

ON THE MATTER OF TEXT IN FLUENCY INSTRUCTION AND ASSESSMENT

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Overview

- Fluency is a bigger problem for many American middle graders than accuracy.
- A factor that likely contributes to fluency problems is that core vocabulary accounts for a smaller portion of unique words in instructional texts than it did several decades ago.
- When primary and challenged readers have exposure to texts with higher repetitions of core vocabulary and fewer rare words, their fluency improves.
- Most tests use core vocabulary words to a greater degree than typical instructional texts. However: core vocabulary use varies considerably across tests.

What's a core vocabulary?

- Through analyses of tests, core word recognition expectations at end-of-year have been established. A grade-level curriculum accounts for at least 85% of the words on a majority of prominent assessments.

CORE VOCABULARIES

- End of Grade 1: 300 most-frequent words and monosyllabic words with simple and long vowel patterns.

- End of Grade 3: 1,000 most-frequent words (Carroll et al. & Zeno et al.) and any vowel pattern in a monosyllabic word

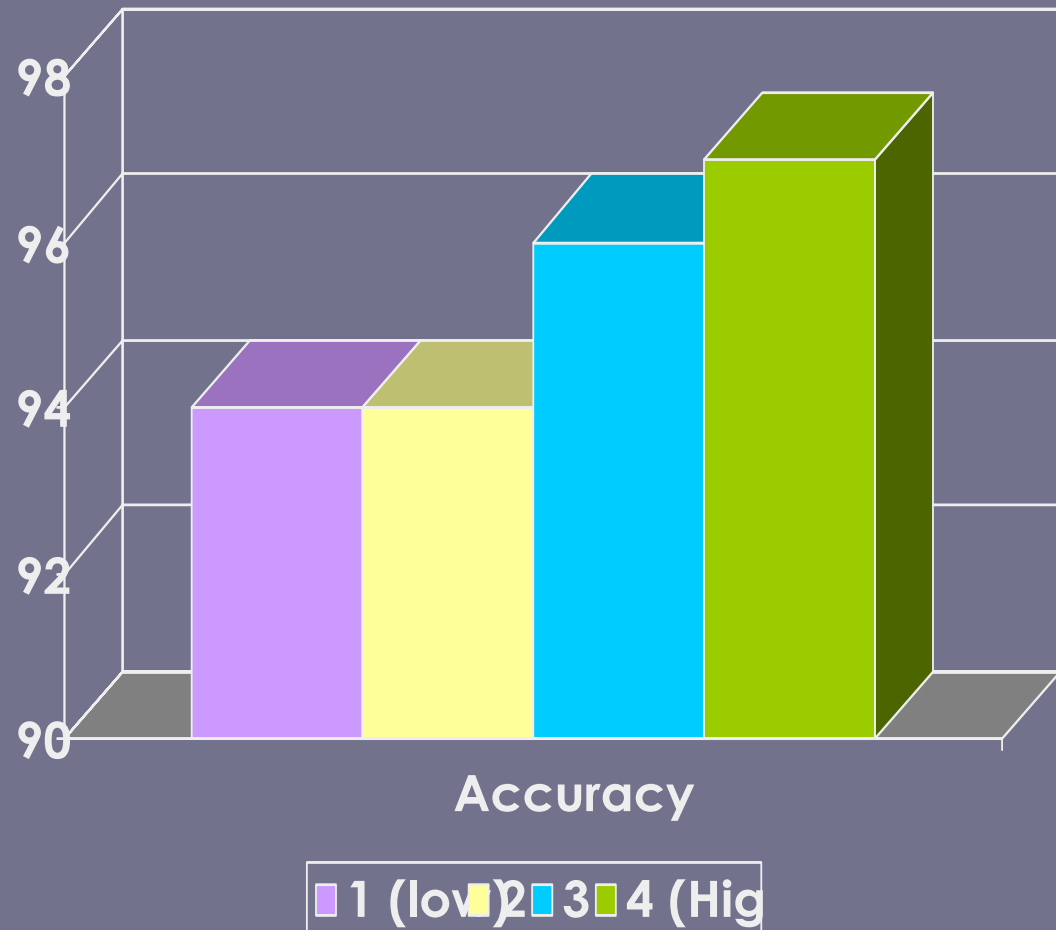
- Words that fit inside the target curriculum
- Words beyond the target curriculum

