

Development of DIBELS[®] Deep: A Pilot Study

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Technical Report No. 5

Recommended Citation:

Powell-Smith, K. A., & Kaminski, R. A. (2007). *Development of DIBELS[®] Deep: A Pilot Study*.

(Technical Report No. 5) Eugene, OR: Dynamic Measurement Group.

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The authors thank the faculty, staff, students, and parents of the participating schools for their effort and support during the course of this study. Correspondence regarding this manuscript should be addressed to Kelly A. Powell-Smith, Dynamic Measurement Group, 859 Willamette Street, Suite 320 Eugene, OR 97401; Email: kpowellsmith@dibels.org.

Abstract

This technical report presents the results of a small-scale pilot study conducted as part of the development of DIBELS[®] Deep. The report describes the initial development and piloting of a set of brief diagnostic reading measures and their linkage to currently existing reading screening measures (i.e., the Dynamic Indicators of Basic Early Literacy Skills, DIBELS[®]). The purpose of this study was to (1) determine the accuracy of the scope and sequence of skills on DIBELS Deep, (2) determine appropriate discontinue rules for the DIBELS Deep Measures, and (3) obtain information from teachers regarding the utility of DIBELS Deep. Therefore, this pilot study was designed to be exploratory and descriptive.

Thirty-five students in first through fourth grades were assessed in the fall of 2006 using an experimental version of DIBELS Deep. Each student was assessed in materials at his or her grade level as well as in materials above or below grade level, depending on student skill. Results indicated that the scope and sequence across the various measures appeared to be accurate, but that some items within measures could be re-ordered. Feedback obtained from assessors also indicated some potential changes in wording and item order. Limited feedback was obtained from teachers. Implications for future research are discussed.

Development of DIBELS[®] Deep: A Pilot Study

Widespread use of general outcomes measures for universal screening has occurred in education due to the current climate of accountability. General outcomes measures have numerous advantages: They can be administered quickly, with high levels of reliability; they have been shown to accurately identify student need, and are highly predictive of future student performance; and they are often useful for determining response to intervention (RtI) (Batsche et al., 2005).

DIBELS data are collected routinely for many schools as part of ongoing school improvement efforts in reading. However, detailed diagnostic information with regard to developing specific instructional interventions is not provided explicitly by the current DIBELS measures. To obtain such information, teachers and other educators must develop their own assessments (e.g., teacher-made tests), use lengthy and/or costly diagnostic assessments, or conduct detailed error analysis procedures.

Purpose and Design Characteristics

The purpose of DIBELS Deep is to place into teachers' hands brief diagnostic assessments that are cost- and time-efficient, yet designed to provide specific information for developing instruction corresponding to the five critical areas of reading instruction described by the National Reading Panel (2000): Phonological Awareness, Phonics, Fluency (with Text), Comprehension, and Vocabulary. Given this purpose, three primary design characteristics guided the development of DIBELS Deep. These design characteristics were that the measures should be: (1) linked with the DIBELS measures; (2) brief (i.e., take approximately 15 minutes to administer), yet cover the range of skills represented within a skill domain (e.g., phonemic awareness); and (3) used within a prevention-oriented decision-making model.

The skills assessed by the DIBELS Deep measures and how they are sequenced correspond to the progression of skills across grades as well as recognized sequences of instruction (c.f., Carnine, et. al., 2006; Jennings, Caldwell, & Lerner, 2006; National Research Council, 1998; Nippold, 2007; Simmons & Kame'enui, 1999; Wagner, Muse, & Tannenbaum, 2007). The DIBELS Deep measures were designed to be user-friendly in terms of their time- and cost-effectiveness. However, they were also designed to help educators differentiate reading instruction to meet specific learner needs. Notably, the intended use of these measures is primarily for differentiating instruction for students identified as at risk for reading difficulties in the elementary grades.

