

Transitioning to Acadience Learning Workshop

Rapid Automatized Naming (RAN)

acadience reading k–6

Acadience Reading K–6 Measures Assess the Essential Early Literacy and Reading Skills

	Measure	Essential Early Literacy/Reading Skill
FSF	First Sound Fluency	Phonemic Awareness
LNF	Letter Naming Fluency	None (Indicator of Risk)
RAN	Rapid Automatized Naming	None (Indicator of Risk)
PSF	Phoneme Segmentation Fluency	Phonemic Awareness
NWF	Nonsense Word Fluency	Alphabetic Principle and Basic Phonics
ORF	Oral Reading Fluency (includes Retell)	Advanced Phonics and Word Attack Skills Accurate and Fluent Reading of Connected Text Reading Comprehension
Maze	Maze	Reading Comprehension
WUF-R*	Word Use Fluency–Revised	Vocabulary and Oral Language

2 | *WUF-R is available to research partners from info@acadiencelearning.org

© 2020 Acadience Learning Inc.

What Is Acadience RAN?

Rapid Automatized Naming = quickly and accurately naming repeated sets of *familiar* items

- Functions as a predictor of reading skills
- Difficulties with RAN don't impact reading as much as difficulties with phonological awareness
- Students who struggle with both PA and RAN have greater challenges in learning to read
- No known way to directly improve RAN



Design of RAN

- Students rapidly name a group of 5 familiar items randomly arranged and repeated randomly in 10 rows on a page.
 - RAN Objects: shoe, sun, cat, chair, tree
 - RAN Letters: A, B, C, X, O
 - RAN Numbers: 2, 3, 4, 6, 7
- A practice trial is done to determine familiarity.
- Time to complete the entire page and errors are recorded for the test page.



Research on RAN

Research suggests RAN is:

- ▶ A reliable measure of automatic naming
- ▶ Predictive of a variety of reading and reading-related skills



© 2020 Acadience Learning Inc.

5

What Is the Research on RAN?

RAN Validity (Total Score)		
	K	1
Concurrent Validity with RCS	-.44 to -.68	-.60
Predictive Validity with RCS	-.50 to -.52	NA
Predictive Validity with RCS EOY K to BOY Grade 1	-.65	

All correlations were significant and negative, meaning that higher RAN scores (slower performance) were associated with lower scores on other Acadience Reading K–6 measures.



© 2020 Acadience Learning Inc.

6

Incremental Validity of RAN

Preliminary Incremental Validity of Acadience RAN with Subsequent Reading Composite Score (RCS)

Grade and Time Span	R^2			R^2		
	RCS	RCS + RAN	ΔR^2	LNF	LNF + RAN	ΔR^2
K BOY to EOY	.337	.435	.098	.202	.300	.098
K BOY to MOY	.332	.435	.103	.251	.387	.136
K MOY to EOY	.447	.502	.055	.457	.518	.061
K EOY to BOY G1	.725	.752	.027	.589	.635	.046

Note: Data were exported from Acadience Data Management for the 2018–2019 school year and the beginning of the 2019–2020 school year. RCS = Reading Composite Score, LNF = Letter Naming Fluency, BOY = beginning of year, MOY = middle of year, EOY = end of year, K = kindergarten, G1 = first grade. Sample sizes: beginning to middle = 174, middle to end = 190, end to beginning = 137.



© 2020 Acadience Learning Inc.

7

Conclusions: Incremental Validity Study

These data indicate that RAN explains additional variation in the outcome (subsequent RCS), regardless of controlling for either initial RCS or LNF. In kindergarten, the amount of additional variance explained from beginning to middle or end of the year is 18–21%.

These results suggest that Acadience RAN: (a) is distinct from LNF and (b) provides additional information beyond that provided by other Acadience Reading K–6 measures (e.g., LNF) in predicting later reading outcomes.



© 2020 Acadience Learning Inc.

8

Why RAN?

RAN measures provide an additional indicator of risk to use with Acadience Reading K–6.

- ▶ RAN is a strong and robust predictor of later reading performance.
- ▶ Identifying students who may be at risk for future reading difficulties
- ▶ Not to be used for progress monitoring
- ▶ Teaching RAN is not advised.
- ▶ There is no research-based way to directly improve RAN, but improving reading skills may improve RAN.



© 2020 Acadience Learning Inc.

