

Noah Text[®] in Action

Results of Randomized Controlled Trial
of Incarcerated Women with Reading Disabilities

*Conducted by Michigan State University
in conjunction with New Century Education Foundation*

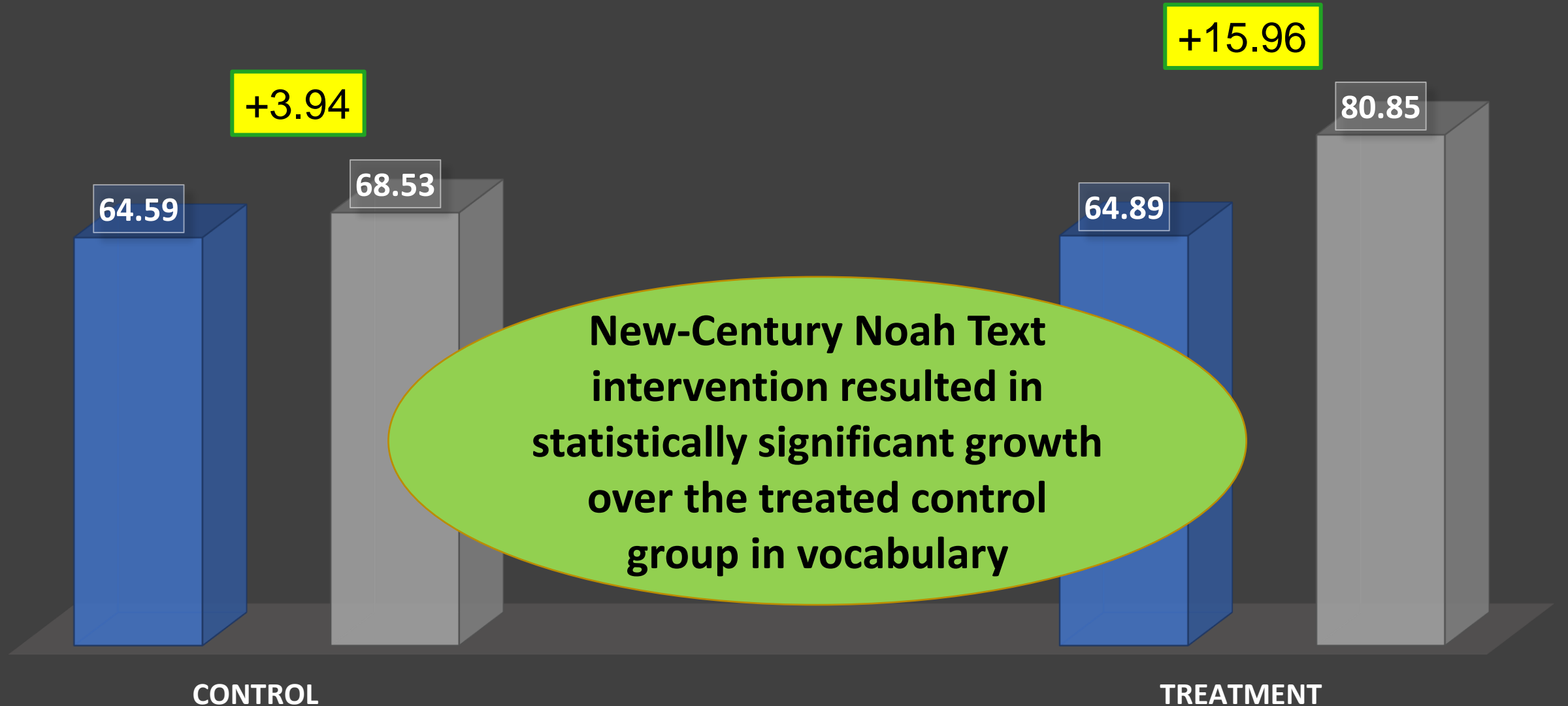
Executive Summary

- Thirty-seven women (age 23-68) with reading disabilities, incarcerated in the southeastern United States, participated in a randomized controlled trial. The treatment group made significant gains after using New Century Noah Text® for three months compared to the control group, who were participating in an adult education reading program. New Century Noah Text® was delivered online through a multicomponent intervention encompassing three fictional books with 60 short chapters and 72 surrounding lessons (approximately 36 hours total).
- Results were as follows:
 - Women in the treatment condition had statistically significant gains in vocabulary and TABE Language ($p \leq .05$) compared to the control condition
 - Women in the treatment condition had an average 18.26-point gain on the TABE Language test, compared to just 5.62 points for women in the control condition
 - Women in the treatment condition also improved in reading motivation, morphology skills, and in-lesson comprehension
 - The social validity was universally high