1. Fluency is a bigger problem for many American middle graders than accuracy.

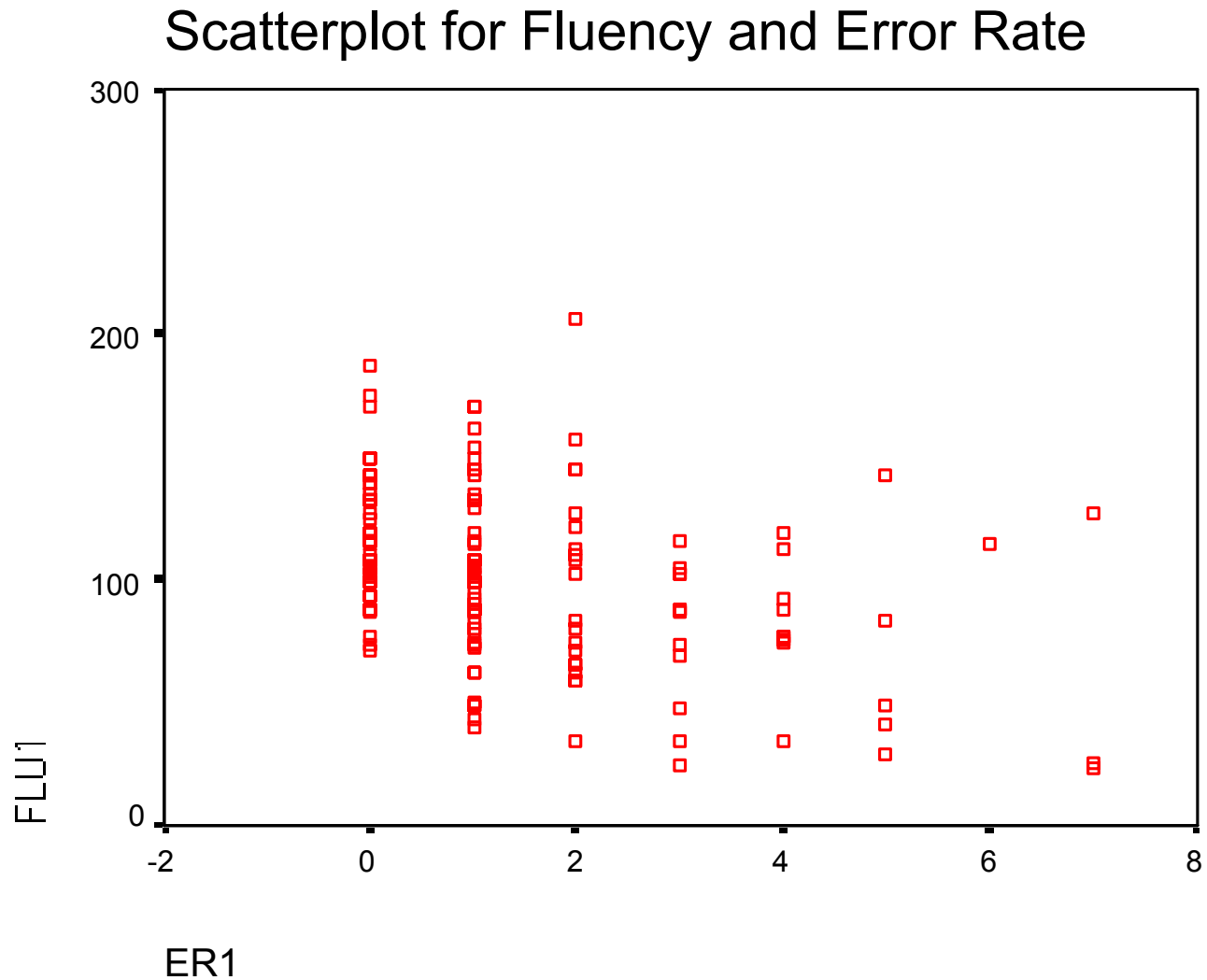
DATA SET A: NAEP (1995) Special Study

HUNGRY SPIDER AND THE TURTLE

Spider was a hungry one, he always wanted to eat. Everybody in **Ashanti** knew about his **appetite**. He was **greedy**, too, and always wanted more than his share of things. So people steered clear of Spider. But one day a stranger came to Spider's **habitation** out in the back country.



DATA SET B: 160 4th Graders (39% Eng. Learners) (Hiebert & Fisher, 2002)



GAMES OF LONG AGO

Hundreds of years ago, **Native** American children played games with balls on ice and grass. These games were like **hockey** and football. To play these games, Native Americans made balls of wood, stone, animal skins, and bark from trees.

The games of Native American children were not only hockey and football on ice or grass. They also played ball games in boats on the water. They would toss or hit balls from one boat to another. Native American children had to be careful when they played these ball games in boats. If they were not careful, they would fall in the water.

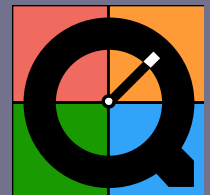
Means for Quartile Groups (based on speed):

Q1: 147 wpm

Q2: 116 wpm

Q3: 95 wpm

Q4: 60 wpm



DATA SET C: CLASS OF FIFTH GRADERS IN FALL [Average Score on NRT: Q4]