9

Acadience RAN Overview

Essential Early Literacy/Reading Skill	None
Administration Time	Ranges from about 30 seconds to 2 minutes per form (students complete two forms: Objects & Letters or Objects & Numbers)
Administration Schedule	Beginning of kindergarten to the end of first grade
Score	Total time, in seconds, to complete a form. Errors are also counted and reported.
Wait Rule	If the student does not respond within 3 seconds on an item, mark the item incorrect, tell the student the name of the item, point to the next item and say, Keep going.
Discontinue Rule	If the student makes <i>any</i> errors on the second practice trial or four errors in the first two rows of the Test Form.

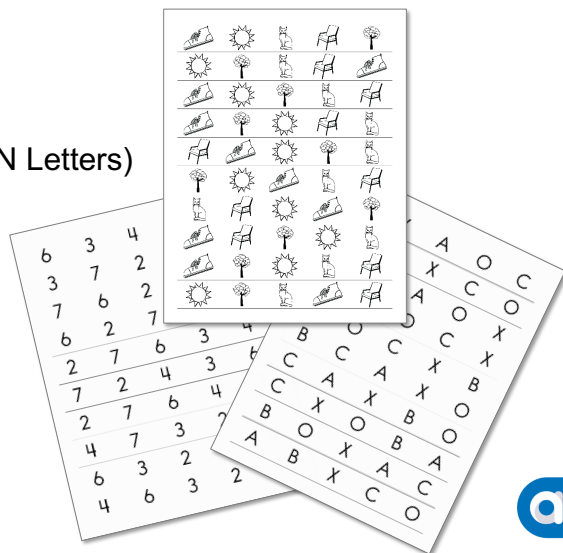


© 2020 Acadience Learning Inc.

10

Acadience RAN

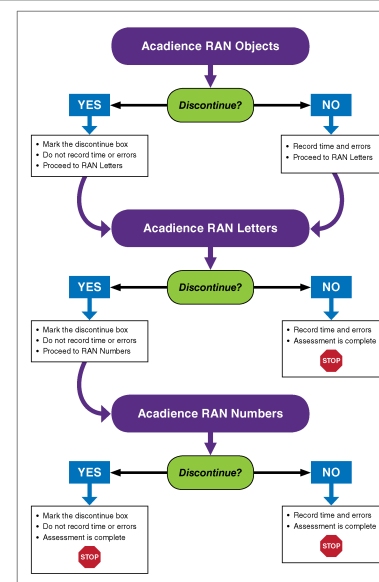
- ▶ RAN Objects
- ▶ RAN Letters
 - RAN Numbers (alternate to RAN Letters)
- ▶ Spanish Version



© 2020 Acadience Learning Inc.

11

Sequence for RAN Assessment



© 2020 Acadience Learning Inc.

12

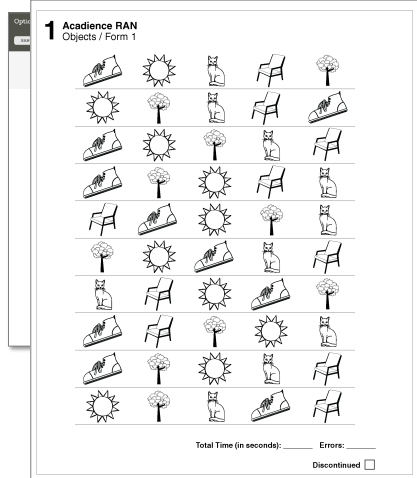
Acadience RAN

Format:

Assessor shows the student the page of items. Student says the names of the items.

Score:

Number of seconds it takes for the student to name all the items.



© 2020 Acadience Learning Inc.

13

Administration Directions: RAN Practice Page

This measure is individually administered.

Practice Page followed by Test Page

Practice Page: Put the Practice Page in front of the student and say, **Here are some pictures*. I will point to a picture and you tell me what it is.** [Point to the first picture], then say, **What is this?** If the student is correct, say, **Good. What are the other pictures?**

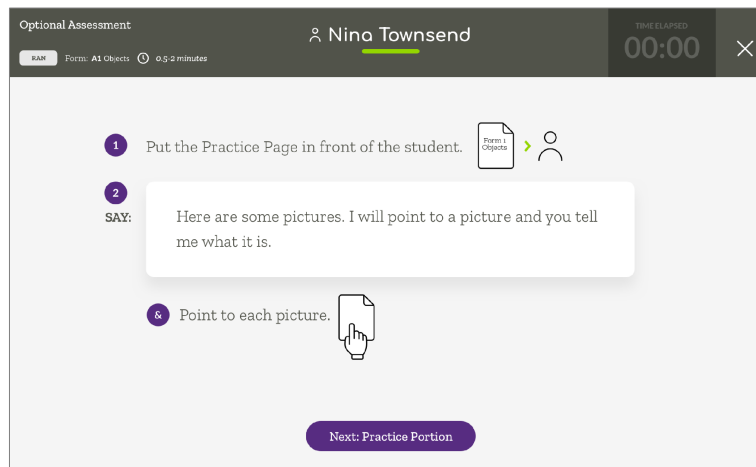
*Note: Other forms say "letters" and "numbers" respectively.