Purpose of the Study

This study, “Development of DIBELS[®] Deep: A Pilot Study,” was focused on achieving three specific aims: (1) determine the accuracy of the scope and sequence of skills on the DIBELS Deep Measures, (2) determine appropriate discontinue rules for the DIBELS Deep Measures, and (3) obtain information from teachers regarding the utility of the DIBELS Deep Measures. This information was subsequently used to revise the measures. This technical report discusses the piloting of measures that were specifically designed to address word reading and decoding (phonics), as well as phonemic awareness.

Method

Pilot Study Setting

Data were collected in two public elementary schools in a mid-size town in the Pacific Northwest. One school (School A) was a large elementary school, while the other school (School B) was a small alternative school focused on the arts. School B is one of several alternative school programs available in the participating school district.

School A had 422 students enrolled in grades K-5 during 2006-2007. Approximately 5% of these students were English Language Learners. Demographic data obtained from the Oregon Department of Education's final Annual Yearly Progress (AYP) report for School A indicates that during 2006-2007, 68% of the students enrolled were White (not of Hispanic origin), 4% were Black (not of Hispanic origin), 12% were Hispanic, 6% were Asian/Pacific Islander, and 4% were Multi-racial/multi-ethnic. The remaining 6% were not described. Approximately 47% of the student population during 2006-2007 was categorized as economically disadvantaged according to the report.

School B had 97 students enrolled in grades K-5 during 2006-2007. Less than 1% of these students were English Language Learners. Demographic data obtained from the Oregon Department of Education's final Annual Yearly Progress (AYP) report for School B indicates that during 2006-2007, 47% of the students enrolled were White (not of Hispanic origin), 18% were Black (not of Hispanic origin), 11% were Hispanic, 7% were Asian/Pacific Islander, and 6% were American Indian/Alaskan Native. The remaining 11% were not described. Approximately 60% of the student population during 2006-2007 was categorized as economically disadvantaged according to the report.

Participants

Students in general education classrooms receiving English-language reading instruction were recruited for participation by their teachers, including students with disabilities and students who were English language learners provided they had the response capabilities to participate. Both students who were struggling in reading and those who were typically achieving were recruited for participation in this pilot study. Teachers were asked to select students for participation such that at least two struggling readers and two typically achieving readers were

tested from each classroom. Thirty-five students total in first through fourth grade participated. Participants from School A included three first-grade students, five second-grade students, six third-grade students, and six fourth-grade students. Participants from School B included three first-grade students, four second-grade students, four third-grade students, and four fourth-grade students.

Measures

DIBELS Deep Phonemic Awareness 1 and 2. A range of Phonemic Awareness (PA) skills are assessed on these two measures generally beginning with easier skills and becoming progressively more challenging. Deep Phonemic Awareness Form 1 (PA1) samples the following skills: Blending word parts in compound words, segmenting compound words into their parts, blending syllables, segmenting syllables, blending onset-rime, matching rimes, segmenting onset-rime, saying rhyming words, and recognizing rhyming words. Deep Phonemic Awareness Form 2 (PA2) samples the following skills: Blending 2- and 3- phoneme words, recognizing and producing initial sounds, recognizing and producing final sounds, segmenting 2- and 3-phoneme words, and segmenting 3-phoneme words with blends. Approximately five items per skill area are on each form. Discontinue rules are included so that students are not tested on skills that may be too difficult or frustrating for them. Scores are totaled for each individual section and overall for each form.

DIBELS Deep Word Reading and Decoding¹ Quick Screen. This measure is designed to provide information helpful in determining which of the DIBELS Deep Word Reading and Decoding Forms should be used for further assessment. The measure contains one or two items

¹ To be consistent with the published version of the measures, the terms "Word Reading and Decoding" is used in this report instead of the term Alphabetic Principle, which was used in the original early version of these measures.

from across the scope and sequence of phonics and word reading skills typically taught in grades K-3 (e.g., reading VC words beginning with continuous sounds, up through blending words with irregular vowel teams). This measure was designed for use in one of two ways:

- (1) Use the discontinue rule. If the child misses 5 items consecutively, discontinue the quick screen. The appropriate entry point for DIBELS Deep Word Reading and Decoding (WRD) is determined by identifying the item number where the discontinue rule was met, and using that number to look up the corresponding WRD Deep form in a table.
- (2) Administer the entire WRD Quick Screen (WRD QS). Examine the student's response patterns on the WRD QS using a table. For each skill with an incorrect response, administer the corresponding WRD Deep form sections.