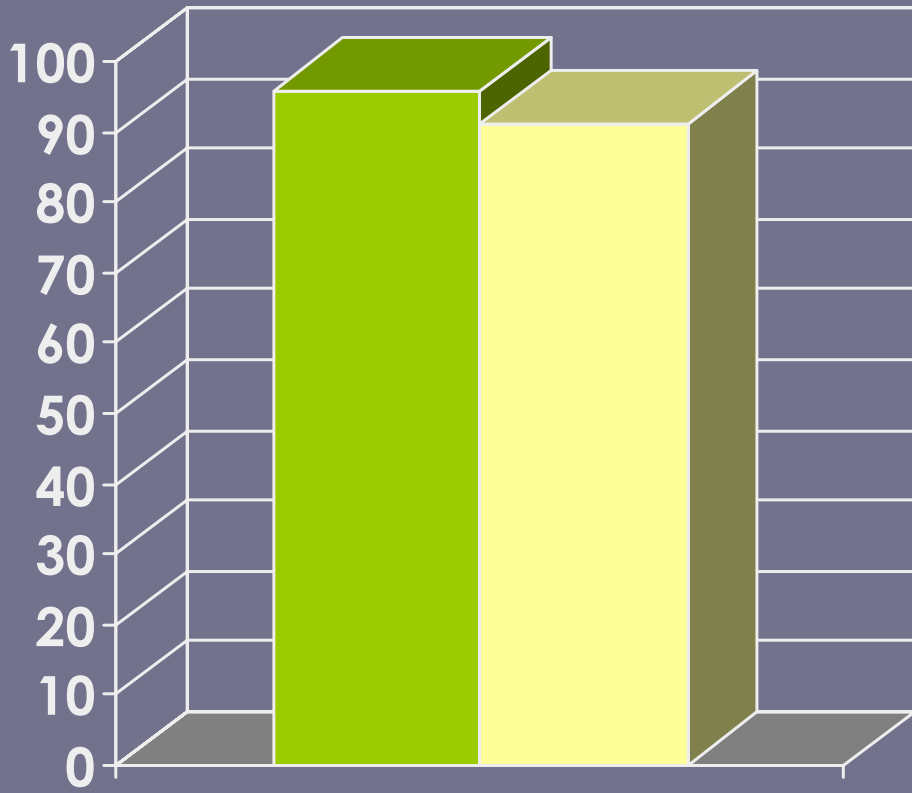
BEGINNING Gr. 5 (68%)

THE **POPCORN** BOOK

Popcorn is best stored in a tight jar in the **refrigerator**, so the **kernels** keep their **moisture**. Popcorn is the oldest of the three main types of corn. There is field corn, which we feed to animals like **cattle** and pigs; sweet corn, which is the kind we eat; and popcorn.

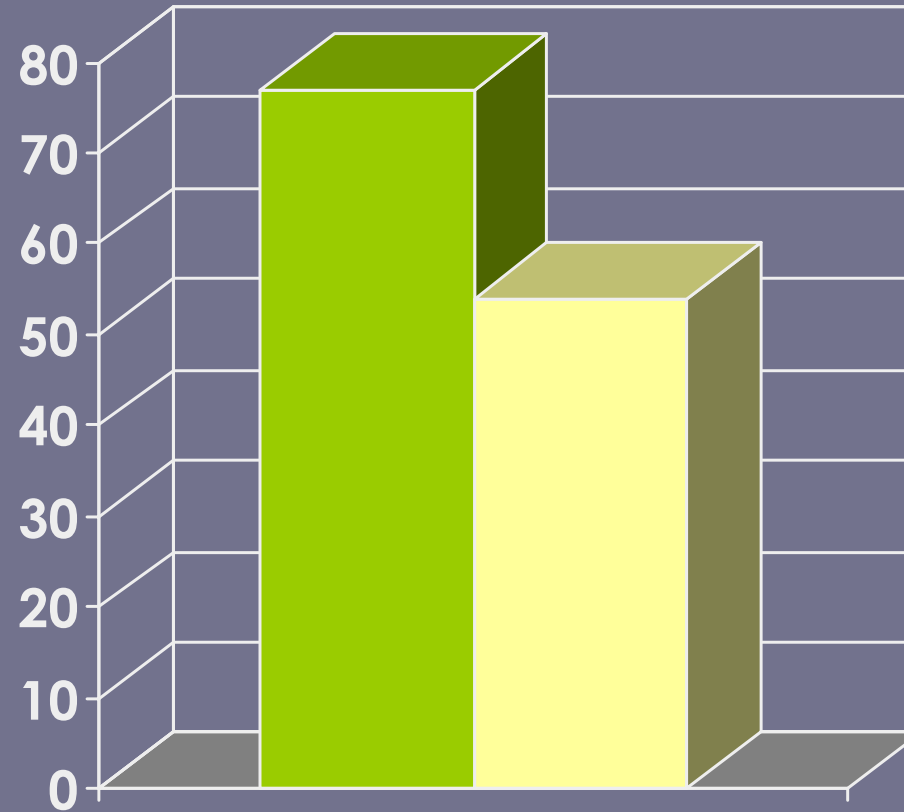
Gr. 3 (27%)

SWIM **POLAR** BEAR, SWIM Polar Star never stopped asking questions. And, at **bedtime**, after the first story, he wanted another and another. Polar Moon found it hard to keep up. Sometimes she **complained**. But at the end of the day she always said the same thing. You are the most **wonderful** bear cub.