© 2020 Acadience Learning Inc.

14

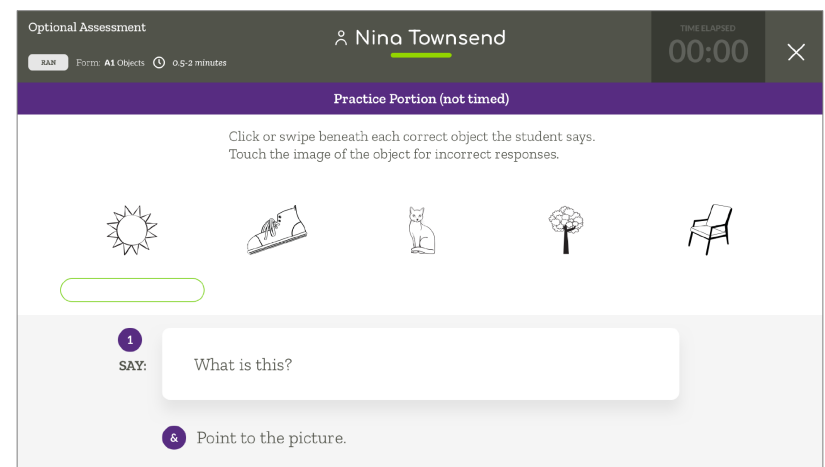
RAN Directions ALO



© 2020 Acadience Learning Inc.

15

RAN Directions ALO



© 2020 Acadience Learning Inc.

16

RAN Directions ALO

Optional Assessment

Nina Townsend

TIME ELAPSED 00:00

RAN Form: A1 Objects 0.5-2 minutes

Practice Portion (not timed)

Click or swipe beneath each correct object the student says.
Touch the image of the object for incorrect responses.

✓

☀️ 📖 🐱 🌳 🪑

1 SAY: What is this?

2 Point to the picture.



RAN Directions ALO

Optional Assessment

Nina Townsend

TIME ELAPSED 00:00

RAN Form: A1 Objects 0.5-2 minutes

Practice Portion (not timed)

Click or swipe beneath each correct object the student says.
Touch the image of the object for incorrect responses.

✓

☀️ 📖 🐱 🌳 🪑

1 SAY: Good. What are the other pictures?



Administration Directions: RAN Practice Page

If the student responds correctly to the remaining practice items, no feedback is provided.

However...

For *all* practice items:

<p><i>Incorrect response</i></p> <p>Student does not respond within 3 seconds or responds <u>incorrectly</u>.</p>	<p><i>Correct response</i></p> <p>Good. If practice items remain say, Keep going.</p>
	<p><i>Incorrect response</i></p> <p>This picture [point] is [insert name]. If practice items remain say, Keep going.</p>

*Note: Other forms say “letters” and “numbers” respectively.



Administration Directions: RAN Practice Page

If the student makes an error on any practice item, provide a second practice trial using the same Practice Page and directions.

If the student makes *any* errors on the second practice trial, discontinue the RAN task, mark the discontinued box on the scoring booklet, do not record time or errors, and proceed to administer the next RAN task (e.g., letters or numbers) (if applicable).



Administration Directions: RAN Test Page

Put the Test Page in front of the student and say,

Here are more pictures. When I say begin, start here [point], ***go this way*** [sweep your finger left to right under the first two rows of pictures], ***and name each picture as quickly as you can. Don't skip any pictures. Ready, begin.***

*Note: Other forms say "letters" and "numbers" respectively.



RAN Objects Administration Directions: ALO

Say the words on the screen.

Note: Mark the student's response to the practice items and the next screen will automatically branch to the appropriate next set of directions.

1 Put the Test Page in front of the student. (Letters)

2 SAY: Here are some more letters. When I say "Begin," start here.

3 SAY: Go this way, and name each letter as quickly as you can.

4 SAY: Don't skip any letters.

5 SAY: Ready, Begin.

Begin



Administration Directions: Testing

1. Touch begin.
2. During the testing:
 - ▶ Follow along and mark the student's responses on the tablet according to the scoring rules.
 - ▶ Once the student names the last picture, touch Stop on the tablet.

*Record the time in seconds that it took the student to name all objects.



RAN Scoring Rules

	ALO
1	Touch or swipe beneath each item the student names correctly.
2	Touch any item that the student omits or names incorrectly.
3	Touch the x above the item if the student self-corrects within 3 seconds. (If the student changes a response from correct to incorrect, touch the check mark (✓) above the item.)