DIBELS[®] Deep Word Reading and Decoding Forms 1-5. These measures are designed to assess the range of phonics, decoding, and word reading skills children are expected to learn in grades K-3. DIBELS Deep Word Reading and Decoding Form 1 (WRD1) covers kindergarten skills (e.g., letter-sound correspondence, blending VC and CVC words like “at” and “dog”). Deep Word Reading and Decoding Form 2 (WRD2) and Word Reading and Decoding Form 3 (WRD3) cover first-grade skills (e.g., blending CVCC, CCVC, and CCVCC words; blending words with consonant digraphs; blending one-syllable words with vowel digraphs and diphthongs). Deep Word Reading and Decoding Form 4 (WRD4) covers second-grade skills (e.g., blending two-syllable words with r-controlled vowels, blending words with inflectional endings, blending multisyllabic words). Deep Word Reading and Decoding Form 5 (WRD5) covers third-grade skills (e.g., blending two-syllable words with diphthongs, blending words with irregular vowel teams, blending words with consonant trigraphs). Approximately five items per skill area are included in each form. Each form also contains a section for reading grade-level

high-frequency words and short sentences composed of words tested in earlier sections of the form. Discontinue rules are included so that students are not tested on skills that may be too difficult or frustrating for them. Scores are totaled for each individual section and overall for each form.

Teacher Questionnaire. This 10-item questionnaire was developed in-house for the purposes of evaluating new DIBELS-related measures and products. Two versions of this measure exist, one for teachers and one for assessors. Only the teacher version of this questionnaire was used in this pilot study. The teacher version of this scale includes statements like, “This measure would be helpful in guiding my instruction for students,” and, “The scores were easy to interpret.”

Procedures

Participant recruitment and selection. Once IRB approval was obtained, a proposal to conduct research was submitted to a school district in a mid-size city in the Pacific Northwest. Upon district approval of the study, three elementary schools were recruited as possible sites for data collection. School A and School B expressed a desire to participate in the study. The third school expressed a preference for participation in a later study regarding the development of DIBELS Deep measures for vocabulary and comprehension.

Prior to data collection, a project description was provided to the participating schools, as well as the teachers and parents of student participants. Teachers were recruited with the assistance of an on-site contact person (e.g., Principal, Title 1 Teacher). Students whose teachers volunteered to participate were eligible to be included in the pilot study. Teachers were asked to select students for participation such that at least two struggling readers and two typically achieving readers were tested from each classroom. Teachers were not asked to share with DMG

any of the data used to select students. Teachers who volunteered to participate were invited to complete the teacher questionnaire.

Data collection. Data collection occurred during the fall of 2006. Testing in School A occurred on two occasions. Each student's testing was completed during one session on one of the two testing occasions. Testing in School B also occurred on two occasions, with first- and second-grade students tested on one day and third- and fourth-grade students tested on another day. The time needed for students to complete the assessments ranged between 10 and 20 minutes. All measures were administered individually and were not timed. No student names were recorded on any of the assessment score sheets.

Three DMG research staff and the principal investigator completed all of the testing in this pilot study. Each of these assessors had extensive experience with DIBELS and also was trained to administer and score DIBELS Deep. Each assessor participated in a training which took approximately one hour and covered the procedures for DIBELS Deep as well as the procedures for the pilot study data collection. During this training, assessors were told to not follow the discontinue rules in the test materials. Instead, assessors were instructed to stop testing if it became clear that the tasks were too difficult for the child being tested. Assessors were also given a list of Deep assessment forms that could be administered at each grade level (see Table 1). However, assessors were given the latitude to try the PA measures with students above first grade if they believed it was necessary. Upon conclusion of each testing session, feedback was shared among the assessors and the principal investigator. Some feedback was shared via in-person discussion and other feedback was written on the DIBELS Deep score sheets. All feedback was considered carefully when determining revisions of the measures.

