

## Fluency Resources and References

### Fluency Resources

For more information regarding the **research base for fluency** visit:

<http://www.nifl.gov/partnershipforreading/explore/fluency.html>,  
<http://www.nifl.gov/partnershipforreading/publications/Cierra.pdf>.

To view a **video clip of explicit fluency instruction** visit:

<http://www.ncrel.org/rf/sbrr/fluencyvid.htm>

For additional information regarding **assessments for fluency** visit:

<http://www.balancedreading.com/assessment/abecedarian.html>.

To learn more about the **DIBELS Oral Reading Fluency measure** visit:

<http://reading.uoregon.edu/assessment/dibels.php>.

For more information on **student progress monitoring**, please visit:

<http://www.studentprogress.org>

For additional considerations on the **instructional design for teaching fluency**, please visit: <http://reading.uoregon.edu/flu/index.php>.

For more information regarding **instructional strategies for teaching fluency** visit:

<http://www.readingrockets.org/article.php?ID=99>, and  
<http://www.ldonline.org/article.php?max=20&id=552&loc=27>.

For more information on **Recordings for the Blind and Dyslexic** visit: <http://www.rfbid.org>

For more information on the **Informal Reading Inventory**, please visit:

<http://lrs.ed.uiuc.edu/students/srutledg/iri.html>

For more information on **Reader's Theater Scripts**, visit:

<http://www.aaronshp.com/rt/RTE.html>

## References

- Elementary and Secondary Education Act (ESEA). (2001). *No child left behind*. Retrieved November 15, 2005 from <http://www.nochildleftbehind.gov/next/overview/index.html>
- Good, R. H., & Kaminski, R. A. (2002). *DIBELS oral reading fluency passages for first through third grades* (Technical Report No. 10). Eugene, OR: University of Oregon.
- Learning Management System. (2005). Reading fluency table. Retrieved November 15, 2005 from [http://www.lsi.ku.edu/jgprojects/cwptlms/html2002/ProjectManagement/reading\\_fluency\\_table.htm](http://www.lsi.ku.edu/jgprojects/cwptlms/html2002/ProjectManagement/reading_fluency_table.htm)
- Lloyd, J.W. (2005). *Characteristics of effective reading programs: Promising and not-so-promising approaches*. (A summary of the teleconference for the state-to-state Information Sharing Community held on January 25, 2005). Washington, DC: The Access Center.
- Mather, N. (2001). *Learning disabilities and challenging behaviors: A guide to intervention and classroom management*. Baltimore: Paul Hl. Brookes Publishing Co.
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.
- O'Neill, L., Harbor, H., & Parton, T. (July 12, 2004). *Reading skills of students at-risk for academic failure in high school*. SpeechPathology.com. Retrieved March 17, 2004 from [http://www.speechpathology.com/articles/arc\\_disp.asp?id=216](http://www.speechpathology.com/articles/arc_disp.asp?id=216)
- Partnership for Reading (2004). What is guided oral reading? ReadingRockets.org. Retrieved September 19, 2005 from <http://www.readingrockets.org/articles/67>
- Pinnell, G. S., Pikulski, J. J., Wixson, K.K., Campbell, J. R., Gough, P. B., and Beatty, A. S. (1995). *Listening to children read aloud*. U.S. Department of Education, National Center for Education Statistics, Washington, DC.

### Fluency Statistic

**Directions:** Cut out phrases. The phrases will be displayed to the audience over one minute of time. Each phrase can be held up for the audience to read silently, or facilitators can use an overhead projector to display phrases.

**The character of object-oriented**

**applications has changed. Originally**

**most object-oriented applications**

**were small and non-critical**

**object-oriented software engineering**

**was chiefly experimental, i.e.,**

**not production-oriented. Slow**

**programming language interpreters,**

**highly non-portable languages and**

**environments, lack of**

**concurrency-related features, and**

**limited access to low level-machine**

**characteristics were all tolerable.**

**Now, object-oriented software**

**engineering is entering the**

**mainstream. Object-oriented**

**technology must demonstrate its**

**suitability for applications that**

**are large and critical.**

The character of object-oriented applications has changed. Originally, most object-oriented applications were small and non-critical. Object-oriented software engineering was chiefly experimental, i.e., not production-oriented. Slow programming language interpreters, highly non-portable languages and environments, lack of concurrency-related features, and limited access to low-level machine characteristics were all tolerable. Now, object-oriented software engineering is entering the mainstream. Object-oriented technology must demonstrate its suitability for applications that are large and critical.

## Running Records and Miscue Analysis

**Running Record Directions:** Running Records can be completed using a blank piece of paper and following along while a student reads a passage aloud. As the student reads a passage, the assessor should use the following symbols:

*Running Record Symbols:*

1. No errors = check mark for each word read correctly
2. Substitution = write what the student read over the correct word  $\frac{\{substitution\}}{correct}$
3. Self-Correction = write what the student read over the correct word and place SC (self correct) next to the word the student read  $\frac{\{student (SC)\}}{correct}$
4. Omission = write a dashed line over the correct word  $\frac{\{- - -\}}{correct}$
5. Insertion = write what the student read over a dashed line  $\frac{\{insertion\}}{- - - -}$
6. Told word = T (a capital t) in place of the check mark for a word
7. Repetition = R (capital r) after a check mark or a capital r with an arrow to the word that was repeated if the previous word was not repeated

**Miscue Analysis Questions**—After completing a running record, errors can be analyzed using the following questions as a guide.

1. Did the error(s) go with the previous text?
2. Did the error(s) go with the following text?
3. Did the errors(s) keep the essential meaning?
4. Was the error self-corrected?

## Fluency Rate

**Directions:** There are two passages in this handout. Find a partner, and read passage #1 to your partner three times while being timed for one minute. At the end of each timing, your partner will count the number of words read correctly and mark it on the fluency chart. Then switch roles and have your partner read passage #2 following the same steps.