Note: Students are not penalized for differences in pronunciation due to dialect, articulation delays or impairments, or speaking a first language other than English.

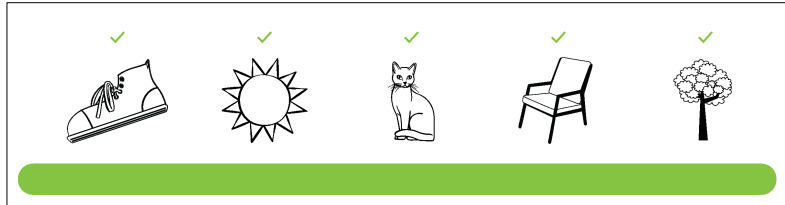


Scoring Rule 1 ALO: Items Named Correctly

Touch or swipe beneath each item named correctly.

Student response shoe...sun...cat...chair...tree

How to score



Note: Students are not penalized for differences in pronunciation due to dialect, articulation delays or impairments, or for pronunciations due to speaking a first language other than English.



© 2020 Acadience Learning Inc.

25

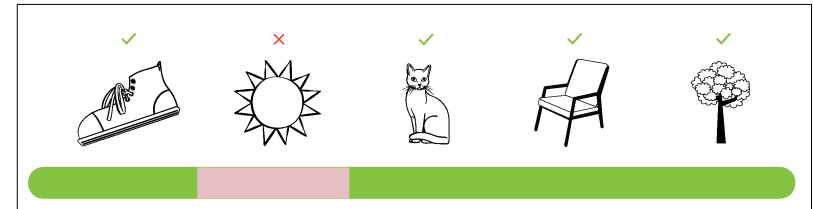
Scoring Rule 2 ALO: Items Named Incorrectly

Touch or swipe over any item named incorrectly, skipped, or not named within 3 seconds.

Student response

shoe...(3 seconds) (assessor says, "sun")...cat...chair...tree

How to score



© 2020 Acadience Learning Inc.

26

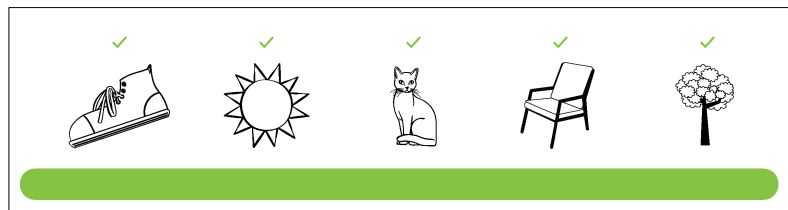
Scoring Rule 3 ALO: Self-Corrections

Touch the **x** above any item that had previously been marked incorrect and was self-corrected within 3 seconds.

Student response

shoe...sun...whiskers, oh wait, I mean cat...chair...tree

How to score



© 2020 Acadience Learning Inc.

27

Wait Rule

If the student does not respond within 3 seconds on a picture, mark a slash (/) through the picture, tell the student the name of the picture, point to the next picture and say, **Keep going.**

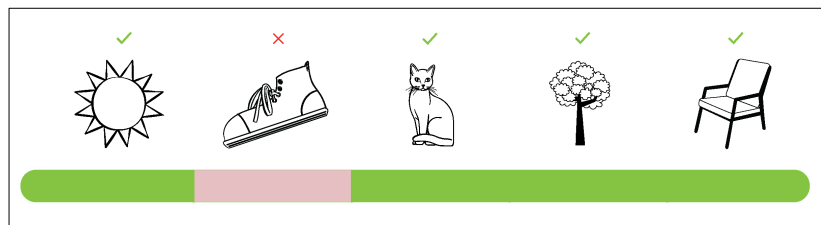


© 2020 Acadience Learning Inc.

28

Discontinue Rule ALO: Practice Page

If the student makes *any* errors in naming the items on the second practice trial, discontinue.

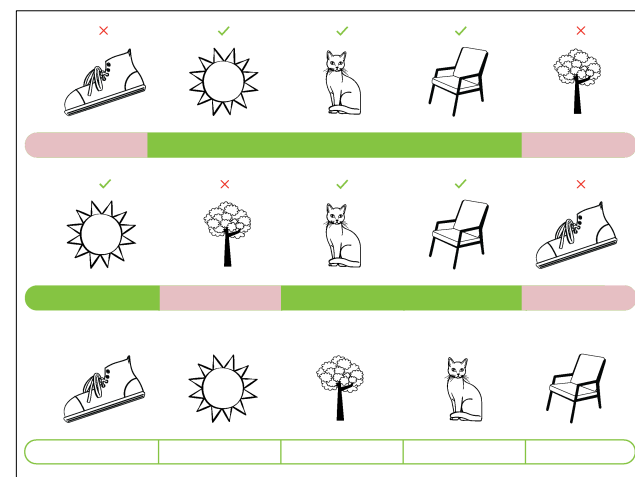


Note: If the discontinue rule is met for RAN Objects, proceed to RAN Letters. If met for RAN Letters, proceed to RAN Numbers.



