

Administration & Scoring of Dynamic Indicators of Vocabulary Skills

DIVS™

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Increasingly Large Numbers of Students Possess Reading Problems

- A minimum of **two million children** in the United States have substantial difficulties in reading.
- Approximately **one out of every six children** will encounter reading difficulties during the crucial first 3 years of school.
- Children who read poorly at the end of their **first year of reading instruction** are likely to continue to experience difficulty in reading throughout their educational careers.



Does preschool matter?

- The Carolina Abecedarian Project
 - 57 infants from low-income families received early intervention through age 5 in a high quality child care center.
 - 54 infants from low-income families were assigned to a non-treatment control group.
 - The children were tracked longitudinally until they reached the age of 21
 - Outcomes at age 21 were astonishing!



Does preschool matter?

	Preschool	Control
Years of School	12.2	11.6
4-Year College	35.9%	13.7%
In School	42%	27%
Skilled Jobs	47%	27%

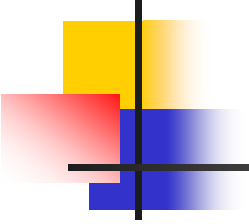
From M. Adams (2006) *Understanding & Promoting Reading Literacy*. Workshop presented at the Reading Institute, Williamstown. MA.



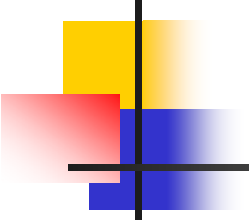
Why change the Assessment System for Preschoolers in the United States?

- A **Preventive Approach** to Reading Problems in Young Children
 - The most **parsimonious** and **sensible** way to remediate the reading difficulties of young children is to **prevent** these problems from occurring in the first place.

(Johnston & Allington, 1991)

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- Prevention Requires **Quality Assessment Tools**
 - Tools that **identify** children early on who are failing to acquire the core components that are essential to reading success.
 - Tools that allow for **ongoing evaluation** of the effectiveness of interventions for individual children.

(Kaminski & Good, 1996)

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- Measurement tools exist that help prevent reading problems
 - Curriculum-Based Measurement (CBM)
 - Dynamic Indicators of Basic Early Literacy Skills (DIBELS)
 - Individual Growth and Development Indicators (IGDIs)
 - Dynamic Indicators of Vocabulary Skills (DIVS)

(Deno, 1985; Kaminski & Good, 1996; 1998; Parker, 2000; Shinn, 1989)



Three Core Components that are Essential to Early Reading Success

1. Phonemic Awareness
2. Print Awareness
3. Oral Language →

Expressive Vocabulary } DIVS
Receptive Vocabulary }

(Adams, 1990)



Features of DIVS

- Dynamic
- Indicators
- Standardized Measurement Procedures
- Short-Duration, Fluency Measures
- Inexpensive
- Multiple Forms
- Work well within a Formative Evaluation Framework
- Technically Adequate

(Deno, 1985; 1992; Kaminski & Good, 1998; Parker, 2000)



Technical Adequacy Summary: PNF

Type of Validity/Reliability	Grade	Test or Criterion	Number	Coefficient
Picture Naming Fluency				
Concurrent	Preschool	DIVS RDF	257	.77
Concurrent	Preschool	PPVT-III	250	.75
Concurrent	Preschool	PLS-Auditory Comm.	207	.64
Concurrent	Preschool	PLS-Expressive Comm.	204	.67
Predictive	Preschool	DIBELS-LNF (Kind.-Spring)	128-139	.40
Predictive	Preschool	DIBELS-NWF (Kind.-Spring)	128-139	.37
Predictive	Preschool	CBM-R (ORF) (Gd. 1-Spring)	128-139	.39
Alternate Form	Preschool	---	256	.84
Test-retest (13 weeks)	Preschool	---	139	.84
Test-retest (26 weeks)	Preschool	---	128	.82

Note: All Correlations significant at the 0.01 level.