### Passage #1:

|   |     |
|---|-----|
| In the very early 1970s, things were simple. There was only one     | 12  |
| programming language which called itself “object-oriented,” i.e.,   | 19  |
| Smalltalk ([Goldberg and Robson, 1983]). Further, all that anyone   | 28  |
| seemed interested in was “object-oriented programming” (OOP). No    | 36  |
| one even suggested such things as “object-oriented design” (OOD)    | 45  |
| or “object-oriented requirements analysis” (OORA).                  | 50  |
| <br>  |     |
| In the 1980s, there was an explosive growth in object-oriented      | 60  |
| programming languages. Initially, most of these languages attempted | 68  |
| to define themselves in terms of the Smalltalk paradigm. As our     | 79  |
| understanding of object-oriented concepts matured, however, the     | 86  |
| deviations from Smalltalk concepts among so-called “object-oriented | 93  |
| programming languages” (OOPL) became more pronounced.               | 99  |
| <br>  |     |
| [The 1980s also saw the birth and evolution of OOD, OORA,           | 110 |
| object-oriented domain analysis (OODA), and object-oriented         | 116 |
| database management systems (OODBMS). As our understanding and      | 124 |
| usage of OOPLs increased, so did our understanding of software      | 134 |
| object-oriented engineering (OOSE) in general.]                     | 139 |

|  |     |
|--|-----|
| By the late 1980s, there was not only an increased interest in | 151 |
| but OOPLs, increased interest in:                              | 156 |
| – attempts to evaluate, classify, or justify a given           | 165 |
| programming language as being “object-oriented,” e.g.,         | 171 |
| [Bach, 1988], [Buzzard and Mudge, 1985], [Cook, 1986],         | 179 |
| [Touati, 1987], and [Wolf, 1989]                               | 184 |
| – adding, or suggesting, “object-oriented extensions” to       | 191 |
| existing programming languages, e.g., [Bergin and              | 197 |
| Greenfield, 1988], [Cox, 1986], [Di Maio et al, 1989],         | 206 |
| [Donaldson, 1989], [Forestier et al, 1989], [Moon, 1986],      | 214 |
| [Simonian and Crone, 1988a], [Simonian and Crone, 1988b],      | 222 |
| [Waurzyniak, 1989], and [Wegner, 1983]                         | 227 |
| – developing applications using an object-oriented approach,   | 234 |
| but using traditionally “non-object-oriented,” programming     | 239 |
| languages, e.g., [Edelson, 1987], [Jacky and Kalet, 1987],     | 247 |
| and [Zaniolo, 1984].   | 250 |

**Passage #2:**

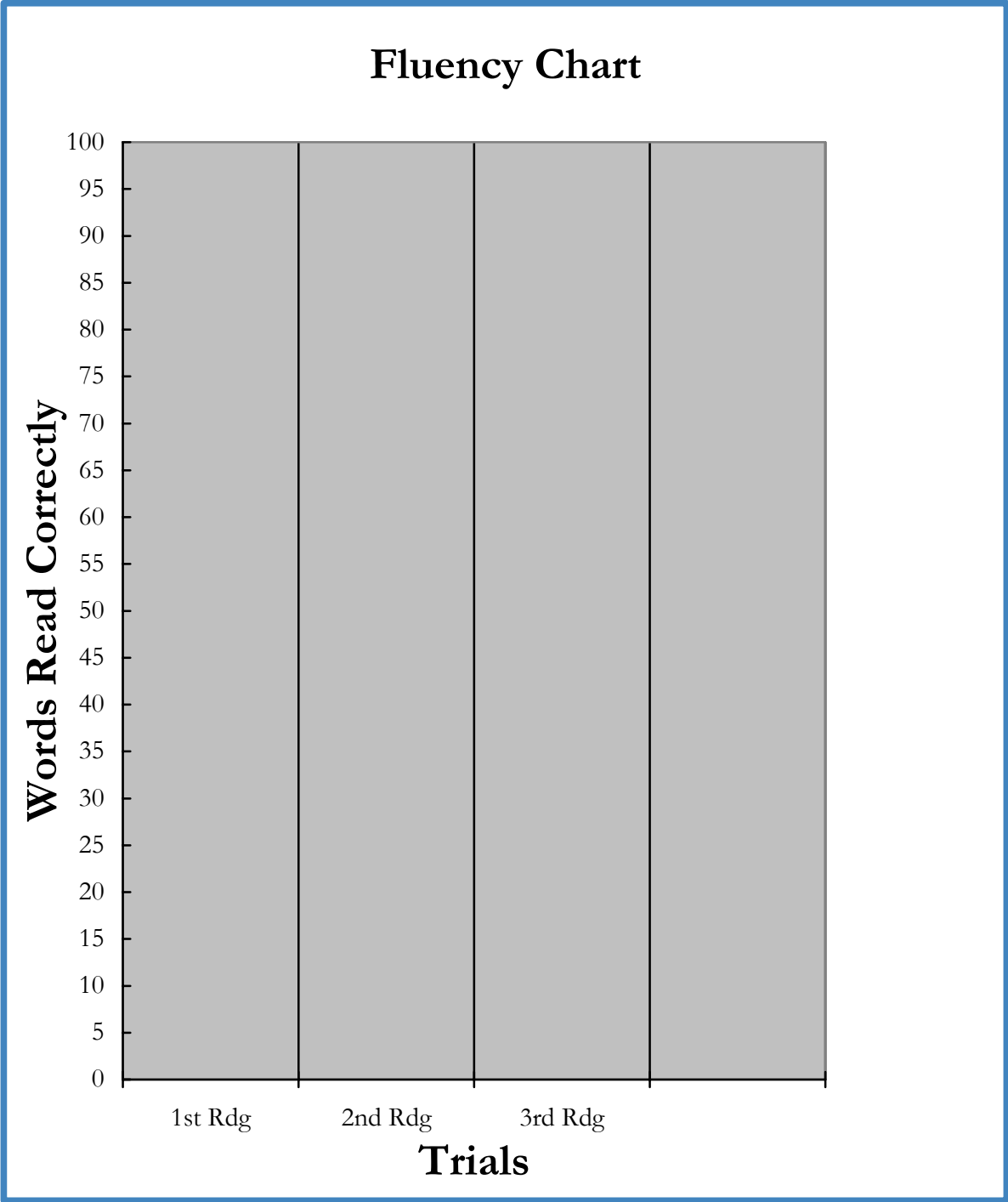
|   |     |
|---|-----|
| Some “litmus tests” for object-oriented programming languages are   | 8   |
| based on how close a programming language is in concept and         | 19  |
| implementation to Smalltalk. There are obvious problems with this   | 28  |
| approach, e.g., since a language which is not Smalltalk must differ | 39  |
| from Smalltalk in some (usually significant) ways, what are         | 48  |
| acceptable deviations? Further, as we begin to understand more      | 57  |
| about the object-oriented paradigm, some people have begun to point | 67  |
| out “deficiencies” in Smalltalk, for example, the lack of type      | 77  |
| checking (see, e.g., [Johnson, 1986]). Is a programming language    | 86  |
| which “corrects” these deficiencies more object-oriented than even  | 94  |
| Smalltalk itself?   | 96  |
| <br>  |     |
| A major source of problems in any comparison scheme is the          | 117 |
| confusion between concepts and implementations. For example, in,    | 125 |
| Smalltalk objects communicate (i.e., work gets done) via “message   | 134 |
| passing. “Messages are sent from one object to another. CLOS        | 145 |
| ([Keene, 1989]), does not have message passing in the Smalltalk     | 155 |
| sense, but instead uses a generalization that is more Lisp-like,    | 165 |
| i.e., generic functions. Is this an acceptable “deviation?” The     | 174 |
| important question here is: when physical differences arise, how    | 183 |
| great must these differences be before “reasonable people” can      | 192 |
| agree that the differences are not only physical differences, but   | 202 |
| also conceptual differences.  | 205 |