Participating teachers were asked to complete a brief questionnaire regarding their opinions about the accuracy of the scope and sequence of skills represented on the measures, as well as the utility and feasibility of the new measures. Unfortunately, only two teachers completed and returned the teacher questionnaire.

Data analysis. Because the study was a pilot study, it was designed to be exploratory and descriptive. Once again, the three general purposes of this pilot were to gain information regarding (1) the accuracy of the scope and sequence, (2) appropriate discontinue rules, and (3) the utility of the measures. Therefore, data analysis focused on obtaining descriptive statistics with respect to which measures were given to students at the various grade levels that participated. This examination was particularly important with respect to evaluating the scope and sequence of items because the assessors were told to discontinue testing when the tasks became too difficult for a student. In addition, anecdotal feedback was obtained from assessors regarding the order of tasks on the measures and the discontinue rules. Finally, the two teacher questionnaires were examined to see if the two teachers responded in a similar manner with respect to the usability of the measures.

Results

Descriptive Statistics

The number of students who were administered each of the DIBELS Deep forms at each grade level is reported in Table 2. As noted in the Table, the WRD Quick Screen was administered to each student at each grade level. On only one occasion did testing deviate from the guidelines provided to assessors shown in Table 1 (i.e., a second-grade student was administered PA2).

Details regarding the specific DIBELS Deep forms administered to each student at each grade level are shown in Tables 3 – 6. The shading in the tables indicates the measures we might typically expect to be given at the beginning of each grade level based upon the grade level of the skills tested on those measures. As shown in Table 3, most first-grade students were administered PA2 and WRD1 (shaded). This finding is consistent with the range of skills covered by these measures (late kindergarten) and the timing of the pilot study (beginning of the school year). There were three first-grade students given measures outside the shaded range. Two first-grade students were given PA1 and one student was given WRD2. These results likely are indicative of the range of skills within the sample tested (i.e., both struggling and typically achieving students).

The second-grade students' (n = 9) results were more variable than those for the first-grade students (see Table 4). In addition to the WRD QS, nearly half of the students (4) were tested in materials covering kindergarten and first-grade word reading and decoding skills (WRD1 and WRD2) outside the shaded area, one student was tested in kindergarten-level skills only (PA2 and WRD1), also outside the shaded area. The remaining four students were all tested in measures falling within the shaded area. One student was tested in materials covering first- and second-grade skills (WRD2 and WRD3), and three students were tested only in materials covering second-grade word reading and decoding skills (WRD4).

When examining the data for the third-grade students (n = 10) (Table 5), we again see that results appear to reflect the grade level tested and the time of year. Most of the students (6) were tested on WRD5, which covers third-grade skills. Two of these students also were tested on second-grade skills (WRD4). Thus, more than half of the students testing fell completely within the shaded area. The remaining students were tested on WRD3 and WRD4, covering first- and

second-grade skills; thus, a portion of their testing included measures outside the shaded area. These results appear to be consistent with our request for a sample of both struggling and typically achieving students.

The data for the fourth-grade students is shown in Table 6. Nine of the 10 students at this grade level were given WRD5, covering third-grade skills. Five students were given WRD4, covering second-grade skills, and one student was given WRD3, which covers first-grade skills. Half of this fourth-grade sample of students was tested in measures completely within the shaded area. Once again the pattern of results seems to reflect the nature of the sample tested (some struggling and some typically achieving), the time of year, and a generally accurate scope and sequence.