Technical Adequacy Summary: RDF

Type of Validity/Reliability	Grade	Test or Criterion	Number	Coefficient
Picture Naming Fluency				
Concurrent	Preschool	DIVS PNF	257	.82
Concurrent	Preschool	PPVT-III	250	.83
Concurrent	Preschool	PLS-Auditory Comm.	206	.70
Concurrent	Preschool	PLS-Expressive Comm.	203	.73
Predictive	Preschool	DIBELS-LNF (Kind.-Spring)	128-139	.37
Predictive	Preschool	DIBELS-NWF (Kind.-Spring)	128-139	.29
Predictive	Preschool	CBM-R (ORF) (Gd. 1-Spring)	128-139	.42
Alternate Form	Preschool	---	256	.80
Test-retest (13 weeks)	Preschool	---	135	.86

Note: All Correlations significant at the 0.01 level.



So...what were DIVS designed to do?

- DIVS were designed to function as **Educational Thermometers**



Vocabulary Benchmark Testing: *Measurement Net*

	Fall	Winter	Early Spring	Late Spring
	<ul style="list-style-type: none"> ■ September ■ October <p><i>*All Students</i></p>	<ul style="list-style-type: none"> ■ January ■ February <p><i>*All Students</i></p>	<ul style="list-style-type: none"> ■ March ■ April <p><i>*Low Performing Students Only</i></p>	<ul style="list-style-type: none"> ■ May ■ June <p><i>*All Students</i></p>
Preschool	<ul style="list-style-type: none"> ■ Picture Naming Fluency 	<ul style="list-style-type: none"> ■ Picture Naming Fluency ■ Reverse Definition Fluency 	<ul style="list-style-type: none"> ■ Picture Naming Fluency ■ Reverse Definition Fluency 	<ul style="list-style-type: none"> ■ Picture Naming Fluency ■ Reverse Definition Fluency
Kindergarten	<ul style="list-style-type: none"> ■ Picture Naming Fluency ■ Reverse Definition Fluency 	<ul style="list-style-type: none"> ■ Picture Naming Fluency ■ Reverse Definition Fluency 	<ul style="list-style-type: none"> ■ Picture Naming Fluency ■ Reverse Definition Fluency 	<ul style="list-style-type: none"> ■ Picture Naming Fluency ■ Reverse Definition Fluency

Note: It is strongly recommended that young students be assessed across multiple days with alternate forms of each measure.



DIVS: Picture Naming Fluency

Directions: When I say ***Begin***, start naming the picture at the top of the page (point to the picture in the top left corner of the page). ***Name the pictures across the page*** (run your finger underneath the top row of pictures). ***Try to name each picture. If you come to a picture that you don't know, I'll tell it to you. Do you have any questions?***



PNF Administration & Scoring Rules

- **Materials:**

- Examiner packet containing picture naming fluency items (44 randomized pictures)
- Student booklet containing picture naming fluency items (44 randomized pictures with corresponding picture labels)
- Stopwatch
- Pencil



PNF Administration & Scoring Rules

- **Directions for Administration:**

1. Place the examiner packet in front of the child.
2. Place the student booklet in front of you, shielded so that the child cannot see what you record.
3. Say these specific directions to the child:
 - *When I say **Begin**, start naming the picture at the **top of the page** (point to the picture in the top left corner of the page). **Name the pictures across the page** (run your finger underneath the top row of pictures). **Try to name each picture. If you come to a picture you don't know, I'll tell it to you. Do you have any questions?** (Pause)*



PNF Administration & Scoring Rules

4. Point to the picture in the top left corner of the page and say, *Put your finger on the first picture...Begin*. As soon as the child names the first picture, start your stopwatch. If the child does not name the first picture within **5 seconds**, tell him/her the correct response, start your stopwatch, and mark the picture as incorrect.
5. Follow along on the student booklet. Put a slash (/) through the picture labels named incorrectly. Circle the picture labels named correctly (see Directions for Scoring).
6. If the child hesitates with a picture for **5 seconds**, tell the child the correct response and mark the picture as incorrect. If necessary, point to the next picture and say, *What's this?*
7. If the child finishes a page, stop your stopwatch, turn the page within the examiner copy, tell the student to *Begin* again, and restart your stopwatch.
8. After **1 minute**, stop the child. Place a bracket (]) after the wording above the last picture attempted. Tally and record the number of **Pictures Named Correct (PNC)** in the lower right corner of the student booklet.
9. If the student completes all 44 pictures prior to the 1 minute time limit, his/her score will need to be prorated [PNC = (# correct x 60) ÷ total time].