|  |     |
|--|-----|
| The greatest problem is determining just what “object-oriented     | 213 |
| characteristics” a programming language must possess to be         | 221 |
| considered a “true” OOPL. There are more than a few contenders for | 233 |
| object-oriented programming language characteristics, e.g.:        | 238 |
| • Encapsulation: Encapsulation is the localization and binding     | 246 |
| together of items. In languages such as Smalltalk, the             | 255 |
| encapsulation is physical, i.e., it is accomplished via the        | 254 |
| syntax and semantics of the language. For example, Smalltalk       | 263 |
| offers a “class” construct which allows a programmer to            | 272 |
| physically encapsulate the methods, operations, and                | 279 |
| other features which logically constitute a class.                 | 286 |
| The Common Lisp Object System (CLOS), on the other hand,           | 296 |
| does not provide much physical encapsulation, and instead          | 304 |
| emphasizes logical encapsulation. (See, e.g., [Gabriel,            | 310 |
| 1989] and [Keene, 1989].)  | 314 |

- Information hiding: Information hiding is the suppression of 323  
(hopefully) unnecessary details. Most commonly, the idea is 331  
to reveal details at a given level of abstraction, and to 342  
hide, or cover up, details at lower levels of abstraction. 352  
In Smalltalk, objects are black boxes, i.e., their internal 361  
structures and implementations are hidden from those outside 370  
of the object. (To be technically accurate, they are hidden 380  
from objects which are outside of the object's 388  
subclass-superclass chain.) 390

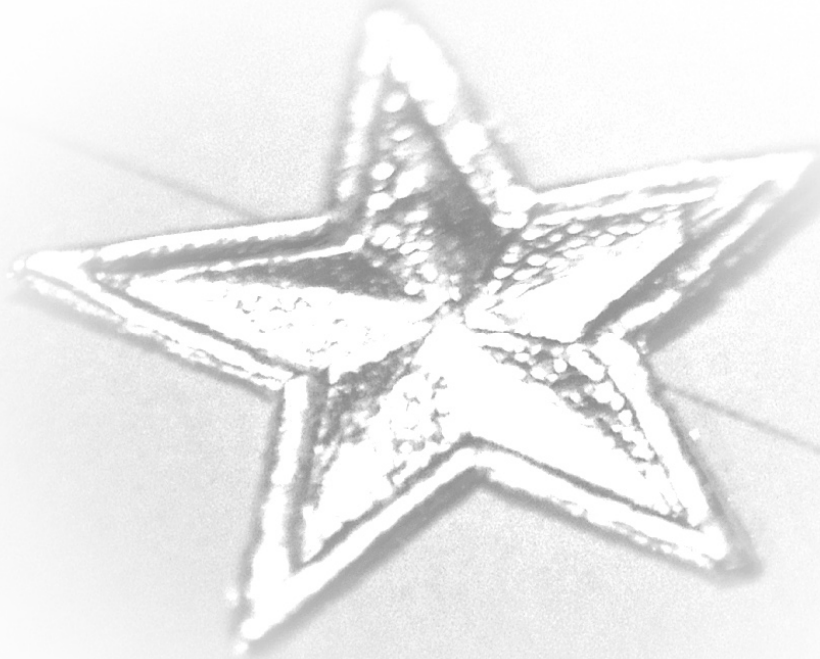
Excerpts from Object-Oriented Programming Languages by Edward V. Berard,  
[http://www.toa.com/pub/oopl\\_article.txt](http://www.toa.com/pub/oopl_article.txt).

Charting Fluency



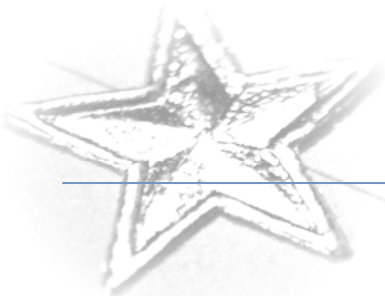
# Handout 6

## Beginning Reading CBM Presentation Handouts



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## Handout 1: Letter Sound Fluency—Teacher Score Sheet

**Teacher:** I'm going to show you some letters. You can tell me what sound the letters make. You may know the sound for some letters. For other letters, you may now know the sounds. If you don't know the sound a letter makes, don't worry. Okay? What's most important is that you try your best. I'll show you how this activity works. My turn first. (Refer to the practice portion of the CBM LSF sheet.) This says /b/. Your turn now. What sound does it say?

**Student:** /b/

**Examiner:** Very good. You told me what sound the letter makes. (Correction procedures are provided in the CBM LSF manual.) You're doing a really good job. Now it will be just your turn. Go as quickly and carefully as you can. Remember to tell me the sounds the letters make. Remember, just try your best. If you don't know the sounds it's okay. Trigger the stopwatch.

### Score Sheet

Student's Name \_\_\_\_\_

Examiner's Initials \_\_\_\_\_

Teacher's Name \_\_\_\_\_

Date of Testing \_\_\_\_\_

School \_\_\_\_\_

### *Letter Sound Fluency Test*

If child does not say anything after 3 seconds: do not say anything, point to next letter. If names incorrect letter: keep going. Draw a diagonal slash through any letters the student does not say the sound for or says the sound incorrectly. Circle the last item that child attempts. Stop at **1 minute**. If finished before 1 minute: record time.

