

#### **Technical Report 1204**

**DIBELS Next Recommended Benchmark Goals: Technical Supplement** 

University of Oregon Center on Teaching and Learning

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#### **DIBELS Next Recommended Benchmark Goals: Technical Supplement**

The University of Oregon (UO) DIBELS Data System (DDS) at the Center on Teaching and Learning (CTL) recommends the use of new benchmark goals for all recommended DIBELS Next measures. For most of the individual DIBELS Next assessments, the former benchmark goals established by Dynamic Measurement Group (DMG) *fail to identify* approximately 40% of students who are *not successful readers*. This means that many students who are identified as on track using the former goals will not achieve a healthy reading outcome, even though their performance on screening measures indicates otherwise. In contrast, the CTL recommended goals identify nearly all students who have a reasonable chance of performing below grade level, allowing teachers to make informed decisions about how to best serve the instructional needs of their students.

In this report we present the results of our benchmark goal analyses for *all* recommended measures<sup>1</sup> and time points. For each analysis, we include a comparison of the CTL *recommended* and the DMG former goals. A complete description of the rationale for and methods used to set the CTL *recommended* benchmark goals is available in <u>2012-2013 DIBELS Data System Update</u> <u>Part II: DIBELS Next Benchmark Goals</u> (UO CTL, 2012b).

#### **Interpretation of Results**

We present results for all DIBELS Next recommended measures and time points in Tables 1 - 64. When viewing these tables, note that after the column headings, the first three rows reflect the recommended and former *benchmark goals*, and the last three rows reflect the recommended and former *cut points for risk*. For each measure, time point, and type of goal, we provide five values: (i) the area under the curve (*AUC*); (ii) the goal itself; (iii) the *sensitivity* value, with the corresponding *specificity* value listed in parentheses; (iv) the SAT10 median percentile rank; and (v) the DDS percentile rank.

<sup>&</sup>lt;sup>1</sup> The list of recommended measures is based on a series of sequential regression analyses testing the extent to which each measure improves the ability to predict students' performance on the SAT10. For details about how the recommended measures were selected, see 2012-2013 DIBELS Data System Update Part I: DIBELS Next Composite Score (UO CTL, 2012a).

The *AUC* is a measure of how accurately the screener separates students being tested into the correct classifications (or groups) across all possible cut points (Marzban, 2004; Peng & So, 2002; Pepe, 2003; Swets, 1996). The *AUC* is the area under a curve that has been drawn based on a plot of sensitivity and specificity coordinates. The *sensitivity* value represents the proportion of "truly at-risk" students who are correctly identified by the specific goal or cut point selected on that screener. *Specificity* is the counterpart to sensitivity and represents the proportion of "truly healthy" readers who are accurately identified as *not* at risk by the specific goal or cut point selected on that screener (i.e., identified as "okay").

Note that in all cases, the CTL *recommended* benchmark goal is set with the criterion of identifying 90% (i.e., sensitivity = .90) of the students who are predicted to end the year below the 40<sup>th</sup> percentile on the SAT10—irrespective of the corresponding value for specificity. This decision is consistent with the development of general outcomes measures, such as DIBELS, which are intended to be used within a formative assessment, problem-solving model to help identify and ameliorate early reading deficits (Deno, 1985; Kaminski & Good, 1998; Knutson & Shinn, 1991; Shinn, 1995). The 40<sup>th</sup> percentile was chosen as the benchmark goal criterion on the SAT10 because it represents the score commonly used nationally for federal reporting (e.g., Reading First, U.S. DOE evaluations; Florida Department of Education, 2009), and it also was used to guide the benchmark standards in DIBELS 6<sup>th</sup> edition (Good & Kaminski, 2002).

DIBELS measures also utilize a second cut point, typically referred to as a "cut point for risk." The CTL *recommended* cut point for risk is set with the criterion of identifying 80% (i.e., sensitivity = .80) of the students who are predicted to end the year below the 20<sup>th</sup> percentile on the SAT10—irrespective of the corresponding value for specificity. The 20<sup>th</sup> percentile was chosen as the cut point for the risk criterion on the SAT10 because that is the score that has been used nationally to guide the "need for intensive support" range in DIBELS 6<sup>th</sup> edition (Good & Kaminski, 2002). The DMG former goals and cut points were *not* set using standard, a priori criteria for either sensitivity or specificity, so the values for both are unpredictable and vary widely by measure and time of year, as illustrated below.