Accuracy--% correct

■ 5th Gr. (68%) ■ 3rd Gr. (27%)



Speed-wcpm

■ 5th Gr. (68%) ■ 3rd Gr. (27%)

2. A factor that likely contributes to fluency problems is that core vocabulary accounts for a smaller portion of unique words in instructional texts than it did several decades ago.

1962c (End Gr1)

FIVE LITTLE PIGS

Mrs. Pig sat down and took off her shoes. "What a busy day!" she said. "What a day I have had! My children are fine children. But they think of too many games to play." Fat old Grandfather Pig laughed and said, "Tell me about your day."

1983c (End Gr1)

You Never Know What You Will Find One day Ray and Sue wanted to do something after breakfast. "Let's go down to the beach," said Sue. "But I want to go to town," said Ray. "You go to town almost every day," said their mother. "Why not do something different today?"

1993c (End Gr1)

TWO GREEDY BEARS

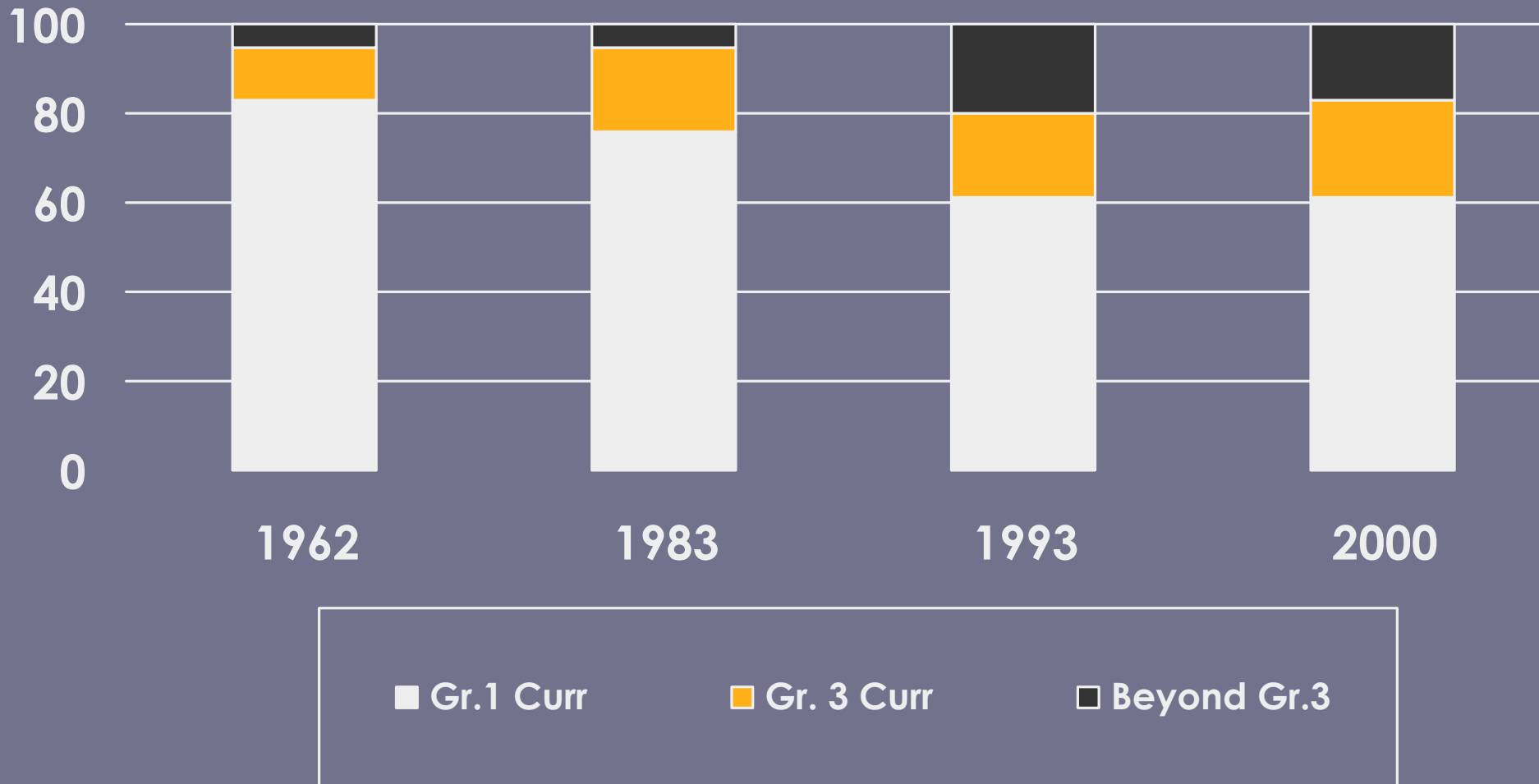
Two bear cubs went out to see the world. They walked and walked, till they came to a brook. "I'm thirsty," said one. "I'm thirstier," said the other. They put their heads down to the water and drank. "You had more," cried one, and drank some more.