Results

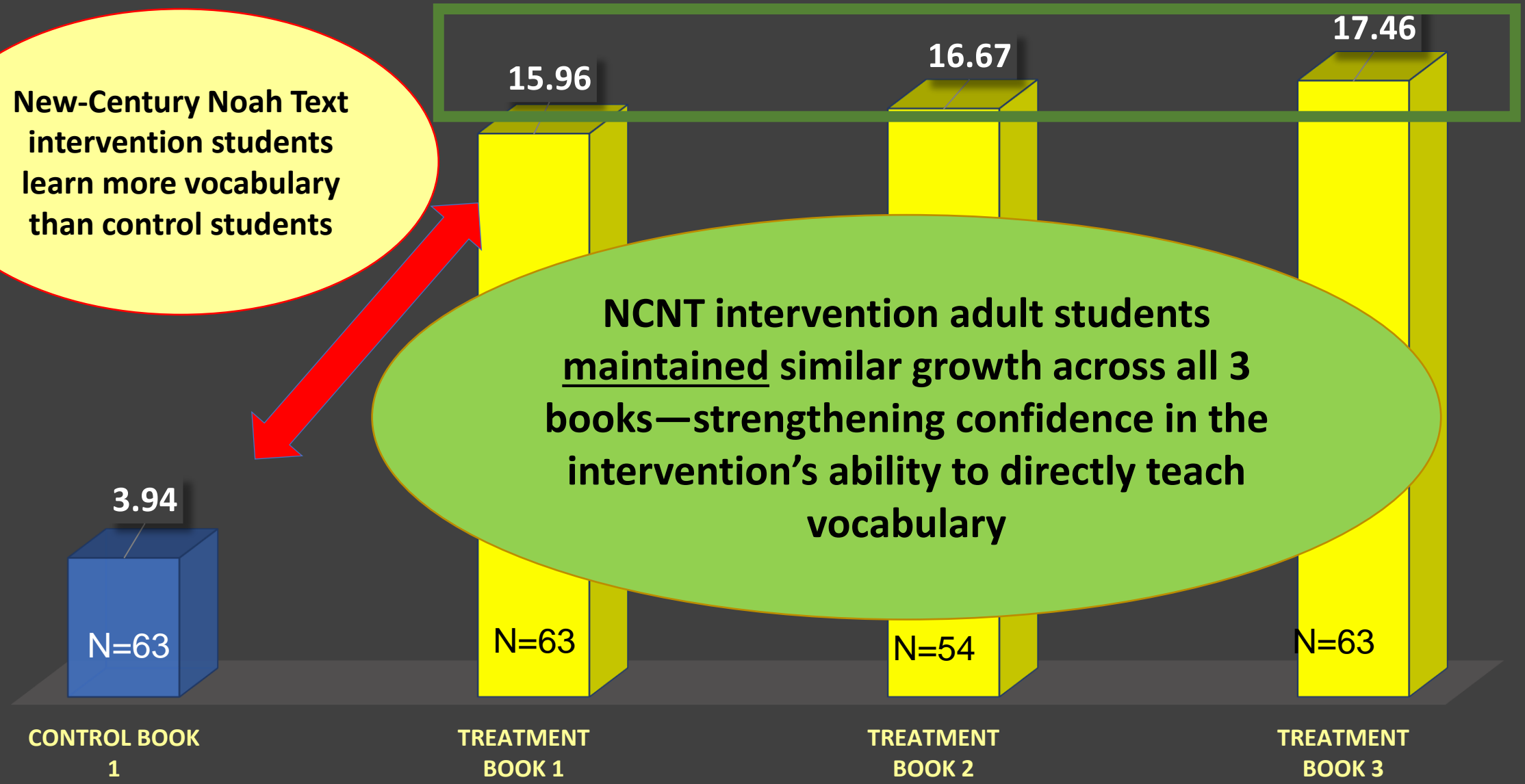
VOCABULARY GROWTH IN BOOK 1

■ PRETEST ■ POSTTEST



Women's Study: Control vs. Treatment in Taught Vocabulary

PERCENTAGE VOCABULARY GAIN FROM PRE-POSTTEST



New-Century Noah Text intervention students learn more vocabulary than control students

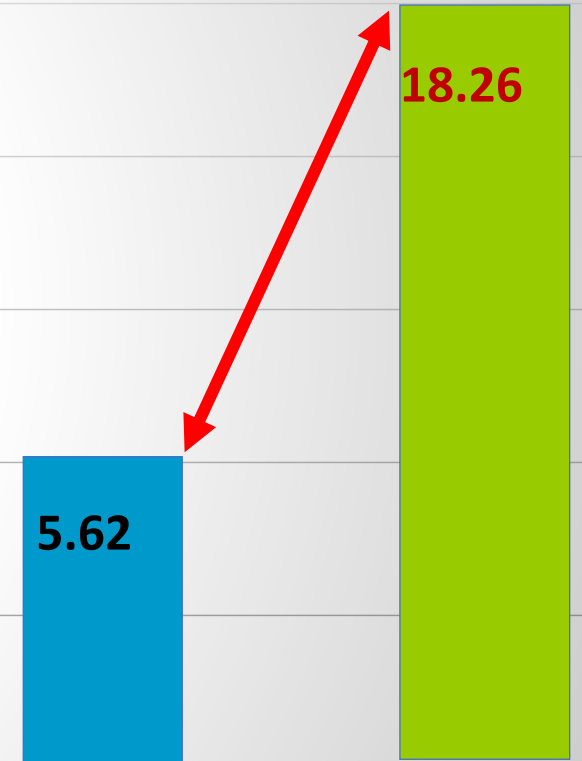
NCNT intervention adult students maintained similar growth across all 3 books—strengthening confidence in the intervention's ability to directly teach vocabulary

Women's Study: TABE Language

TABE Language: Average Gains for Control and Treatment

**Statistically significant improvement in
TABE Language test in favor of the
treatment group (approx. 1 grade level gain)**