The last two columns in each table provide information about the relative standing of students in our sample compared with two separate reference groups: the SAT10 national

percentile reference group (based on SAT10 performance) and the DDS system-wide reference group (based on performance on a given DIBELS Next measure). For all *benchmark goals*, we report the median SAT10 national percentile rank associated with the subset of students in our sample who scored *within four points of the goal* (i.e., benchmark goal ± 4 points). For all *cut points for risk*, we report the median SAT10 national percentile rank associated with all students in our sample who scored *below the cut point for risk*. The last column in each table is the single DDS system-wide percentile rank associated with the exact DIBELS Next benchmark goal or cut score listed in the table. Although the numbers in the last two columns are all percentile scores, their interpretation is different, because the reference group and the testing materials are not the same. Specifically, the DDS reference group includes significantly more students scoring in the below-average range than we would expect if using a nationally stratified sample such as with the SAT10. When interpreting percentile ranks, the validity of the interpretation depends on understanding both what is being measured as well as the norm group that is being used for comparison (Cummings, Kennedy, Otterstedt, Baker, & Kame'enui, 2011).

Below each table, we include two figures for each DIBELS Next measure and time point: (a) one for the benchmark goals analysis and (b) one for the analysis of the cut points for risk. These figures are relative (receiver) operating characteristic (ROC) curves. The ROC curves provide a visual representation of the tradeoff between the relative proportion of time that an adverse outcome was *correctly predicted by a screener* (e.g., "hit rate;" sensitivity) to the proportion of time that an adverse outcome was *incorrectly predicted* (e.g., "false alarm;" 1 specificity). Keep in mind that an "adverse outcome" is conceptualized differently for benchmark goals and cut points for risk. When considering benchmark goals, an "adverse outcome" is indicated if a student is *not a successful or grade-level reader* (i.e., scored below the 40<sup>th</sup> percentile on the SAT10) at the end of the year. When considering cut points for risk, an "adverse outcome" is indicated if a student is *a struggling reader* (i.e., scored below the 20<sup>th</sup> percentile on the SAT10) at the end of the year. Included on the ROC curves are indicators of where the CTL *recommended* and DMG former goals (or cut points for risk) fall along the distribution. Filled circles represent the CTL *recommended* goals; open circles represent the DMG former goals. For all measures and time points, the DMG former goals identify fewer atrisk students correctly (i.e., have a lower hit rate).

**Interpretation of tables**. As an example of an appropriate interpretation of the summary page for each measure, consider Table 11 (p. 21), which reports results for Nonsense Word Fluency Correct Letter Sounds (NWF–CLS) at the beginning of Grade 1. The first row after the column headings lists the AUC associated with the benchmark goals analysis (i.e., predicting end-of-year SAT10 performance as either at or above, or below, the 40<sup>th</sup> percentile using beginning-of-year NWF–CLS). The AUC covers the range from .50, which means chance prediction or no relation to the SAT-10, to 1.0, which means perfect prediction on the SAT10. An AUC of .78 indicates reasonably good predictive accuracy—that is, the prediction is much better than chance but the prediction is not perfect.

The second line shows that the recommended NWF–CLS benchmark goal at the beginning of Grade 1 is 42 correct letter sounds. This raw CLS score corresponds to a sensitivity value of .90, and a specificity value of .49. This means that of those students who scored below the 40<sup>th</sup> percentile on the SAT10, 90% of them will be identified by the benchmark goal of 42. It also means that 49% of students who scored at or above the 40<sup>th</sup> percentile on the SAT10 were correctly identified as performing at grade level. The median end-of-year SAT10 percentile rank associated with Grade 1 students who *started* the year with an NWF–CLS score between 38 and 46 (i.e., *within four points of the goal*) is the 37<sup>th</sup> percentile on the SAT10. The DDS percentile rank shows that first grade students who *started* the year with an NWF–CLS score of 42 were at the 76<sup>th</sup> percentile. Because the DDS contains more students who score below average than the national population value, the 76<sup>th</sup> percentile may somewhat overestimate students' true performance.