2000c (End Gr1)

FOX ON STAGE

One Saturday morning Fox and his friends were just lying around. What a sad little group," said Mom. "Why don't you do something?" "The television is broken," said Fox. "Oh, that is terrible!" said Mom. Then Fox had one of his great ideas.

Core Vocabulary: End of Grade-One Text Over 4 Decades (samples of 10 texts)



3. When primary and challenged readers have exposure to texts with higher repetitions of core vocabulary and fewer rare words, their fluency improves.

Review: NRP Fluency Studies

TEXT TYPES	STUDIES IN NRP DATA-BASE (#)	STUDIES IN NRP META-ANALYSIS
• Basals (pre-1990)	• 21	• 8
• Skill series (e.g., Barnell Loft Multiple/Specific Skill Series)	• 9	• 0
• High-interest, low-vocabulary stories (e.g., <u>I can read</u> series)	• 4	• 2
• Literature	• 6	• 3
• Unspecified texts	• 2	• 0

BASAL 1966

- Tim's Woods

It had snowed in the night. Tim **Baker** could tell that it had without looking out of his bedroom window.

There was always a bright **whiteness** about the daylight when the world was deep in snow. Tim lay in bed and thought about what he would do.

HIGH/INTEREST, LOW-VOCABULARY

Hill of Fire

Once there was a farmer who lived in **Mexico**. He lived in a little village, in a house which had only one room.

The farmer was not happy. "Nothing ever happens," he said.

The people in the village thought the farmer was **foolish**.

"We have everything we need," they said.