PNF Administration & Scoring Rules

■ Directions for Scoring:

1. Circle the picture labels named correctly.
2. The following responses should be counted as correct:
 - Words listed above the target picture within the student booklet.
 - Self-corrections made within **5 seconds** of the child's original response. Denote self-corrections by writing the symbol "**SC**" above the picture within the student booklet.
 - The plural form of singular words. For example, the child says "ducks" instead of "duck".
 - The singular form of plural words. For example, the child says "mitten" instead of "mittens".
 - Multi-word responses that contain the correct response. For example, the child says "polar bear" instead of bear.



PNF Administration & Scoring Rules

3. Put a slash (/) through picture labels named incorrectly.
4. The following responses should be counted as incorrect:
 - An incorrectly named picture.
 - An omitted picture.
 - A hesitation for 5 seconds.
5. After noting a hesitation mistake, the examiner does not provide the student with the correct answer.
6. The student is not penalized for imperfect pronunciation due to dialect, articulation, or second language inferences. This is a professional judgment issue and should be based on the child's response patterns and/or prior knowledge of his/her speech patterns. For example, a child may regularly substitute /th/ for /h/. If that is the case, the child would be given full credit for saying "thill" instead of "hill".



PNF Administration & Scoring Rules

■ Accommodations:

1. The child may be tested in an alternative setting.
2. The child may be tested by an alternative examiner, preferably someone with whom the child is comfortable and/or who is familiar with the child's speech patterns.
3. The child's understanding of the directions can be checked. For example, the child can be asked to repeat or summarize the directions.
4. The directions can be provided in a manner more accessible to the child (e.g., sign language).
5. Enlarged pictures may be used.
6. A marker, ruler, or window may be used to help guide the child from one row of pictures to the next.
7. If the child is experiencing difficulty tracking across a row of pictures, the examiner may point to each picture.

Definition	Answer Key	Scoring
1. What is a musical instrument that makes a sound when it's hit with sticks?	drum, cymbal, bell, gong, tambourine, tom-tom, bongo(s), xylophone	WNC =
2. What is something we hold in our hand to write?	pen, marker, pencil, crayon, chalk	WNC =
3. What is something that has a flame and burns things?	fire, spark, blaze, firework, furnace, stove, oven, range, grill, barbecue, incinerator, kiln, hearth, fireplace, sun, matches, candle, torch	WNC =
4. What is a place where many animals live?	forest, park, jungle, zoo, woods, farm, barn	WNC =
5. What is a fruit that is used to make lemonade?	lemon	WNC =
6. What is a shape that has four sides?	square, rectangle	WNC =
7. What is moving air that blows leaves off trees?	wind, gust, breeze, squall, gale, hurricane, tornado, cyclone	WNC =
8. What is a part of your body between your chin and your shoulders?	neck	WNC =
9. What is a part of your body that is found under your skin and feels hard?	bone(s), cartilage, skeleton	WNC =
10. What is a toy that is round, bouncy, and used to play games?	ball (any type), marble	WNC =
11. What is a person who is little, crawls, and cries when hungry?	baby, infant, child, babe	WNC =
12. What is an animal with long ears that can hop very fast?	rabbit, bunny, Bugs Bunny, kangaroo, hare	WNC =
13. What is an animal that has feathers and wings?	bird (any type)	WNC =
14. What is a musical instrument that makes noise when you blow into it?	horn, trumpet, bugle, saxophone, trombone, tuba, clarinet, flute, oboe, harmonica, kazoo, recorder, whistle	WNC =
15. What is a thing that is slippery when wet and used to wash our hands?	soap, detergent, shampoo, water, sink	WNC =

DIVS: Reverse Definition Fluency

Directions: I am going to describe a word to you. After I describe it, tell me what word I'm thinking of. So if I say, 'What is an animal that roars?' you would say, 'A lion.' Let's try one...What is a part of your body that is used to see?