The third row of Table 11 shows similar statistics for the DMG goal of 27 correct letter sounds. Based on the sensitivity value of .60, this goal will identify 60% of students who ultimately perform below the 40<sup>th</sup> percentile on the SAT10. In addition, students who receive a NWF–CLS score of 27 are likely to score around the 29<sup>th</sup> percentile on the SAT-10, a level of performance that represents the 44<sup>th</sup> percentile in the DDS. Comparing the second and third rows of the table, we can see that students who score above the DMG benchmark goal of 27, yet

below the CTL recommended benchmark goal of 42 are likely to perform below the 37<sup>th</sup> percentile on the SAT10. This shows that students can perform considerably better than the former benchmark goal and still fall well below the 40<sup>th</sup> percentile at the end of the year on the criterion measure of performance (i.e., the SAT10).

Look now at the bottom three rows of Table 11. The AUC associated with the cut point for risk analysis (i.e., predicting end-of-year SAT10 performance as either at or above or below the 20<sup>th</sup> percentile using beginning-of-year NWF–CLS) is .80, again indicating that the measure is a moderately accurate predictor of the SAT10. The recommended cut point for risk on NWF– CLS at the beginning of Grade 1 is 31 correct letter sounds. This corresponds to a sensitivity value of .81, and a specificity value of .62. The median end-of-year SAT10 percentile rank associated with first grade students who *started* the year with an NWF–CLS score *below* the cut point for risk of 31 is the 21<sup>st</sup> percentile. The DDS percentile rank associated with first grade students who started the year with an NWF–CLS score of 31 is the 54<sup>th</sup> percentile.

The former goal of 18 correct letter sounds correctly identifies 92% (specificity) of students who score at or above the 20<sup>th</sup> percentile on the SAT10, but it only identifies 35% of students who perform below the 20<sup>th</sup> percentile at the SAT10 at the end of the school year. As a consequence, the former goals will not identify 65% of students who will end the year as a struggling reader. If these students had been identified the school may have been able to provide the type of instruction and intervention necessary for the students meet the criterion measure of healthy reading performance.

Comparisons between the SAT10 and DDS percentile ranks (i.e., columns 4 and 5 in each table) illustrate another important point. First, the DDS sample is at a higher risk for reading difficulty than the SAT10 norming sample. In nearly all cases, the SAT10 percentile rank for a given DIBELS Next goal is *lower* than the DDS percentile rank for the same score. This trend illustrates the importance of using a rigorous, nationally normed comprehensive test of reading as the gold standard when setting national goals and cut points. If local or system-wide DIBELS norms were used to set the DIBELS Next benchmark goals, then the goal level of performance in many cases would correspond to a national standard that was below the 25<sup>th</sup> percentile.

Interpretation of ROC curves. As an example of an appropriate interpretation of the ROC curves for each measure, refer to Figure 11 (beginning of Grade 1 NWF-CLS; p. 21). The graph on the left refers to the benchmark goals analysis. It plots the distribution of "hit rates" (i.e., sensitivity) to "false alarms" (i.e., 1 – specificity) for each beginning-of-year NWF-CLS raw score when compared to the SAT10. When considering any particular NWF-CLS score, the "hit rate" refers to correctly identifying students who are *not* on track for reading success while the "false alarms" refer to incorrectly identifying students as being not on track for successful reading when in fact they are on track. As higher goals are selected, moving from the lower left to the upper right corner of the curve, both the hit rate and the false-alarm rate increase. If the point closest to the upper-right corner of the curve was selected as the benchmark goal for NWF-CLS, then *all* students would be identified as being below benchmark. This decision would result in a goal that correctly identifies all students who are below the 40<sup>th</sup> percentile on the SAT10 (i.e., sensitivity = 1.0), but none of the students who are at or above the  $40^{\text{th}}$  would be identified as being on track for healthy reading when in fact they are on track (i.e., specificity = 0.0). In contrast, if the lower-left point on the curve was selected as the benchmark goal, then there would be no false alarms, yet none of the students who were below the 40<sup>th</sup> percentile would have been identified as being not on track, and would not have received the extra support they need. At this lower-left point, sensitivity equals 0.0 and specificity equals 1.0.