**g l d i w n b t f k a p m j v x h o z y c e q s u**

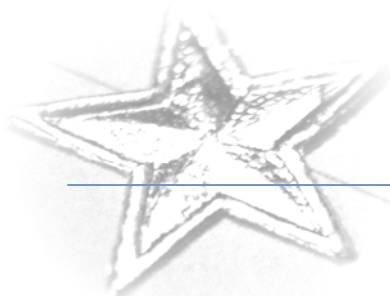
\_\_\_\_\_ number of letters sounded correctly ( in \_\_\_\_\_ seconds)

\_\_\_\_\_ adjusted score ( if completed test in less than 1 minute)



Handout 2: Letter Sound Fluency—Student Copy

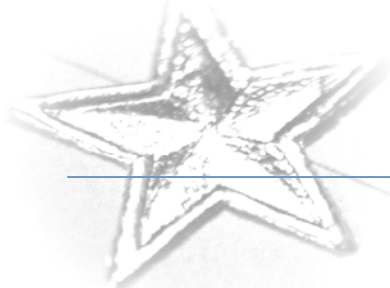
|   |   |   |   |   |   |
|---|---|---|---|---|---|
| b | c | h | a |   |   |
| g | l | d | i | w |   |
| n | b | t | f | k |   |
| a | p | m | j | v |   |
| x | r | h | o | z |   |
| y | c | e | q | s | u |



## Handout 3: Word Identification Fluency—Teacher Score Sheet

**Teacher:** When I say “go,” I want you to read these words as quickly and correctly as you can. Start here (point to the first word) and go down the page (run your finger down the first column). If you don’t know a word, skip it and try the next word. Keep reading until I say stop. Do you have any questions? (Trigger the timer for 1 minute.)

|   |                            |                     |
|---|----------------------------|---------------------|
| <i>List 16</i>  |                            |                     |
| Student's Name: _____                                   | Examiner's Initials: _____ |                     |
| Student's Teacher: _____                                | Date: _____                |                     |
| Score 1 for correct response, 0 for incorrect response. |                            |                     |
| that _____  | school _____               | brought _____       |
| for _____   | say _____                  | line _____          |
| by _____  | land _____                 | probably _____      |
| her _____   | enough _____               | close _____         |
| up _____  | live _____                 | table _____         |
| them _____  | against _____              | strong _____        |
| has _____   | city _____                 | past _____          |
| than _____  | knew _____                 | friends _____       |
| now _____   | state _____                | rest _____          |
| water _____   | wanted _____               | having _____        |
| must _____  | four _____                 | full _____          |
| me _____  | toward _____               | instead _____       |
| come _____  | move _____                 | case _____          |
| still _____   | power _____                | worked _____        |
| found _____   | feel _____                 | alone _____         |
| here _____  | given _____                | street _____        |
| large _____   | eat _____                  | Total score = _____ |



## Handout 4: Word Identification Fluency—Student Copy

## List 16

|       |         |          |
|-------|---------|----------|
| that  | school  | brought  |
| for   | say     | line     |
| by    | land    | probably |
| her   | enough  | close    |
| up    | live    | table    |
| them  | against | strong   |
| has   | city    | past     |
| than  | knew    | friends  |
| now   | state   | rest     |
| water | wanted  | having   |
| must  | four    | full     |
| me    | toward  | instead  |
| come  | move    | case     |
| still | power   | worked   |
| found | feel    | alone    |
| here  | given   | street   |
| large | eat     |          |

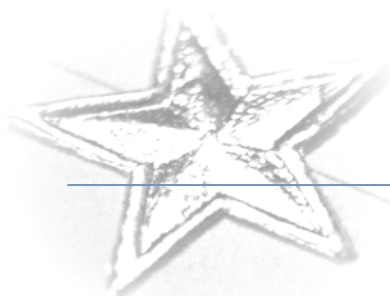


## Handout 5: Passage Reading Fluency—Teacher Copy

**Teacher:** I want you to read this story to me. You'll have 1 minute to read. When I say 'begin,' start reading aloud at the top of the page. Do your best reading. If you have trouble with a word, I'll tell it to you. Do you have any questions? Begin. (Trigger the timer for 1 minute.)

### Bubbles

|  |     |
|--|-----|
| One rainy day I was looking through the heavy          | 9   |
| glass of the tank. I watched a school of fish swim by. | 21  |
| A big sea turtle followed them. Then I saw something   | 31  |
| falling slowly through the water. It was a diver!      | 40  |
| The picture shows how he was dressed. Do you           | 49  |
| know what's in the basket beside him? It has food for  | 60  |
| the fish.  | 62  |
| The diver was feeding the fish. Suddenly, the          | 70  |
| water above him became dark. He looked up.             | 78  |
| Something very, very large was moving near him. My     | 87  |
| eyes grew big in surprise. It was a whale! Its great   | 98  |
| mouth was open as it came closer and closer.           | 107 |
| "What will the diver do?" I wondered.                  | 114 |
| Suddenly the big mouth closed. The whale shook         | 122 |
| its head up and down. Like a big dog, it rubbed        | 133 |
| against the diver. He patted its nose.                 | 140 |
| With a turn of its tail, the big whale shot upward.    | 151 |
| It swam around and around the tank. Its head was       | 161 |
| turned so that only one big eye showed.                | 169 |
| A young man walked up some steps to the top of         | 180 |
| the tank. He bent down and called softly, "Come on,    | 190 |
| Bubbles!"  | 191 |