Discontinue Rule ALO: Test Page

If the student makes four errors in the first two rows of the Test Form, discontinue.



Note: If the discontinue rule is met for RAN Objects, proceed to RAN Letters. If met for RAN Letters, proceed to RAN Numbers.



Reminder: For RAN Objects

If the student says an accurate word that describes the picture but that does not match the name used for the item (sun, shoe, cat, tree, chair), say, **Let's call it** [insert name of picture], then point to the next picture (if any remain) and say, **Keep going**. For example, if the student says "kitty" for cat, say, **Let's call it cat**, point to the next picture and say, **Keep going**.



Reminders: For Any Acadience RAN Measures

If the student skips a line, redirect the student to the correct line [point] and if necessary, say, **Keep going from here**.

If the student skips an individual item, mark it as an error.

If the student is skipping around the page, point to the appropriate spot and say, **Try to name each picture/letter/number**.

Note: All reminders may be used as often as needed.



Note

Students are not penalized for imperfect pronunciation due to articulation delays or impairments, dialect, or speaking a first language other than English.



Approved Accommodations for RAN

Approved accommodations are unlikely to affect how the assessment functions. A score can be reported and interpreted as an official Acadience RAN score.

Approved accommodations for RAN include the use of:

- ▶ Enlarged student materials for students with visual impairments
- ▶ Colored overlays, filters, or lighting adjustments for students with visual impairments
- ▶ Assistive technology, such as hearing aids and assistive listening devices (ALDs), for students with hearing impairments
- ▶ Markers or rulers to focus student attention on a single line



Immediately After Testing

- ▶ **Make a note** about any patterns in student responses that were not captured by the marking procedures.

Optional Assessment

Nino Townsend

RAN Form: A1 0:52 minutes

RAN Assessment Done!

Notes

If I type a note in here it looks like this ...

Next



ALO Automatically Computes the Final Score and Transfers It to the Student Profile

Optional Assessment

Nino Townsend

RAN Form: A1 0:52 minutes

RAN Assessment Done!

RAN - Random Automatized Naming

SECONDS 78 ERRORS 1

RAN Breakdown by Assessment

RAN Objects

Seconds 62 Errors 1

RAN Letters (Accuracy rate below 94%)

Seconds 16 Errors 4

DISCONTINUED

RAN Numbers

Seconds 16 Errors 0



RAN Review

	ALO
How do I mark a correct response?	Touch or swipe beneath each correct item.
How do I record an incorrect response?	Touch or swipe the item.
What do I do when the student hesitates for 3 seconds?	Touch or swipe the item, name it, point to the next item and say, Keep going .
When do I discontinue RAN?	If the student makes <i>any</i> errors on the second practice trial or four errors in the first two rows of the Test Form.



Interpreting RAN Results

A provisional cut score for determining need for support will be based on local norms for the time to complete each RAN measure, as well as for total time (time to complete RAN Objects and Letters or time to complete RAN Objects and Numbers).

Provisionally, students who earn scores at the 10th percentile or lower may need additional support.

Scores for students who have more than five errors (less than 90% accuracy) on any RAN measure should not be interpreted as RAN.



Interpreting RAN Results

Local norms represent relative assessment performance within the district.

Local norms are NOT benchmarks and NOT anchored to an empirically-derived target.

As additional data are gathered on the Acadience RAN measures, these criteria may be updated.

Using RAN for teaching purposes is not advisable.



RAN Summary

Start timer after you say, **Begin**.

Correct	Incorrect
<ul style="list-style-type: none"> Item (object, letter, number) named correctly Item name mispronounced due to articulation error, dialect, or different first language 	<ul style="list-style-type: none"> Item named incorrectly No response for 3 seconds Item skipped
Reminders	Let's call it _____. [point] Keep going. Keep going from here. Try to name each picture/letter/number.
Wait Rule	If the student does not respond within 3 seconds on an item, mark the item incorrect, tell the student the name of the item, point to the next item and say, Keep going .
Discontinue Rule	If the student makes <i>any</i> errors on the second practice trial or four errors in the first two rows of the Test Form.