**Language development precedes reading
comprehension**



CONTROL

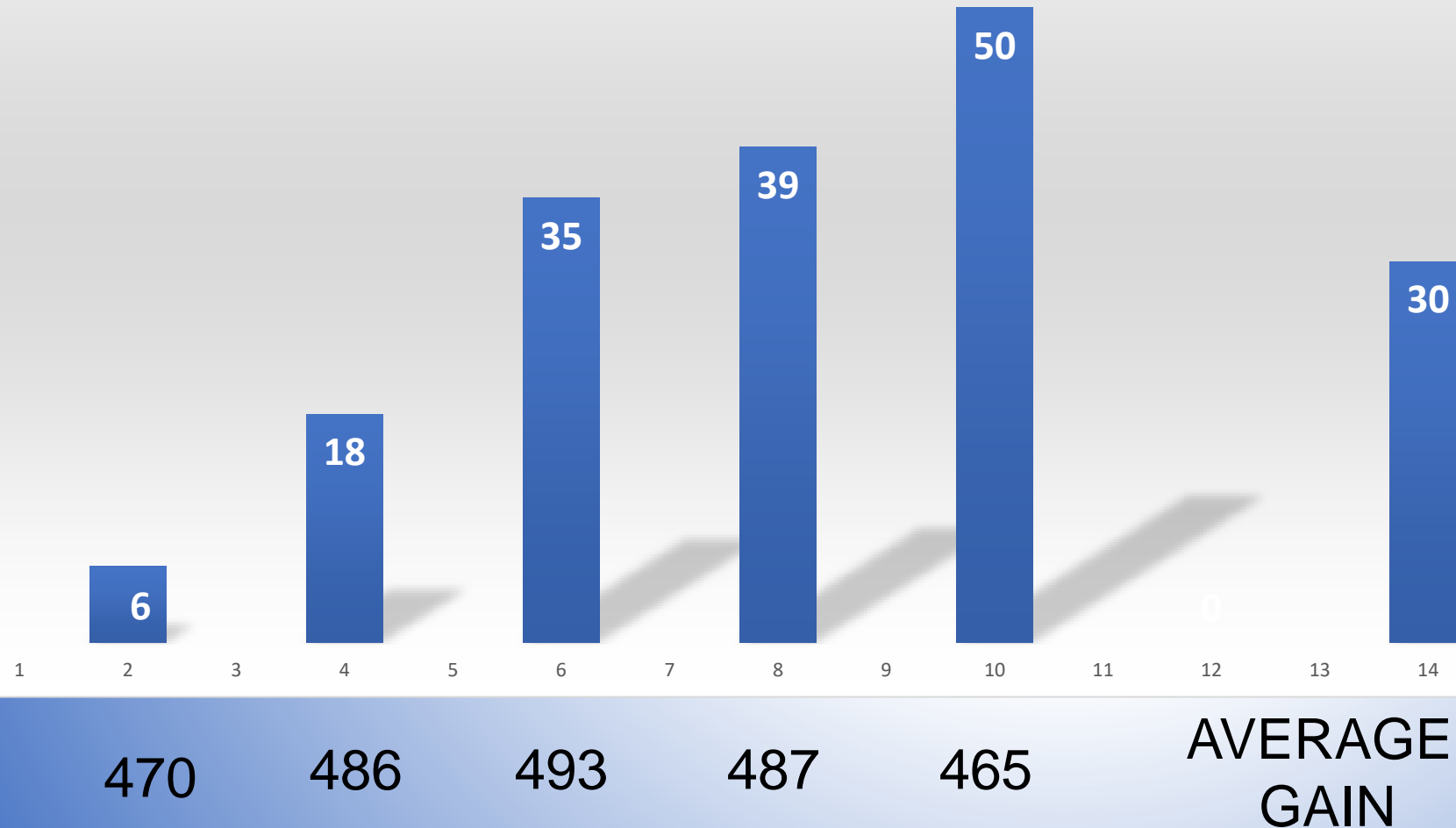


TREATMENT

TABE LANGUAGE

Possible Differential Impact: Lowest Treatment Students

Does NCNT Impact Our Lowest Students (lowest 5) in the TREATMENT Condition? TABE LANGUAGE