The circles on the two ROC curves in Figure 11 compare the DMG former goal and the CTL *recommended* goal. The curve on the left side of the figure depicts the NWF–CLS benchmark goal analysis. The DMG former benchmark goal for this measure is 27 and the CTL *recommended* goal is 42. By design, the CTL *recommended* goal identifies 90% of students who score below the 40<sup>th</sup> percentile on the SAT10 for additional follow-up assessment or instruction (i.e., sensitivity = .90). We believe that teachers should be informed about the majority of students who have a reasonable chance of performing below grade level. A higher sensitivity value, however, would create too many false alarms. Using the DMG former NWF–CLS benchmark goal of 27, only 60% of students who score below the 40<sup>th</sup> percentile on the SAT10 are identified as at risk; the other 40% of students who also scored below the 40<sup>th</sup> percentile are misclassified as being on track. The goal of 27 does not offer teachers the opportunity to

intervene with the 30% of students who ultimately perform below the 40<sup>th</sup> percentile on the SAT10 and fall between the former and recommended goals (e.g., the difference between sensitivity of .90 for the recommended goal and .60 for the former goal).

The graph on the right in Figure 11 plots the distribution of "hit rates" to "false alarms" for each beginning-of-year NWF–CLS raw score for the *cut points for risk* analysis. The interpretation is the same as with the benchmark goals analysis. As higher goals are selected, sensitivity increases and specificity decreases; at the highest point in the upper-right corner of the graph, *all* students would be identified as struggling readers. The CTL *recommended* cut point of 31 NWF–CLS identifies 81% of students who score below the 20<sup>th</sup> percentile on the SAT10 as needing intensive support. In contrast, using the DMG former cut point of 18 NWF-CLS, only 35% of students who score below the 20<sup>th</sup> percentile as needing intensive support. As previously noted, this former goal misses 65% of students who will end up considerably below grade level at the end of the year, depriving teachers of the opportunity to offer additional instructional support to those students. Using the CTL *recommended* cut point, specificity is .62; the specificity value for the DMG former cut point is .92. These values indicate that the likelihood of a false alarm is 38% using the CTL *recommended* cut point and 8% using the DMG former cut point.

Again, this tradeoff between hit rate and false alarms is inherent to the goal selection process. Identifying more students as at risk necessarily increases the number of false alarms. However, we believe it is better to identify with a high degree of accuracy *all* of the students who have a reasonable chance of *not* meeting the criterion measure of performance. In that group, of course, will be some students who will in fact meet the criterion measure of performance ("false alarms"). The benefit to this approach is that it gives schools consistent information about which students are potentially in jeopardy of not meeting the criterion standard, information that they can then use to allocate services and supports in a manner that they believe is most defensible. For example, more intense service would be provided to those students who are furthest away from the benchmark goal; students who are closer to the benchmark goal might receive services that are less resource intensive.

#### **Summary of Results**

An examination of the range of sensitivity and specificity values across the recommended and former goals highlights that, in all instances of benchmark goals, the CTL *recommended* goals identify 90% of students who, without additional support, are unlikely to reach the 40th percentile or above on the SAT10 at the end of the year. The DMG former goals identify 25% -81% (*Mdn* = 60%) of students who are unlikely to meet a healthy standard for reading performance. The false positive (false alarm) rate for the CTL benchmark goals ranges from 16% -75% (Mdn = 50%); for the DMG former goals, the range is 5% - 40%, with a median of 13%. In all instances of cut points for risk, the CTL recommended cut points identify 80% of students who are unlikely to reach the 20th percentile or above on the SAT10 at the end of the year. The DMG former cut points identify 13% - 73% (Mdn = 44%) of students who are unlikely to meet this standard. The false positive (false alarm) rate for the CTL cut points ranges from 10% - 50%(Mdn = 36%); for the DMG former cut points, the range is 2% - 26%, with a median of 7%.

#### Conclusion

We have developed the CTL *recommended* DIBELS Next goals for use in a problemsolving model of education service delivery (Deno, 1985; Shinn, 1995). The problem-solving model for data-based decision-making consists of two major components. First, it requires the identification of students through screening systems. Screening systems are not perfect, but offer evidence that a student is most likely to meet benchmarks at the end of the year, fall below benchmarks, or risk falling well below grade level. The greater the accuracy of a screener, as measured by the AUC, the fewer the number of misses and false alarms. An AUC value of .50 indicates that the screener has no value at all (i.e., flipping a coin is as accurate), but as the AUC approaches 1.0, it indicates that the screener minimizes the number of misses and false alarms (i.e., becomes increasingly more accurate than flipping a coin). The specific cut score for benchmark or risk thus represents a trade-off between misses and false alarms. Given a screener with a certain level of accuracy (AUC value), as we increase the cut score to raise the identification success rate, the number of false alarms also increases. As we lower the cut score, the rate of false alarms goes down but so does the successful identification rate, which increases the number of misses. The estimation of accuracy and choice between trade-offs is best determined with representative data and high-quality standardized tests to ensure the broadest application across all students and all schools.