## Handout 6: Passage Reading Fluency—Student Copy

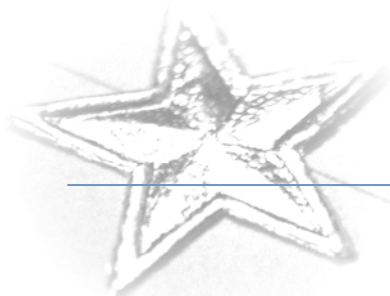
**Bubbles**

|  |     |
|--|-----|
| One rainy day I was looking through the heavy          | 9   |
| glass of the tank. I watched a school of fish swim by. | 21  |
| A big sea turtle followed them. Then I saw something   | 31  |
| falling slowly through the water. It was a diver!      | 40  |
| The picture shows how he was dressed. Do you           | 49  |
| know what's in the basket beside him? It has food for  | 60  |
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| The diver was feeding the fish. Suddenly, the          | 70  |
| water above him became dark. He looked up.             | 78  |
| Something very, very large was moving near him. My     | 87  |
| eyes grew big in surprise. It was a whale! Its great   | 98  |
| mouth was open as it came closer and closer.           | 107 |
| “What will the diver do?” I wondered.                  | 114 |
| Suddenly the big mouth closed. The whale shook         | 122 |
| its head up and down. Like a big dog, it rubbed        | 133 |
| against the diver. He patted its nose.                 | 140 |
| With a turn of its tail, the big whale shot upward.    | 151 |
| It swam around and around the tank. Its head was       | 161 |
| turned so that only one big eye showed.                | 169 |
| A young man walked up some steps to the top of         | 180 |
| the tank. He bent down and called softly, “Come on,    | 190 |
| Bubbles!”  | 191 |



## Handout 7: Maze Fluency—Teacher Directions

**The teacher says:** Whenever you come to three words in parentheses and underlined, circle the word that belongs in the sentence. Choose a word even if you're not sure of the answer. When I tell you to start, pick up your pencil, turn your test over, and begin working. At the end of 2-and-a-half minutes, I'll tell you to stop working. Remember, do your best. Any questions? Start. (Trigger the timer for 2.5 minutes.)



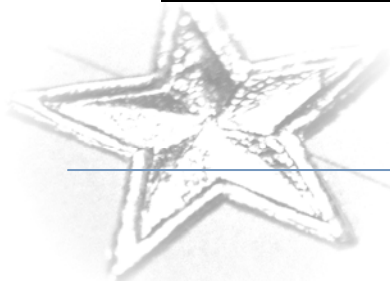
## Handout 8: Maze Fluency—Student Copy

## SUMMER CAMP

Stuart had nice parents. They did not embarrass him in [glad/ front/ yellow] of his friends. His father did [not/ ant/ soft] yell at him during his baseball [center/ games/ lines], and his mother never kissed him [in/ tot/ put] front of his friends. He generally [liked/ flow/ jeep] his parents, except for the fact [shoe/ went/ that] they were sending him to summer [bus/ dump/ camp] this year.

Stuart did not want [to/ wit/ cow] go to summer camp. The thought [and/ be/ of] it made him picture himself hot [coat/ rest/ and] thirsty, hiking up a dusty trail. [Bit/ He/ Go] knew that summer camp food had [of/ to/ my] be bad news, too. Besides, summer [camp/ free/ dog] was for people with nothing else [fad/ to/ sew] do. He had plenty of things planned [for/ much/ very] his summer at home.

"Summer camp [will/ yes/ belt] be good for you," said Mother. "[Feel/ And/ Lot] I don't want to hear another [catch/ phone/ word] about it!" Stuart moped around the [beat/ opens/ house] until it was time to go. Mother [had/ with/ boy] packed his trunk full of clothes, [and/ sort/ time] she and Dad took Stuart to [real/ glob/ the] bus station. Stuart tried hard not [to/ sun/ we] cry when he hugged them goodbye. [Yet/ He/ Sat] ran onto the bus and buried [beam/ his/ neat] head in his hands. After a [while/ tall/ hate], he looked out the window.



## Handout 9: Quick Miscue Analysis—Student Copy

The examiner copy of the student reading is below. Use the blank Quick Miscue Analysis Table and write in the student miscues.

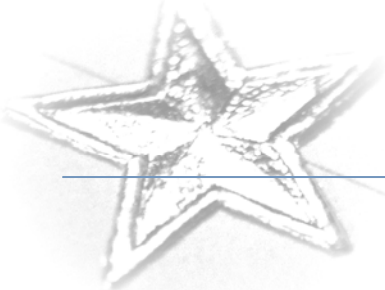
## Miscue Analysis Story—Practice

| <u>Adventure on Highway 66</u>  |     |
|---|-----|
| A snowstorm <del>can</del> <sup>could</sup> be exciting. But <del>too</del> <sup>that</sup> much snow <del>can</del> <sup>could</sup> cause | 11  |
| trouble. I learned <del>this</del> <sup>it</sup> in a way I will never forget.  | 22  |
| My name is John Hearon. I <del>am</del> <sup>am</sup> a bus driver. At five o'clock one   | 35  |
| morning I turned <del>my</del> <sup>the</sup> bus onto Highway 66. It was snowing. But I was  | 49  |
| used to driving <del>in</del> <sup>at</sup> all kinds of weather. Maybe this storm wouldn't last  | 62  |
| long.   | 63  |
| <del>As</del> <sup>while</sup> I drove, I counted my passengers. There <del>were</del> <sup>was</sup> 14 – nine men,                        | 75  |
| four women and a little two-year-old boy. It was so early that <del>most</del> <sup>they</sup> of   | 91  |
| <del>them</del> were still asleep. No one seemed to worry about the storm.  | 103 |
| But after an hour or two, I felt <del>the</del> <sup>a</sup> wind getting stronger. <del>The</del> <sup>That</sup> bus                      | 117 |
| swayed from side to side. It was snowing harder, and I had to drive more  | 132 |
| <del>and more</del> slowly. I wished I had never started out. I didn't like the look of   | 148 |
| things.   | 149 |



Handout 10: Quick Miscue Analysis—Practice

|     | Written Word | Spoken Word | Grapho-Phonetic | Syntax | Semantics |
|-----|--------------|-------------|-----------------|--------|-----------|
| 1.  |              |             |                 |        |           |
| 2.  |              |             |                 |        |           |
| 3.  |              |             |                 |        |           |
| 4.  |              |             |                 |        |           |
| 5.  |              |             |                 |        |           |
| 6.  |              |             |                 |        |           |
| 7.  |              |             |                 |        |           |
| 8.  |              |             |                 |        |           |
| 9.  |              |             |                 |        |           |
| 10. |              |             |                 |        |           |
|     |              |             | %               |        |           |



## Handout 11: Quick Miscue Analysis—Practice Answers

Your miscue analysis table should look like this. Based on this table, the teacher can see that the student's problem is mistakes on short, functional words rather than content words. The teacher might choose to practice discrimination between similar words (i.e., this / that / the) and similar phrases (i.e., The big boy..., This big boy..., That big boy...). The teacher might also choose to have the student echo read and complete writing and spelling exercises for the short, functional words.

