say their name |
| Say it like a cheer | "Jessica, Jessica, Jessica!" |

Raps & Chants for Older Students

Name / Word Chant

Supporting Phonological Awareness

WHAT AND WHY: Many older students have not developed phonological awareness skills, and need support. It is very important not to do activities that feel 'babyish.' The use of chants and raps can offer activities that are engaging but age-respectful.

NAME CHANT

This is a fun and easy activity. Use the names of everyone in the class or family . . . including your pets! It helps to use a simple chart, as shown to the right.

| | | |
|-------|------|---------|
| clap | tap | stretch |
| spell | tell | cheer |

| Say This | Do This |
|--------------------------|---|
| Clap your word | "be-cause" (clapping each syllable) |
| Tap your word | "be-cause" (show 3 - 9 words from word wall; student taps target word) |
| Stretch it til it's long | /beeee-cuz/ (move hands apart, showing each syllable) |
| Spell the word | "B - E - C - A - U - S - E" (show word, with large print. Point to each letter, but PAUSE before saying it) |
| Tell the word | Have student sign, say, or use a device to say the word |
| Say it like a cheer | "be-cause, be-cause, be-cause!") |

WORD CHANT

This is the same activity, but students are now chanting about word wall words. Pick 3 or 4 word wall words to clap and chant each day. *Tips:*

- **'Tap your word':** use the 'wipe-off choice board' (see www.aacintervention.com, Tip # 3, 2016,) to display 3, 4, 6, or 9 choices, depending on student needs
- **'Stretch the word':** highlight onsets and rimes. For example, the word 'not' would be stretched as: /N - OT/ rather than /N - O - T/. This will help students hear and identify the 'chunks' or rimes in words
- **'Tell the word':** All students can call out word, or give each student a word in advance to call out
- **Inner voice:** Remind all students (not just those who are non-speaking) to 'say it in your head.'

| | | |
|-------|----------|-------|
| Randy | Tanisha | D'lia |
| Anne | Emmalina | Ramon |

| | | |
|------|------|------|
| make | when | go |
| that | not | like |

Name Chant Tip

2018, Tip # 8

www.aacintervention.com

Name Chant Script

Student: Alexis is struggling with access. She's working with the OT & SLP to improve access

She's leading name chants for morning meeting:

- The next name starts with 'D'
- So, who is it? Natasha? Derek? Jesus?
- It's Derek!!! Let's chant for Derek!
- The next name has 3 beats . . .
- Is it Ann? Marcus? Natasha?
- It's Natasha!
- Let's chant for Natasha!

Tongue Twisters

- **Start with 2 or 3 sounds that are important**
 - D for Dad & Daniela (sister)
 - M for Maggie and Mom
- **Make up twisters with 1 word missing**
 - Students can pick the word to finish it

Mom makes / milks / meets **messy mud.**

Mom makes a messy / marvelous / mean **mud.**

Matt / Mom / Mick **makes a messy mud.**

Students Use AAC System to Choose Words to Add

- Help students pick action words and describing words
- Partners should model where words are found



Touch Chat Basic 42 – Describe/ M

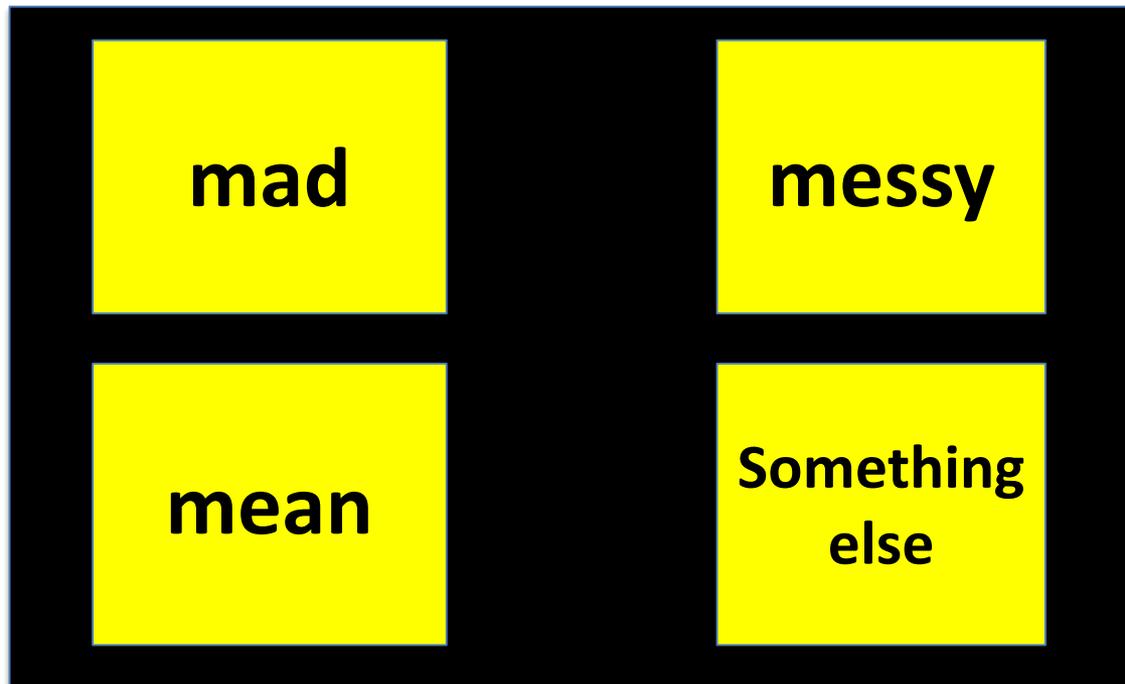
Use ‘Talk-Alouds’: ‘I’m looking for mad. Let’s see: FEELINGS . . . Let’s find the one with the mad face . . .’