RDF Administration & Scoring Rules

- **Materials:**
 - Student booklet containing reverse definition fluency items (30 randomly ordered formal definitions with corresponding answer keys)
 - Stopwatch
 - Pencil



RDF Administration & Scoring Rules

- **Directions for Administration:**

1. Place the student booklet in front of you, shielded so that the child cannot see what you record.
2. Say these specific directions to the child:
 - *I am going to describe a word to you. After I describe it, tell me what word I'm thinking of. So if I say "What is an animal that roars?" you would say, "A lion." Let's try one...What is a part of your body used to see? (Pause)*

Correct Response: If the student says, eye or eyes, you say...	Incorrect Response: If the student gives any other response, you say...
<i>Good. Eye is a part of your body that is used to see.</i>	<i>Eye is a part of your body that is used to see. Let's try again. What is a part of your body that is used to see? (If still incorrect, point to your eye and say...) Eye is a part of your body that is used to see.</i>

- *OK. Here is your first one...*



RDF Administration & Scoring Rules

3. Supply the first definition and start your stopwatch. If the child does not begin to provide a response after **5 seconds**, stop your stopwatch and score the item as zero. Give the child the next definition. Note: Do not give the child the correct answer.
4. If the child says, "I don't know," wait **5 seconds**, stop your stopwatch, and score the item as zero. Give the child the next definition.
5. If the child fails to produce a response **after the first 5 definitions**, discontinue the task.
6. Run your stopwatch **only** when the child is attempting to respond. As soon as the child provides a response, stop your stopwatch. Do not start it again until you are done giving the next definition.



RDF Administration & Scoring Rules

6. Follow along on the student booklet and check to see whether the child's response is listed in the appropriate answer key. If the child's response is listed in the answer key, circle it. If the child's response is not listed in the answer key, put a slash (/) through the entire answer key box. Then, mark the student's response as either correct (1 point) or incorrect (0 points) (see Directions for Scoring).
7. After **1 minute** has accumulated, stop the child. Tally and record the number of **Words Named Correct (WNC)** in the lower right corner of the student booklet.



RDF Administration & Scoring Rules

■ Directions for Scoring:

1. Circle correct responses.
2. The following responses should be counted as correct:
 - Words listed in the answer key to the right of the definition.
 - Self-corrections made within **5 seconds** of the child's original response. Denote self-corrections by writing the symbol "**SC**" above the circled response within the student booklet.
 - The plural form of singular words. For example, the child says "lions" instead of "lion".
 - The singular form of plural words. For example, the child says "sneaker" instead of "sneakers".
 - Multi-word responses that contain the correct response. For example, responding to the definition "What's an animal that gives us milk?" the child says "moo cow" instead of cow.



RDF Administration & Scoring Rules

3. If the child responds incorrectly, put a slash (/) through the entire answer key box.
4. The following responses should be counted as incorrect:
 - A response that is not listed in the item's answer key.
 - A repetition of the definition.
 - A hesitation for 5 seconds.
5. After noting a hesitation mistake, the examiner does not provide the student with the correct answer.
6. The student is not penalized for imperfect pronunciation due to dialect, articulation, or second language inferences. This is a professional judgment issue and should be based on the child's response patterns and/or prior knowledge of his/her speech patterns. For example, a child may regularly substitute /w/ for /r/. If that is the case, the child would be given full credit for saying "mushwoom" instead of "mushroom".



RDF Administration & Scoring Rules

- **Accommodations:**

1. The child may be tested in an alternative setting.
2. The child may be tested by an alternative examiner, preferably someone with whom the child is comfortable and/or who is familiar with the child's speech patterns.
3. The child's understanding of the general directions or key words (e.g., "describe") within the directions can be checked. The child can also be asked to repeat or summarize the directions.
4. The directions can be provided in a manner more accessible to the child (e.g., sign language).
5. The practice item may be repeated or one additional example may be provided (e.g., What is a part of your body used to smell?).



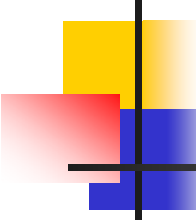
Where can you get DIVS?

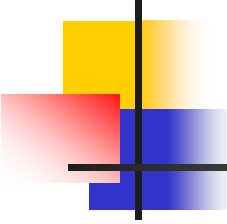
- DIVS materials are available:
 - On the web: www.idealconsultingservices.com
 - Click on the **Dynamic Indicators of Vocabulary Skills (DIVS)** link
 - Click on the **DIVS Benchmark Testing Probes** link
 - Note: DIVS materials are password protected. To receive a free download of DIVS materials through June 30, 2008, type in the password **DIVS**.

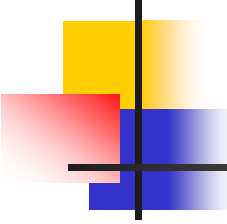


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