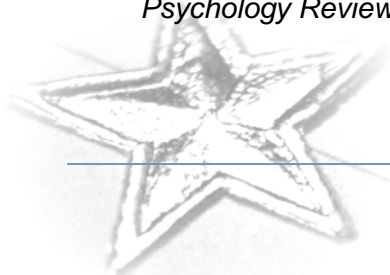
### Quick Miscue Analysis Table—Practice

| Quick Miscue Analysis |              |             |                 |        |           |
|-----------------------|--------------|-------------|-----------------|--------|-----------|
|                       | Written Word | Spoken Word | Grapho-Phonetic | Syntax | Semantics |
| 1.                    | can          | could       | no              | yes    | yes       |
| 2.                    | too          | that        | no              | yes    | yes       |
| 3.                    | this         | it          | no              | yes    | yes       |
| 4.                    | I'm          | I am        | no              | yes    | yes       |
| 5.                    | my           | the         | no              | yes    | yes       |
| 6.                    | in           | at          | no              | yes    | no        |
| 7.                    | As           | while       | no              | yes    | yes       |
| 8.                    | were         | was         | no              | yes    | yes       |
| 9.                    | most of them | they        | no              | yes    | yes       |
| 10.                   | the          | a           | no              | yes    | yes       |
|                       |              | %           | 0%              | 100%   | 90%       |

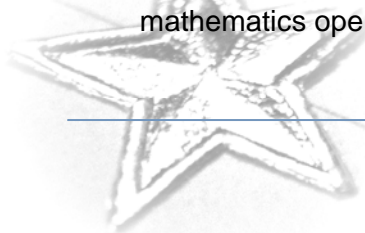


## CBM Resources

- Deno, S.L. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children*, 52, 219–232.
- Deno, S.L., Fuchs, L.S., Marston, D., & Shin, J. (2001). Using curriculum-based measurement to establish growth standards for students with learning disabilities. *School Psychology Review*, 30, 507–524.
- Deno, S.L., & Mirkin, P.K. (1977). *Data-based program modification: A manual*. Reston, VA: Council for Exceptional Children.
- Fuchs, L.S. (1987). Curriculum-based measurement for instructional program development. *Teaching Exceptional Children*, 20, 42–44.
- Fuchs, L.S. & Deno, S.L. (1987). Developing curriculum-based measurement systems for data-based special education problem solving. *Focus on Exceptional Children*, 19, 1–16.
- Fuchs, L.S., & Deno, S.L. (1991). Paradigmatic distinctions between instructionally relevant measurement models. *Exceptional Children*, 57, 488–501.
- Fuchs, L.S., & Deno, S.L. (1994). Must instructionally useful performance assessment be based in the curriculum? *Exceptional Children*, 61, 15–24.
- Fuchs, L.S., Deno, S.L., & Mirkin, P.K. (1984). Effects of frequent curriculum-based measurement of evaluation on pedagogy, student achievement, and student awareness of learning. *American Educational Research Journal*, 21, 449–460.
- Fuchs, L.S. & Fuchs, D. (1990). Curriculum-based assessment. In C. Reynolds & R. Kamphaus (Eds.) *Handbook of psychological and educational assessment of children (Vol. 1): Intelligence and achievement*. New York: Guilford Press.
- Fuchs, L.S., & Fuchs, D. (1992). Identifying a measure for monitoring student reading progress. *School Psychology Review*, 58, 45–58.
- Fuchs, L.S., & Fuchs, D. (1996). Combining performance assessment and curriculum-based measurement to strengthen instructional planning. *Learning Disabilities Research and Practice*, 11, 183–192.
- Fuchs, L.S., & Fuchs, D. (1998). Treatment validity: A unifying concept for reconceptualizing the identification of learning disabilities. *Learning Disabilities Research and Practice*, 13, 204–219.
- Fuchs, L.S., & Fuchs, D. (1999). Monitoring student progress toward the development of reading competence: A review of three forms of classroom-based assessment. *School Psychology Review*, 28, 659–671.



- Fuchs, L.S., & Fuchs, D. (2000). Curriculum-based measurement and performance assessment. In E.S. Shapiro & T.R. Kratochwill (Eds.), *Behavioral assessment in schools: Theory, research, and clinical foundations* (2nd ed., pp. 168–201). New York: Guilford.
- Fuchs, L.S., & Fuchs, D. (2002). Curriculum-based measurement: Describing competence, enhancing outcomes, evaluating treatment effects, and identifying treatment nonresponders. *Peabody Journal of Education*, *77*, 64–84.
- Fuchs, L.S. & Fuchs, D. (in press). Determining Adequate Yearly Progress From Kindergarten through Grade 6 with Curriculum-Based Measurement. *Assessment for Effective Instruction*.
- Fuchs, L.S., Fuchs, D., & Hamlett, C.L. (1989a). Effects of alternative goal structures within curriculum-based measurement. *Exceptional Children*, *55*, 429–438.
- Fuchs, L.S., Fuchs, D., & Hamlett, C.L. (1989b). Effects of instrumental use of curriculum-based measurement to enhance instructional programs. *Remedial and Special Education*, *10*, 43–52.
- Fuchs, L.S., Fuchs, D., & Hamlett, C.L. (1990). Curriculum-based measurement: A standardized long-term goal approach to monitoring student progress. *Academic Therapy*, *25*, 615–632.
- Fuchs, L.S., Fuchs, D., & Hamlett, C.L. (1993). Technological advances linking the assessment of students' academic proficiency to instructional planning. *Journal of Special Education Technology*, *12*, 49–62.
- Fuchs, L.S., Fuchs, D., & Hamlett, C.L. (1994). Strengthening the connection between assessment and instructional planning with expert systems. *Exceptional Children*, *61*, 138–146.
- Fuchs, L.S., Fuchs, D., & Hamlett, C.L. (in press). Using technology to facilitate and enhance curriculum-based measurement. In K. Higgins, R. Boone, & D. Edyburn (Eds.), *The Handbook of special education technology research and practice*. Knowledge by Design, Inc.: Whitefish Bay, WI.
- Fuchs, L.S., Fuchs, D., Hamlett, C.L., Phillips, N.B., & Karns, K. (1995). General educators' specialized adaptation for students with learning disabilities. *Exceptional Children*, *61*, 440–459.
- Fuchs, L.S., Fuchs, D., Hamlett, C.L., Phillips, N.B., Karns, K., & Dutka, S. (1997). Enhancing students' helping behavior during peer-mediated instruction with conceptual mathematical explanations. *Elementary School Journal*, *97*, 223–250.
- Fuchs, L.S., Fuchs, D., Hamlett, C.L., & Stecker, P.M. (1991). Effects of curriculum-based measurement and consultation on teacher planning and student achievement in mathematics operations. *American Educational Research Journal*, *28*, 617–641.