The second component of the problem-solving model involves decision making about how to support students who are identified. This aspect of the model takes place at the classroom-, school-, or district-level and requires information from multiple sources. The decision-making component partially relies on the number of students who need support and the resources available to support them. It also highlights the importance of using teacher judgment, as well as the collection of additional data (from either DIBELS assessments or other sources), to determine the true need for additional instructional support. Educators can then decide how to best allocate their resources to provide support for students.

Through this analysis, we have attempted to create CTL recommended goals for DIBELS Next that identify most students who *may* need additional instructional supports. The two cut scores identify students who are at immediate risk of reading difficulties and those who perform below benchmark. As the criterion, we chose the 20<sup>th</sup> percentile on the SAT10 for immediate risk and the 40<sup>th</sup> percentile for benchmark. Our analysis then produced cut points on each DIBELS Next measures that identified at least 80% of those students who are at immediate risk for reading difficulties and 90% of those students who fall below benchmark level of the 40<sup>th</sup> percentile. The students at risk may require frequent, intensive instructional support, and their scores on the different DIBELS Next measures should help teachers target those supports in the areas of greatest need. The students who are below benchmark may benefit from instructional supports or preventive activities, but some, especially those at the higher range, may simply require progress monitoring to ensure they remain on-track for grade level performance through the school year. The advantage of this approach is that it provides educators with greater opportunities for early intervention that can lead directly to important outcomes in terms of improvements in end-of-year performance. The CTL recommended goals for DIBELS Next measures prioritize *correctly identifying* those students who need additional instructional support, by using a stable and consistent standard. This allows schools to more accurately predict the likelihood of students' future reading success, and to intervene with confidence, knowing they are providing support to those students who need it.

Benchmark Goals and Cut Points for Risk for Beginning of Kindergarten First Sound Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .76	
Recommended (.90)	23	.90 (.43)	58	79
Former	10	.65 (.75)	36	50
Cut Points for Risk		AUC =	= .74	
Recommended (.80)	13	.82 (.56)	24	57
Former	5	.68 (.74)	20	40

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

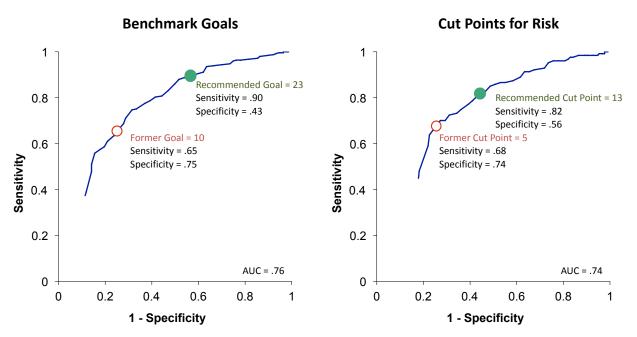


Figure 1. Receiver Operating Characteristic (ROC) curves for beginning of Kindergarten First Sound Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .75	
Recommended (.90)	52	.90 (.34)	58	83
Former	30	.35 (.94)	23	28
Cut Points for Risk		AUC =	= .74	
Recommended (.80)	43	.81 (.56)	24	61
Former	20	.23 (.95)	9	14

Benchmark Goals and Cut Points for Risk for Middle of Kindergarten First Sound Fluency Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