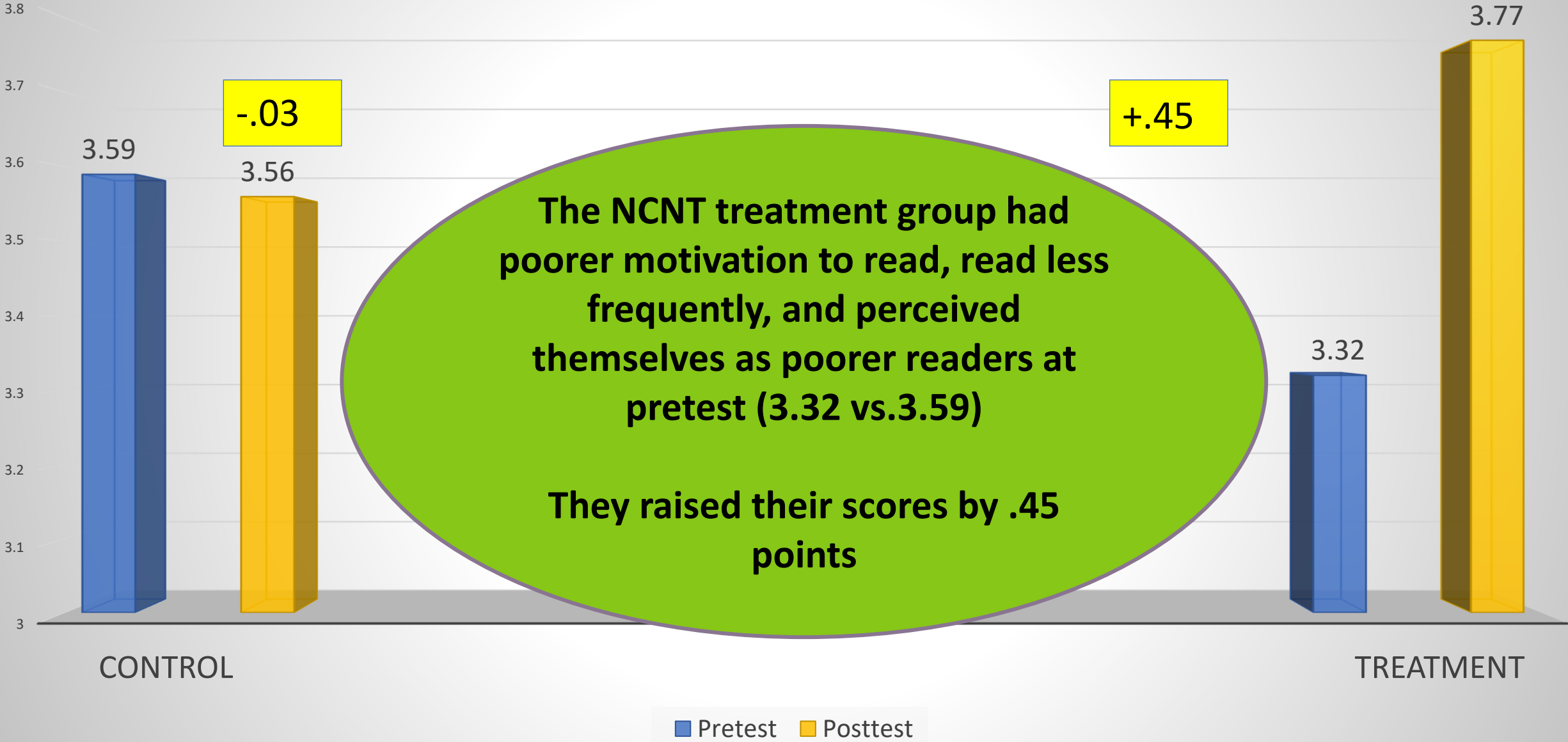
Interpretation: The lowest five NCNT students improved their TABE LANGUAGE test by an average of 30 points.

This compares to an 18.26 average gain for the entire treatment group.