- Fuchs, L.S., Fuchs, D., Hamlett, C.L., Thompson, A., Roberts, P.H., Kubek, P., & Stecker, P.S. (1994). Technical features of a mathematics concepts and applications curriculum-based measurement system. *Diagnostic*, 19, 23–49.
- Fuchs, L.S., Fuchs, D., Hamlett, C.L., Walz, L., & Germann, G. (1993). Formative evaluation of academic progress: How much growth can we expect? *School Psychology Review*, 22, 27–48.
- Fuchs, L.S., Fuchs, D., Hosp, M., & Hamlett, C.L. (2003). The potential for diagnostic analysis within curriculum-based measurement. *Assessment for Effective Intervention*, 28, 13–22.
- Fuchs, L.S., Fuchs, D., Hosp, M.K., & Jenkins, J.R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 5, 241–258.
- Fuchs, L.S., Fuchs, D., Karns, K., Hamlett, C.L., Dutka, S., & Kataroff, M. (2000). The importance of providing background information on the structure and scoring of performance assessments. *Applied Measurement in Education*, 13, 83–121.
- Fuchs, L.S., Fuchs, D., Karns, K., Hamlett, C.L., & Kataroff, M. (1999). Mathematics performance assessment in the classroom: Effects on teacher planning and student learning. *American Educational Research Journal*, 36, 609–646.
- Fuchs, L.S., Fuchs, D., Karns, K., Hamlett, C.L., Kataroff, M., & Dutka, S. (1997). Effects of task-focused goals on low-achieving students with and without learning disabilities. *American Educational Research Journal*, 34, 513–544.
- Fuchs, D., Roberts, P.H., Fuchs, L.S., & Bowers, J. (1996). Reintegrating students with learning disabilities into the mainstream: A two-year study. *Learning Disabilities Research and Practice*, 11, 214–229.
- Germann G., & Tindal, G. (1985). An application on curriculum-based assessment: The use of direct and repeated measurement. *Exceptional Children*, 52, 244–265.
- Gersten, R., & Dimino, J. A. (2001). The realities of translating research into classroom practice. *Learning Disabilities Research and Practice*, 16, 120–130.
- Gickling, E.E. (1981). The forgotten learner. *Nevada Public Affairs Review*, 1, 19–22.
- Hutton, J.B., Dubes, R., & Muir, S. (1992). Estimating trend progress in monitoring data: A comparison of simple line-fitting methods. *School Psychology Review*, 21, 300–312.
- Jenkins, J.R., Mayhall, W., Peshka, C., & Townshend, V. (1974). Using direct and daily measures to measure learning. *Journal of Learning Disabilities*, 10, 604–608.
- Marston, D., Mirkin, P.K., & Deno, S.L. (1984). Curriculum-based measurement: An alternative to traditional screening, referral, and identification of learning disabilities of learning disabled students. *The Journal of Special Education*, 18, 109–118.

- Marston, D. (1988). The effectiveness of special education: A time-series analysis of reading performance in regular and special education settings. *The Journal of Special Education*, 21, 13–26.
- Phillips, N.B., Hamlett, C.L., Fuchs, L.S., & Fuchs, D. (1993). Combining classwide curriculum-based measurement and peer tutoring to help general educators provide adaptive education. *Learning Disabilities Research and Practice*, 8, 148–156.
- Shinn, M.R. (Ed.). (1989). *Curriculum-based measurement: Assessing special children*. New York: Guilford Press.
- Shinn, M.R., Tindal, G.A., & Stein, S. (1988). Curriculum-based measurement and the identification of mildly handicapped students: A research review. *Professional School Psychology*, 3, 69–86.
- Stecker, P.M., & Fuchs, L.S. (2000). Effecting superior achievement using curriculum-based measurement: The importance of individual progress monitoring. *Learning Disabilities Research and Practice*, 15, 128–134.
- Tindal, G., Wesson, C., Germann, G., Deno, S., & Mirkin, P. *A data-based special education delivery system: The Pine County Model*. (Monograph No. 19). Minneapolis: University of Minnesota, Institute for Research on Learning Disabilities, 1982.
- Tucker, J. (1987). Curriculum-based assessment is not a fad. *The Collaborative Educator*, 1, 4, 10.
- Wesson, C., Deno, S.L., Mirkin, P.K., Sevcik, B., Skiba, R., King, P.P., Tindal, G.A., & Maruyama, G. (1988). A causal analysis of the relationships among outgoing measurement and evaluation, structure of instruction, and student achievement. *The Journal of Special Education*, 22, 330–343.
- Zeno, S. M., Ivens, S. H., Millard, R. T., & Duvvuri, R. (1995). *The educator's word frequency guide*. New York, NY: Touchstone Applied Science Associates, Inc.



### What Is Guided Reading?

There are a number of effective procedures that can be used in providing guided oral reading. In general, a teacher, parent, or peer reads a passage aloud, modeling fluent reading. Then students reread the text quietly on their own—sometimes several times. The text should be at the student's independent reading level. Next, the students read aloud and then reread the same passage. Usually, reading the same text four times is sufficient.

Some examples of more specific techniques that involve rereading with feedback include these:

- An adult or peer reads with the student by modeling fluent reading and then asking the student to read the same passage aloud with encouragement and feedback by the adult or peer.
- A student listens to a tape or a fluent reader reading text at the student's independent level at a pace of about 80-100 words per minute. The student listens to the tape the first time and then practices reading along with the tape until the student is able to read fluently.
- The student reads with a peer partner. Each partner takes a turn reading to the other. A more fluent reader can be paired with a less fluent reader to model fluent reading. The more fluent reader can provide feedback and encouragement to the less fluent reader. Students of similar reading skills can also be paired, particularly if the teacher has modeled fluent reading and the partner reading involves practice.