Assessor Feedback and Review of Score Sheets

Anecdotal feedback was obtained directly from assessors who administered DIBELS Deep measures during the pilot study. Feedback was obtained orally as well as written on the score sheets. This information and a review of students' responses to the test items resulted in a list of potential changes to the measures. Most changes were in regard to clarifying directions, correcting typos, and formatting of the test items and score sheets. For three of the forms, content-related changes were suggested. On WRD2, changes included re-ordering four sections and rewording one item on the sentence reading task. For WRD4, changes included only edits on two items in the sentence reading task. Finally, for WRD5, a comma was added to one of the items on the sentence reading task and nine sections were re-ordered.

Teacher Feedback

Teacher responses to the usability questionnaire are found in Table 7. Overall, the teachers' responses indicate a favorable view of the utility of DIBELS Deep.

Discussion

Summary of Findings

The first aim of this pilot study was to determine the accuracy of the scope and sequence of skills on the DIBELS Deep Measures. The data obtained generally appear to support the scope and sequence accuracy. The pilot test results likely reflect the range of skills within the sample tested (i.e., both struggling and typically achieving students) given that the measures ultimately administered to participants contained skills appropriate for their grade level. Also, with the exception of second-grade students, who were the most variable in their performance, the results for each grade appear to reflect an accurate scope and sequence of skills. This means that students primarily were tested in materials designated as grade appropriate for them. The differences in second grade could have been related to the scope and sequence or the sample of students tested. When examining individual score sheets and feedback from examiners, a few skills within some measures were identified as potentially out of sequence, but the sequence across measures appeared to be appropriate.

The second aim of this pilot study was to determine appropriate discontinue rules for the measures. Feedback from examiners who completed the pilot testing indicated that the discontinue rules for the measures worked well enough to retain as part of the measures that would be examined in further research (i.e., a phase 1 validity study).

Finally, the third aim of the pilot study was to obtain information from teachers regarding the utility of the DIBELS Deep Measures. Though quite limited, the data obtained indicate that the measures may be useful to teachers. The two teachers who completed the usability questionnaire provided responses indicating a favorable view of the utility of DIBELS Deep. However, it is important to keep in mind that only about 25% of the teachers who had students participating in

the pilot returned a completed usability questionnaire. Thus, caution is urged when considering the questionnaire data.

Limitations

The most significant limitation of this study is related to its scope. This study was a non-experimental pilot study with a small sample. Limitations with respect to external validity are apparent; thus, the results cannot be generalized to the larger student population. Despite this issue, a great deal of practical information was obtained in the study that is useful for guiding future work on DIBELS Deep.

Directions for Future Research

This pilot study raised a number of potential issues to be explored in future research. One issue to be explored is the use of DIBELS Deep with a much larger and more diverse population of students. Such a wide-scale study would allow exploring the reliability and validity of DIBELS Deep. In addition, a study with a broader population would allow exploring the utility of decisions based on data obtained from DIBELS Deep. For example, the relationship of scores from DIBELS Deep to important outcomes (e.g., DIBELS benchmark testing results) could be determined. Finally, we must obtain additional feedback about the degree to which teachers and other educational professionals find DIBELS Deep feasible and useful for planning instruction. Ultimately, assessments like DIBELS Deep will only be useful for improving student outcomes to the degree that educators actually use the data to inform instruction.

Summary

This technical report describes a pilot study conducted on DIBELS Deep, the results of the study, and implications for further research and practice related to DIBELS Deep. The design characteristics of DIBELS Deep set it apart from more typical reading diagnostic measures. That

is, the measures are designed to be brief and linked to DIBELS. Based upon the pilot data, DIBELS Deep has the potential to be a useful and practical tool for educators. Some modification of the order of tasks within measures and finalizing discontinue rules may improve ease of use, but overall the results of this pilot study suggest that DIBELS Deep may be helpful for better targeting instructional needs and planning instruction. Further research is recommended to obtain additional information about the validity and utility of the measures.