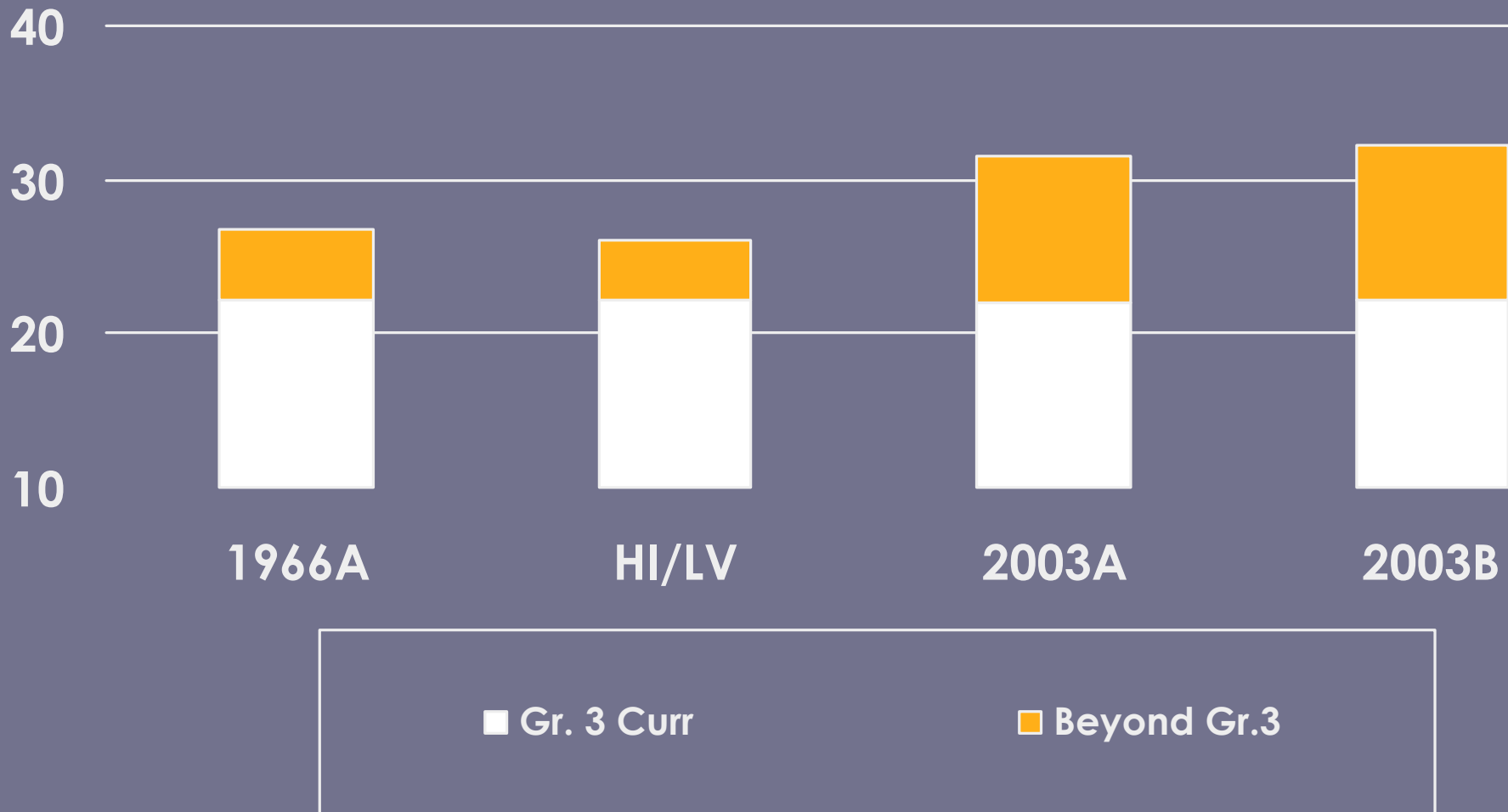
BASAL 2003

Born to Rope

My name is **Anthony Reynoso**. I'm named after my father, who is holding the white horse, and my **grandfather**, who is holding the **dappled** horse. We all rope and ride **Mexican Rodeo** style on my grandfather's ranch outside of **Phoenix, Arizona**.

As soon as I could stand, my dad gave me a rope.

Core Vocabulary in Gr. 3 Texts: 1966 & 2003 (Unique Words per 100 Words of Text)



Study: Texts that Repeat Core Vocabulary

(Hiebert & Fisher, 2002)

What is a Hurricane?

Hurricanes start out at sea.

As the sun beats down on the sea, the water gets hot. The hot water starts to **evaporate**.

Evaporate means that the water turns into clouds.

As the clouds get big with the evaporated water, the air around the clouds starts to move very fast.

Tracking Hurricanes

People need to know when a hurricane is coming.

There are people who keep track of hurricanes with **computers**. With computers, they know when a hurricane has started out at sea.

Computers also help them know how fast the wind is blowing and if the hurricane is heading to land.

Hurricane Cleanup

When a hurricane is over, parts of trees, houses, bikes, and cars are all over the ground. There is no water or food. There are no lights. Some people have lost their homes. Some people have lost their cars and bikes. Some people cannot find their pets.

Pets in Hurricanes

When a hurricane is about to hit, people have to leave their homes. They cannot take their pets with them to **shelters**. Pets are left in their homes.

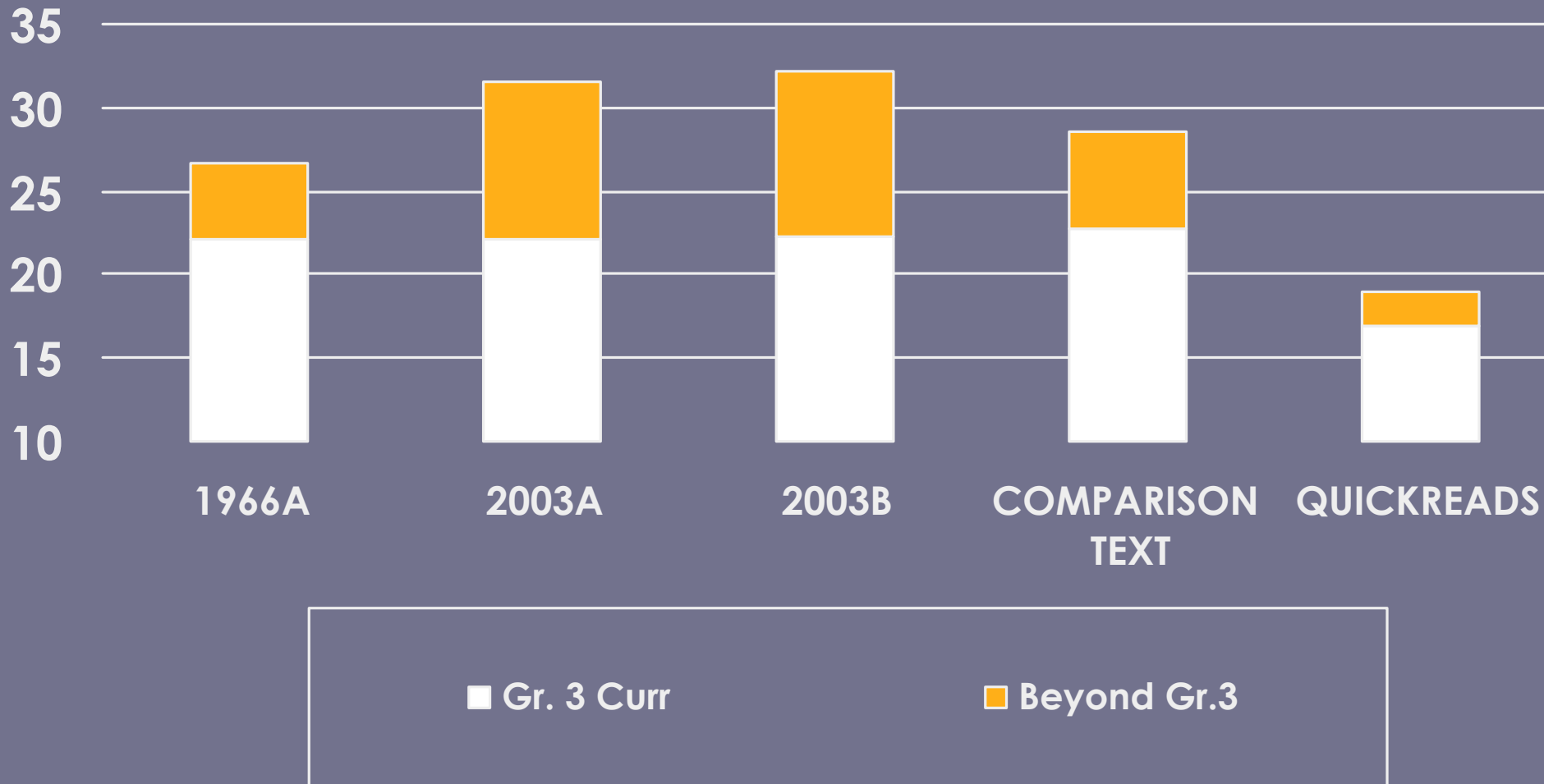
Some pets run away. But most dogs and cats do not run very far. Dogs and cats often hide in places where they feel safe.