Words For Life – Feelings

Students Use AAC System to Choose Words to Add

- Then put choices on a wipe-off board
- Include 'something else'



Wipe Off PostIt Choice Page2016, Tip # 3

www.aacintervention.com

Sound Substitution Script

The class has been reading *Pizza Today* from the Raps set.

Ava is leading rhyming chants for morning meeting:

- Pizza patza peric, pizza fell on _____
- Is it Eric? Manuel? Dorcas?
- Pizza patza peric, pizza fell on Eric!
- peric / Eric - Eric / peric - It rhymes!
- Here's another: Pizza patza Porcas, pizza fell on _____
- So who is it? Jamal? Manuel? Dorcas
Etc.

Peer Conferencing

Communicative Function

Sample Messages

Attention Getter(s)

Hi!

It's conference time!

Starter(s)

Ready to listen to my writing?

I've been working on this and need ideas.

<student writing is recorded here>

Maintainers/
Turn Transfers

So, what did you like the best?

Was there a part you didn't understand?

Where could I add some more details?

Anything else?

Thanks very much.

Closer(s)

I can't wait to hear your writing now.

Script by Gretchen Hanser

Book Discussion

Communicative Function

Sample Messages

Attention Getter(s) **Hey!**

What's up?

Starter(s)

I am reading the coolest book.

Want to hear about it?

It's called Holes.

Maintainers/
Turn Transfers

I really like one of the characters, Zero.

It's a mix of real and fantasy.

What are you reading right now?

What do you like about it?

Interesting.

Closer(s)

Better get back to my desk.

Bye.

Script by Gretchen Hanser

Share a Personally Written Piece!

- poem
- story
- recipe review
- short report



Summarize: List Poem

- Make a shape or a swirl
- Then type!

*Path
On
Swipe
to Type*



Name: _____ Date: _____

Rosa Parks: A Poem



Rosa Parks

List Poem:

Save As

How could we save
as to make a poem
to review other
people / events /
places, etc.

Poems for 2 Voices

Paul Fleishman

- *Joyful Noises*
- *Big Talk*

- **WHY??**
 - **Reading** – GREAT for fluency
 - **Reading** – purpose for reading multiple times
 - **Writing** – great for comparing & contrasting
 - **Writing** – great for sparkle words / strong verbs
 - **Summarize** – what students know about a topic

Writing In Content Areas: Poem for 2 Voices

I am a British soldier

I am a Revolutionary soldier

I wear fine black boots

I wear rags on my feet

I have plenty of food

I am often hungry

I speak English

I fight for the King George III

I am a patriot

I fight for the superpower

I fight for our rights

I am scared

Movies

popcorn

exciting

too short

with friends

people spilling

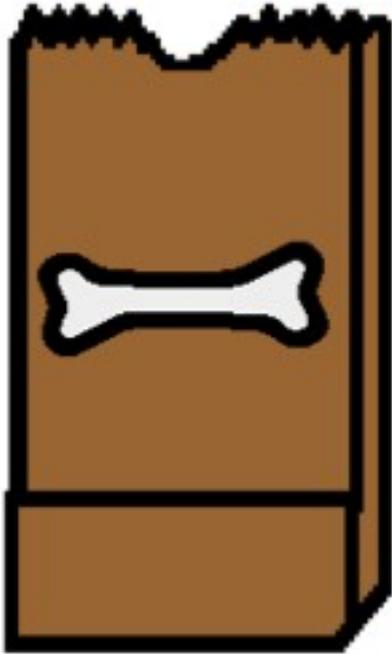
scary

too long

by myself

Movies

Don't Forget Your DOGGIE BAGS!!!



- Handout
- Language Lab
- AAC Intervention
- AAC Girls Blog
- SpedApps2 wiki
- TeachersPayTeachers.com

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