References

- Batsche, G., Elliott, J., Graden, J. L., Grimes, J., Kovalski, J. F., Prasse, D., Reschly, D. J., Schrag, J. & Tilly III, W. D. (2005). *Response to intervention: Policy considerations and implementation*. Alexandria, VA: National Association of State Directors of Special Education, Inc.
- Carnine, D. W., Silbert, J., Kame'enui, E. J., Tarver, S. G., & Jungjohann, K. (2006). *Teaching struggling and at-risk readers: A Direct Instruction approach*. Upper Saddle River, NJ: Pearson.
- Jennings, J. H., Caldwell, J., & Lerner, J. W. (2006). *Reading problems: Assessment and teaching strategies* (5th ed.). Boston: Pearson.
- National Reading Panel. (2000). *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*. Washington, DC: National Institute of Child Health and Human Development.
- National Research Council. (1998). *Preventing reading difficulties in young children*. Washington DC: National Academy Press.
- Nippold, M. A. (2007). *Later language development: School-age children, adolescents, and young adults (third edition)*. Austin, TX: PRO-ED.
- Simmons, D. & Kame'enui, E. J. (1999) *Curriculum maps: Mapping instruction to achieve instructional priorities in beginning reading, kindergarten-grade 3*. Unpublished manuscript.
- Wagner, R. K, Muse, A. E., & Tannenbaum, K. R.(Eds.)(2007). *Vocabulary acquisition: Implications for reading comprehension*. New York: Guilford.

Table 1

Guidelines for Deep Forms To Administer by Grade Level

Deep Measure	Grade Level			
	First	Second	Third	Fourth
PA1	X ^a			
PA2	X			
WRD QS	X	X	X	X
WRD1	X	X	X	X
WRD2	X	X	X	X
WRD3	X	X	X	X
WRD4		X	X	X
WRD5			X	X

Note. PA1 = Phonemic Awareness 1, PA2 = Phonemic Awareness 2, WRD QS = Word Reading and Decoding Quick Screen, WRD1 = Word Reading and Decoding Form 1, WRD2 = Word Reading and Decoding Form 2, WRD3 = Word Reading and Decoding Form 3, WRD4 = Word Reading and Decoding Form 4, WRD5 = Word Reading and Decoding Form 5.

^a The X indicates that the measure could be given at that grade level.

Table 2

Number of Students Administered Deep Forms by Grade Level

Deep Form	Grade Level			
	First (n = 6)	Second (n = 9)	Third (n = 10)	Fourth (n = 10)
PA1	2	0	0	0
PA2	5	1	0	0
WRD QS	6	9	10	10
WRD1	5	5	0	0
WRD2	1	4	0	0
WRD3	0	1	4	1
WRD4	0	4	6	5
WRD5	0	0	6	9

Note. PA1 = Phonemic Awareness 1, PA2 = Phonemic Awareness 2, WRD QS = Word Reading and Decoding Quick Screen, WRD1 = Word Reading and Decoding Form 1, WRD2 = Word Reading and Decoding Form 2, WRD3 = Word Reading and Decoding Form 3, WRD4 = Word Reading and Decoding Form 4, WRD5 = Word Reading and Decoding Form 5.

Table 3

DIBELS Deep Forms Administered to Grade 1 Students (n = 6)

Student	DIBELS Deep Measure							
	PA1	PA2	WRD QS	WRD1	WRD2	WRD3	WRD4	WRD5
1a			X ^a	X	X			
1b		X	X	X				
1c		X	X	X				
1d		X	X	X				
1e	X	X	X	X				
1f	X	X	X	X				

Note. The shading represents the measures you might typically expect to be given at the beginning of first grade. PA1 = Phonemic Awareness 1, PA2 = Phonemic Awareness 2, WRD QS = Word Reading and Decoding Quick Screen, WRD1 = Word Reading and Decoding Form 1, WRD2 = Word Reading and Decoding Form 2, AP3 = Word Reading and Decoding Form 3, WRD4 = Word Reading and Decoding Form 4, WRD5 = Word Reading and Decoding Form 5.

^aThe X indicates that the measure was administered to the student.