NCNT *may* differentially impact the lowest achieving students

NOTE: 1 year's growth-1 grade level = 20 points

Motivation, Self-Efficacy, and Reading Habits of NCNT and Control Groups

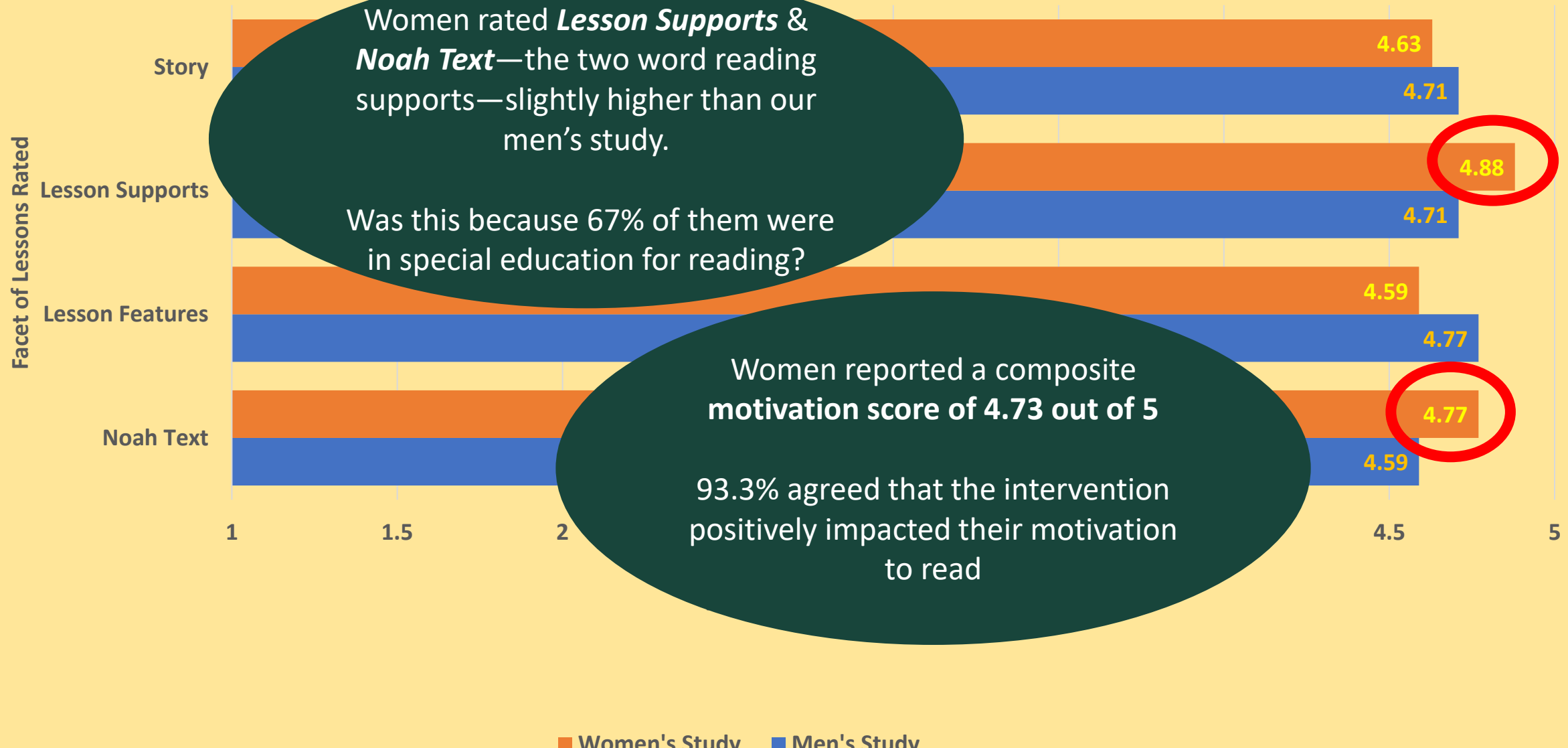


Student Social Validity

“I just want the best for the women here. To be able to comprehend and know more words and be more advanced at what they're doing because you have some that really try and just don't get it. So, I figure having New Century Noah Text was the best thing for some of these women, including myself.”