Hurricane Names

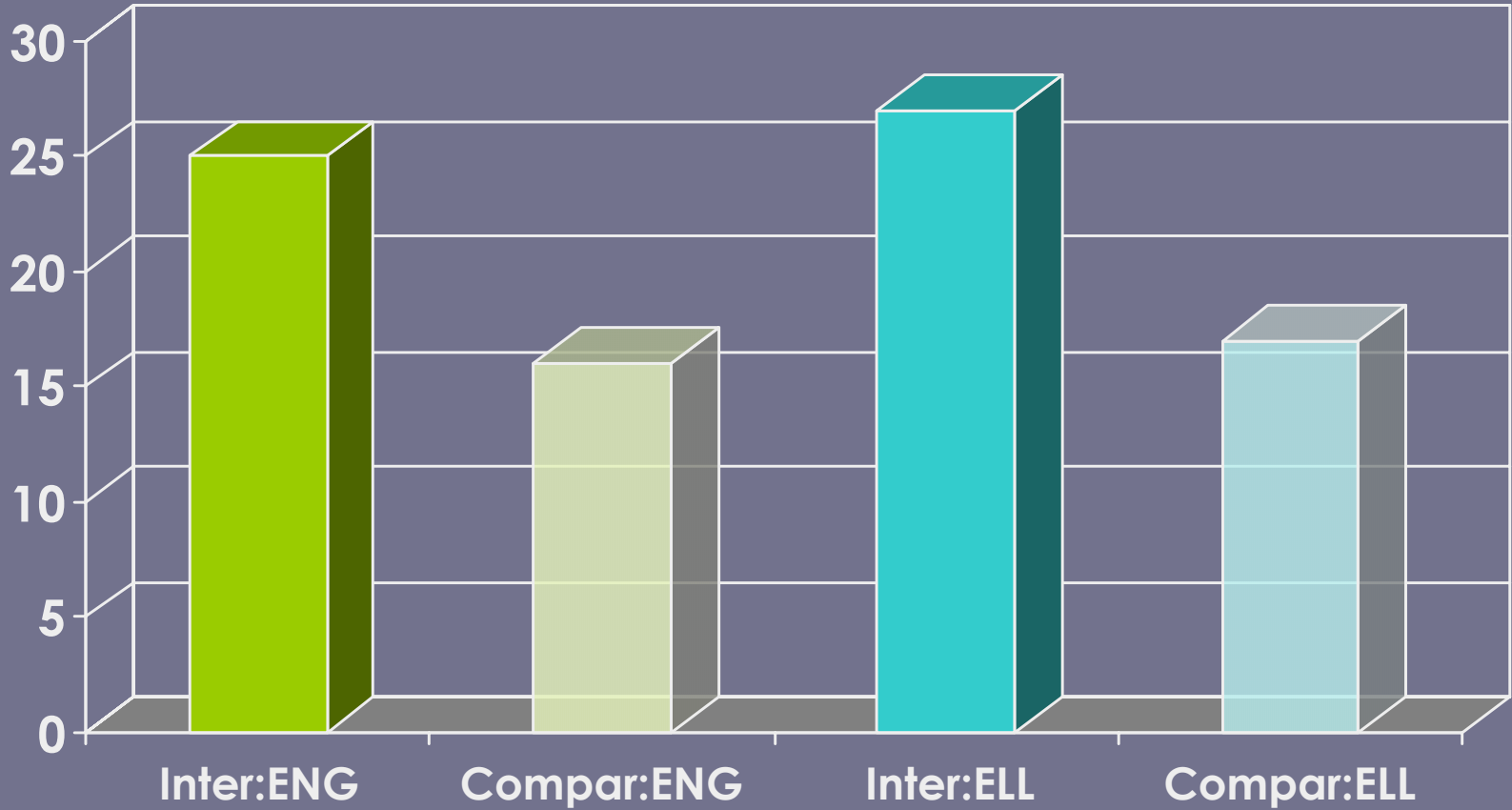
Names help people to keep track of a hurricane. Each year, 21 names are picked for hurricanes. The first hurricane in a year starts with the letter A. If a girl's name is first one year, the next year will start with a boy's name.