Table 4

DIBELS Deep Forms Administered to Grade 2 Students (n = 9)

Student	DIBELS Deep Measure							
	PA1	PA2	WRD QS	WRD1	WRD2	WRD3	WRD4	WRD5
2a			X ^a	X	X			
2b			X	X	X			
2c			X	X	X			
2d			X	X	X			
2e			X			X	X	
2f			X				X	
2g			X				X	
2h			X				X	
2i		X	X	X				

Note. The shading represents the measures you might typically expect to be given at the beginning of second grade. PA1 = Phonemic Awareness 1, PA2 = Phonemic Awareness 2, WRD QS = Word Reading and Decoding Quick Screen, WRD1 = Word Reading and Decoding Form 1, WRD2 = Word Reading and Decoding Form 2, AP3 = Word Reading and Decoding Form 3, WRD4 = Word Reading and Decoding Form 4, WRD5 = Word Reading and Decoding Form 5.

^aThe X indicates that the measure was administered to the student.

Table 5

DIBELS Deep Forms Administered to Grade 3 Students (n = 10)

Student	DIBELS Deep Measure							
	PA1	PA2	WRD QS	WRD 1	WRD2	WRD3	WRD4	WRD5
3a			X ^a					X
3b			X					X
3c			X					X
3d			X					X
3e			X				X	X
3f			X				X	X
3g			X			X	X	
3h			X			X	X	
3i			X			X	X	
3j			X			X	X	

Note. The shading represents the measures you might typically expect to be given at the beginning of third grade. PA1 = Phonemic Awareness 1, PA2 = Phonemic Awareness 2, WRD QS = Word Reading and Decoding Quick Screen, WRD1 = Word Reading and Decoding Form 1, WRD2 = Word Reading and Decoding Form 2, AP3 = Word Reading and Decoding Form 3, WRD4 = Word Reading and Decoding Form 4, WRD5 = Word Reading and Decoding Form 5.

^aThe X indicates that the measure was administered to the student.

Table 6

DIBELS Deep Forms Administered to Grade 4 Students (n = 10)

Student	DIBELS Deep Measure							
	PA1	PA2	WRD QS	WRD1	WRD2	WRD3	WRD4	WRD5
4a			X ^a					X
4b			X					X
4c			X					X
4d			X					X
4e			X				X	X
4f			X					X
4g			X				X	X
4h			X				X	X
4i			X				X	X
4j			X			X	X	

Note. The shading represents the measures you might typically expect to be given at the beginning of fourth grade. PA1 = Phonemic Awareness 1, PA2 = Phonemic Awareness 2, WRD QS = Word Reading and Decoding Quick Screen, WRD1 = Word Reading and Decoding Form 1, WRD2 = Word Reading and Decoding Form 2, AP3 = Word Reading and Decoding Form 3, WRD4 = Word Reading and Decoding Form 4, WRD5 = Word Reading and Decoding Form 5.

^aThe X indicates that the measure was administered to the student

Table 7

Teacher Responses to DIBELS Deep Usability Questionnaire

Question	Teacher 1 (Grade 3)	Teacher 2 (Grade 4)
1. The measures adequately covered the reading skills in the grade level I teach.	Agree	Agree
2. Most teachers would find the measures appropriate for assessing reading difficulties.	Agree	Agree
3. I believe the measures would be helpful in planning reading instruction for phonemic awareness (if applicable—otherwise leave blank).		Agree
4. I believe the measures would be helpful in planning reading instruction for phonics (alphabetic principle) (if applicable—otherwise leave blank).	Agree	Agree
5. I would suggest the use of the measures to other teachers.	Agree	Slightly Agree
6. I would be willing to use the measures in my classroom.	Agree	Agree
7. I liked the procedures used for the measures.	Agree	Agree
8. The measures were a good way to assess students' reading strengths and weaknesses.	Agree	Agree
9. Overall, the measures would be beneficial for planning reading instruction.	Agree	Agree
10. Please share with us any feedback you believe would make the measures more useful to you as a teacher when planning reading instruction.		...this test would give clear direction for [identifying] holes in student learning.