Social Validity: Consumer Satisfaction

Social Validity Measures for NCNT Intervention



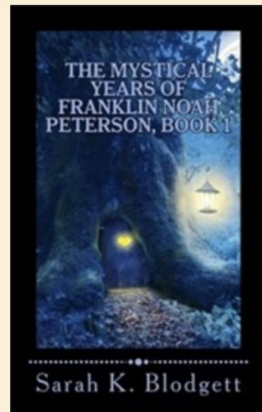
APPENDIX 1:
Design of the Noah Text®
Instructional Product

How Noah Text® was deployed

- Noah Text® was integrated into lessons in *The Intelligent Tutoring System* online reading instructional product developed by the New Century Education Foundation. The content used in the lessons came from the book *The Mystical Years of Franklin Noah Peterson, Volume One, Two, and Three*, by Sarah K. Blodgett, who is the creator of Noah Text.
- Sample screens from the lessons appear on the following slides.



New Century Education Reading



*The Mystical Years of Franklin
Noah Peterson*

Book 1 Chapter 1

A Boy Named Frank





Habits of Good Readers

Good **reading** means **understanding** what we are **reading** and **making connections between** the **story** and our **own lives**. Good **readers** who are **reading stories** are **reading detectives**. Good **readers** are **always looking** for **special words** or **clues** or **hints** to help them think **about** what the **story means**.

All **stories** have at **least** four parts: (1) **characters**, (2) **setting**, (3) **events** or **problem**, and (4) **resolution** or **solving the problem**.

Getting Ready to Read: Anticipatory Set
and Previewing Cognitive Strategies or Text Structure





**Good reading
strategy:
Elements of
story structure**

- Character
- Setting
- Events/Problem
- Solution/Resolution

Stories almost always have interesting characters.

The **author** in this **story** gives you **many** clues about the main **character, Franklin Noah Peterson**. As you read this first **chapter**, think **carefully** about how the **author describes** Frank.

Also, in this first **chapter**, the **author describes several important** clues about the **setting** of the **story** – where the **story takes place**. The **author describes** the sights, sounds, **objects**, pets, and **family members**.

So, as you read this first **chapter**, pay close **attention** to the **characters** and the **setting** of this **story**. This is what good **reading detectives** do to **understand** what they are **reading**.






Many large **houses** were built **along** the **Atlantic Ocean** by **wealthy sea captains** in the 18th **century**. Many of these **homes** had **lookout structures** built on top of their roofs. These **structures** were **often** called **widow's watches**. **Stories** were **often** told of a **captain's wife** **pacing** back and forth **inside** the **widow's watch** as she looked out to **sea anxiously waiting** for her **husband's** ship to **return home**. **Sadly, many sea captains and sailors** **became** lost at **sea never** to **return** to their **families**. Have you **ever anxiously waited** for **someone** to **return home**? It's an **awful feeling**!




Building critical background knowledge for vocabulary and conceptual understanding: Auditory support

-ap as in lap in **dilapidated**.


Find the words with the **pattern -ap**.


 perhaps

 spaceship


 overlap


 doormat

 kneecap

 forget

 handicap

 grownup

 unwrap

Active student engagement: Drag and drop words with same sound

Auditory support: All words are spoken when clicked on.

Word Study:
Focusing
attention on
common
letter patterns
to help
decode
complex
words






Visual image to strengthen word association



dilapidated (adjective) – **Fallen into ruin** or **decay**, run-down.

The town **finally** tore down the **dilapidated** old school **building**.

 di-lap-i-dat-ed

Building vocabulary knowledge:

- Definition
- Word in context

Auditory support: Syllabication—Breaking apart and blending together









Building understanding of vocabulary: synonyms


- Example is voiced
- Option to hear each word

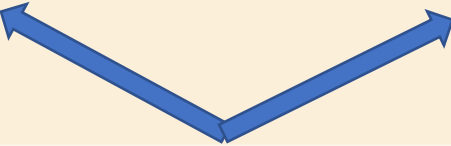
NF-1-1 Frame: Q1 Score: 0 / 0





Rundown is similar to **dilapidated**. Find other words similar to **dilapidated**.


 falling apart  healthy  neat

 repaired  neglected  unkempt

 broken down





- Active Student Response:
Drag and drop with correction

Student is active on most slides:
Drag and drop with immediate corrective feedback

Vocabulary: Understanding Words Through Root Word Knowledge


NF 3-1


Frame: Q4


Score: 3 / 3


The words **below** come from the word root "fort". Move **each picture** to the **matching sentence**:



 A **fortress** is a strong **structure** built to **protect** against **attack**.