Core Vocabulary in Gr. 3 Texts

(Unique Words per 100 Words of Text)

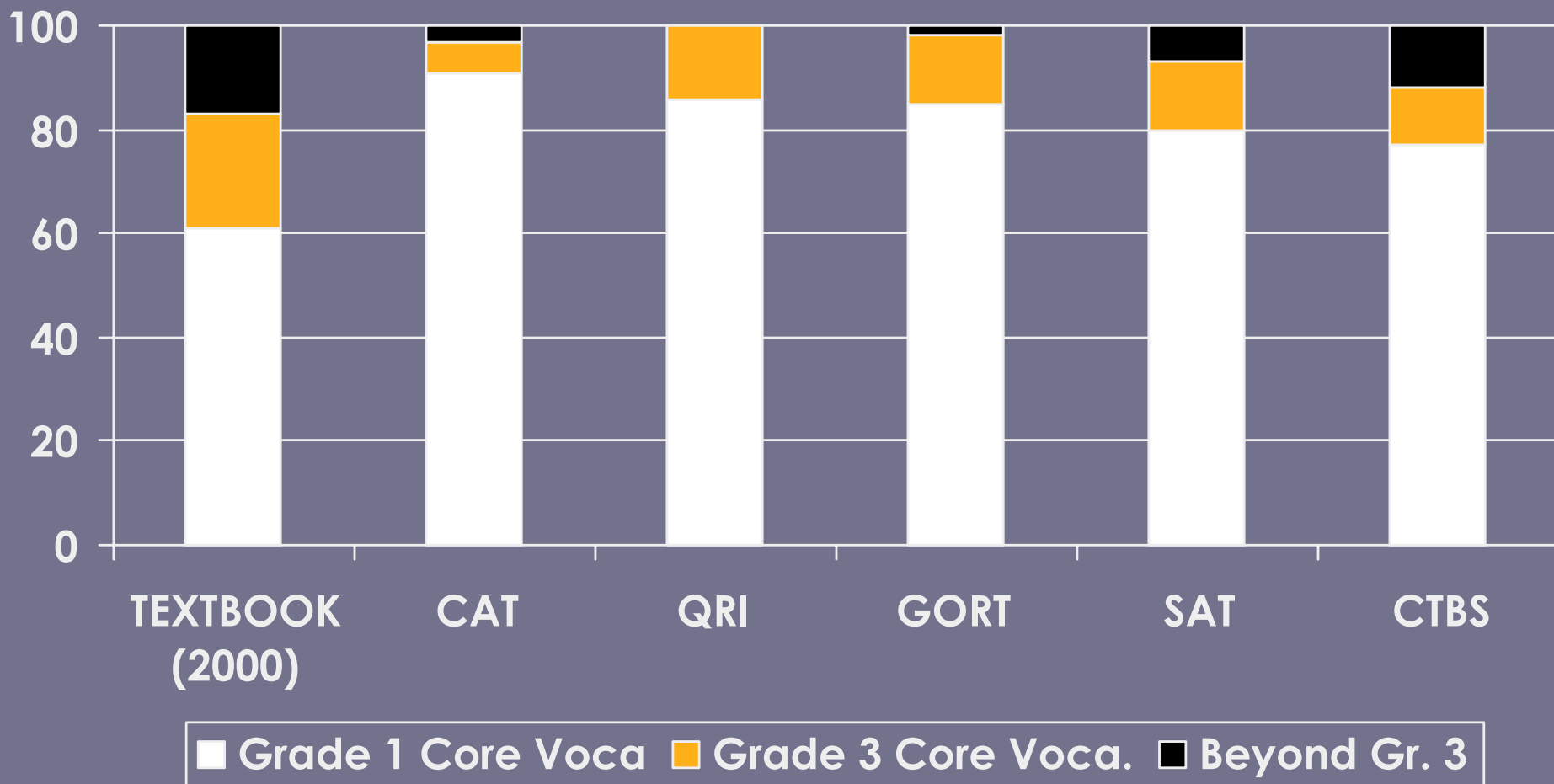


Fluency (gain scores for wpm)



4. Most tests use core vocabulary words to a greater degree than typical instructional texts. However: core vocabulary use varies considerably across tests.

End-of-Grade 1 Assessments



CAT

“Here I am on the **moon**. The moon looks just like the earth.” “Well, well,” said Little **Bear**. “The trees here look just like our trees. The **birds** look just like our birds.” “And look at this,” he said. “Here is a house that looks just like my house.”

CTBS

“It's another trick!” said **Martha**. “Not this time,” said **George**. “Then you **open** it”, said Martha. “Very well,” said George. “I will.” Martha bit her nails, while George **pulled** off the **ribbon**. Out jumped one **rubber tarantula**, one stuffed snake, four **plastic spiders**, and two real frogs! “**Egads!**” cried George.

Summary

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