*Excerpt from Reading Rockets, What is Guided Reading? Partnership for Reading (2004)*

## Opportunities for Fluency Practice

***Students should have opportunities to develop fluency everyday in the classroom. The following list provides several examples of how fluency can be incorporated into the daily instructional routine.***

|                                    |   |
|------------------------------------|---|
| <b>Model Fluent Reading</b>        | Demonstrate fluent reading and ask students to identify good characteristics of your reading.   |
| <b>Phrasing</b>                    | Instruct students on how to read in phrases instead of word for word. This can be done with poems by writing phases of the poem on sentence strips to demonstrate this skill.                       |
| <b>Following along with a Tape</b> | Students can read along with a tape to practice reading as fluently as the tape recording.  |
| <b>Readers' Theater</b>            | Give students a script to practice reading out loud. You can find many examples online. Students can also develop scripts for the class to use.   |
| <b>Choral Reading</b>              | Students can read passages, poems, and scripts together to practice fluency.  |
| <b>Repeated Reading Chart</b>      | Students can chart their fluency and see their growth.  |
| <b>Reading Buddies</b>             | Can be a student from the same or different class (same grade or different). Students can practice their fluency by reading to their buddy.   |
| <b>Self-recordings</b>             | Recording students' fluency and playing it back for them to hear can be helpful for students to better understand the areas they need to work on.   |
| <b>Amplification</b>               | Whisper phones are a telephone shape and can be used to help students listen to their fluency. Students can hold the phone up to their ear and mouth as they read aloud to listen to their fluency. |

### Fluency Strategies

#### Guided Reading

Guided reading is a time for teachers to work one on one or in small groups to work on areas of need in reading skills. When implementing guided reading, the first step is to assess students to determine strengths and weaknesses. After examining assessment results, teachers should group students with similar needs. If appropriate, teachers can work one-on-one with a student for a unique need. When assigning students to groups for guided reading, groups should not be larger than six students. Once these groups are formed the teacher should work with each group on the needed skills.

Guided reading is a time to work on fluency skills such as reading rate, accuracy, phrasing, smoothness, and expressiveness. Teachers need to choose reading passages and books that are appropriate for each group to use. Texts used should not be completely familiar to students. Choose texts students can read with 90–95 percent accuracy. When using guided reading with students, the teacher reads a passage to the group, then the students read the passage silently on their own, then as a group the students read the passage out loud. Teachers should encourage students to learn from each other. The teacher should provide feedback throughout the entire process.

Teachers should continue to assess throughout the guided reading process. Groups of students do not have stay together through the school year. Groups should be flexible based on student needs.

#### Partnership for Reading (2004)

#### Feedback

When students are participating in opportunities to practice fluency, teachers must provide feedback. Teachers can provide feedback by focusing on several areas. One way teachers can provide feedback is to point out clues in the text. Teachers can pick words that indicate the mood or discuss punctuation and the meaning it provides readers. Discuss whether the student is using punctuation to indicate pauses and mood to indicate tone when reading. A second way teachers can provide feedback to students is to point out missed words. Teachers can bring students' attention to words skipped to make them aware of their reading behavior. A third way to provide feedback is to discuss reading pace. Point out whether the student's pace is too fast or too slow.

Teachers are not the only people who can and should provide feedback on reading skills. Parents, peers, and tutors can be involved in the feedback process. Teachers can train others to provide students feedback on their fluency. Once training in providing feedback has occurred, teachers should continue to model and monitor feedback delivered by others to students.

### Books on Tape

Books on tape model fluent reading for students. Listening to books on tape can be a fun and independent student activity to support fluency development. One way for teachers to incorporate books on tape into their classroom is to make it an activity available for students to complete while the teacher is working with other students on guided reading.

The Recording for the Blind & Dyslexic (RFB&D) has many books on tape available (<http://www.rfbd.org/>). Anyone with a documented disability that makes reading standard print difficult or impossible is eligible to use RFB&D's audio textbooks. Membership is required. RFB&D offer two types of membership: individual and institutional. Students may join as individual members or become a member through their school if the school has an RFB&D Learning through Listening institutional membership. Some students become members through their school and also maintain an individual membership.

**Cost:** \$100 to join for individual membership and \$35 for the renewal fee. \$350–950 to join for institutional membership, depending on the number of books per year.

**Contact information:** National Headquarters  
20 Roszel Road  
Princeton, NJ 08540  
#866-RFBD-585 (866-732-3585)

**Research:** Dowhower (1987) found that repeated reading with audiotapes increased expressive reading more than repeated reading without audiotapes.

Carbo (1981, 1992) found reading gains with audiotapes with slow recordings of text.

Hasbrouk, Ihnot, & Rogers (1999) found improvements with audiotapes used in the Read Naturally program.

### Ensure Appropriate Text Level

Teachers should ensure students read an appropriate text level when working on fluency skills. To determine an appropriate text level, the first step is to have a student read a passage at the level the teacher believes is appropriate for the student. In order to determine if the passage is appropriate for the student, the teacher should calculate the number of words read correctly and divide by the total words read. The percentage calculated should be used to interpret scores with the following information:

- Higher than 97% accuracy = independent reading level
- 90–97% accuracy = instructional level
- 89% or below = frustration level

These steps will identify a student's accuracy level. This strategy is also used when assessing students.

It is important to ensure that texts are at the instructional level or above when working on fluency; the main focus during fluency instruction should not be on identifying words.

### Learning Management System (2005)

#### Five Finger Rule

The “Five Finger Rule” can be used to determine an ideal book. Students often select their own books to read during class. Many students select books that are too easy or too hard for them. In order to prevent students from selecting inappropriate books, teachers can instruct students on a simple rule to follow when picking a book to read. Teachers should direct students to turn to any page in a selected book and read the page independently. The student should keep track of any errors or unknown words. The amount of errors will identify whether the book is a good choice for the student. After reading the page and counting their errors, students can use the following scale:

- 0–1 errors = easy
- 2–3 errors = perfect
- 4–5 errors = difficult

This method is a quick guide when thorough assessment cannot be completed, or when students independently choose reading books. Students can learn to use this method on their own when picking out an appropriate book for working on fluency.