 You **provide comfort** to **someone** to give them strength.

 You **strengthen** your **body** by **fortifying** it with food.

 You put **effort into something** to be **stronger** at it.



(Book 3)



Vocabulary: Multiple Meanings

NF 3-1

Frame: Q1

Score: 0 / 0

Now, **figure** out what the word "**bizarre**" means by **looking** at these short **sentences** and **images**. Match each **sentence** to the **picture** that shows its **meaning**:



The news **reported** a **bizarre** **story**.



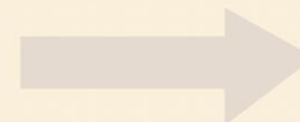
Your **hair** looks **bizarre**.



What a **bizarre** **outfit**.



(Book 3)



Assessing comprehension:

Multiple-choice quiz after each chapter with a variety of question types:





- Literal
- Inferential
- Vocabulary
- Text structure
- Author's purpose






Audio support:

All questions are read to each student, with an option to hear each answer stem

NF-1-1 Frame: Q12 Score: 8 / 9

Which of the **following characteristics** might make Frank seem **quirky**?

- Loves his **family** and his pet; **very easygoing**; three close friends 
- Lives in a **coastal** town; lives in an old house with a **scarecrow** in the yard 
- Builds **structures** in the yard; reads **under** his **covers**; makes up make **believe** worlds 
- Average** build; has a **sister** and two **parents**; 12 years old 

Frank lives with his **p**arents and nine-year-old **s**ister, **I**zzy, in a large two-**s**tory home built in the mid-1800s... The house is **v**ery big and **a**iry and **e**ven has an old **w**idow's watch perched at the top. **A**lthough the home is **v**ery old and was once **v**ery **d**ilapidated, Frank's **p**arents, **E**mily and **N**oah, **l**ovingly restored it, such that it is **v**ery comfortable and **c**ozy.

What does **dilapidated** mean in this passage?

- Modern, fancy
- Rundown, in disrepair
- Textured shapes, color profile
- Historic, old



Assessment:

Vocabulary question:

- Passage where word was used is made available in question
- Passage is read to student

Word Study: Blending Syllables

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Active student engagement: Drag and drop with error correction



Connecting the story to student's life: Personal response to literature

NF-1-1 Frame: T10 Score: 14.5 / 16

1. You wrote down **several traditions** that were **important** in your life. What were these **traditions** and why were they **important** to you?
2. For **many people**, when they take time each **morning** to think **positively** about the day ahead, their day tends to go well; and when they think **negatively**, it does not go well. What are some **ideas** for **having** more **positive** thoughts to start our day?
3. Can you give a **specific example** of a **negative attitude** you had about **something**: What was it? What **happened**? How might **having** a **negative attitude** slow down or **even stop** our **personal success** towards our **goals**?
4. Can you give a **specific example** of a **positive attitude** you had about **something**? What was it? What **happened**? How might **having** a **positive attitude** help us **achieve personal success** towards our **goals**?



Lesson Extensions:

Social-Emotional Learning

- Students write in response to one or more stems
- Book club discussion
- Counselor/counseling bibliotherapy
- Building executive skills

Themes: Dealing with disappointment, loss, planning, assessing personal strengths, peer pressure, resisting impulses, traditions, attitude, careers, perspective taking.

Written Response

- Connecting to story
- Discussion starter

NF-1-1

Frame: T9

Score: 14.5 / 16

Frank and his **family** have **many special traditions** around **Halloween**. **Traditions** are **often rituals**, like **special holidays** or **birthdays** or **celebrations**. Write down three traditions that have been **important** in your life.

DONE