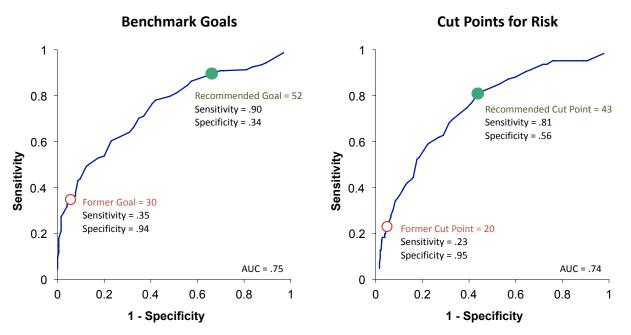


Figure 2. Receiver Operating Characteristic (ROC) curves for middle of Kindergarten First Sound Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .80	
Recommended (.90)	29	.90 (.48)	53	74
Former	_	_	_	_
Cut Points for Risk		AUC =	= .76	
Recommended (.80)	22	.81 (.53)	24	60
Former	_	_	_	_

Benchmark Goals and Cut Points for Risk for Beginning of Kindergarten Letter Naming Fluency Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former goals not established for Kindergarten LNF.

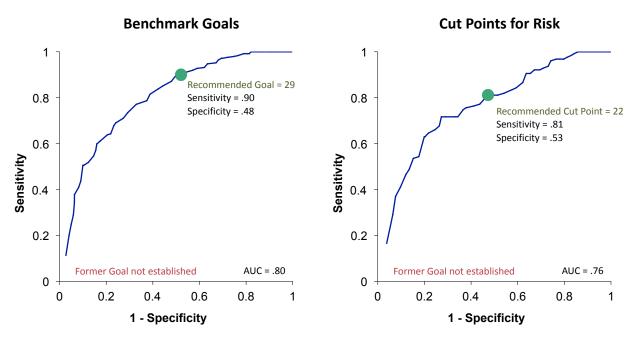


Figure 3. Receiver Operating Characteristic (ROC) curves for beginning of Kindergarten Letter Naming Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Kindergarten Letter Naming Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .79	
Recommended (.90)	52	.90 (.45)	51	78
Former	_	_	_	_
Cut Points for Risk		AUC =	= .80	
Recommended (.80)	42	.82 (.61)	23	57
Former	_	_	_	_

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former goals not established for Kindergarten LNF.

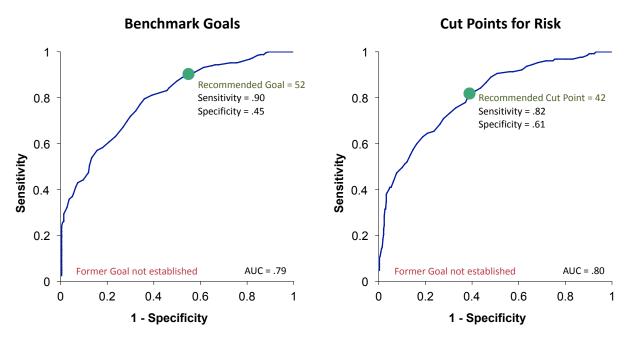


Figure 4. Receiver Operating Characteristic (ROC) curves for middle of Kindergarten Letter Naming Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Kindergarten Letter Naming Fluency
Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .78	
Recommended (.90)	62	.89 (.44)	46	77
Former	-	_	_	_
Cut Points for Risk		AUC =	= .79	
Recommended (.80)	51	.80 (.65)	22	51
Former	_	_	_	_

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former goals not established for Kindergarten LNF.

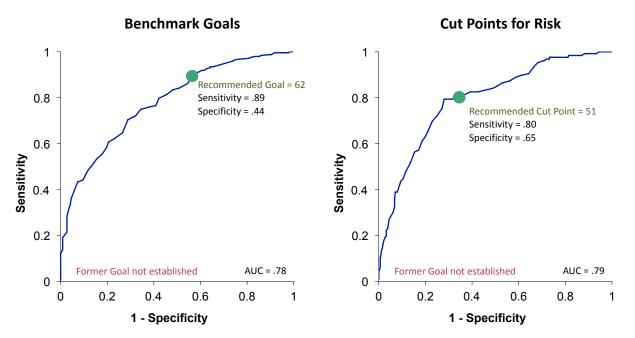


Figure 5. Receiver Operating Characteristic (ROC) curves for end of Kindergarten Letter Naming Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Kindergarten Phoneme Segmentation Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .75	
Recommended (.90)	51	.90 (.36)	57	79
Former	20	.38 (.92)	18	28
Cut Points for Risk		AUC =	= .80	
Recommended (.80)	42	.80 (.57)	26	58
Former	10	.24 (.95)	11	14

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

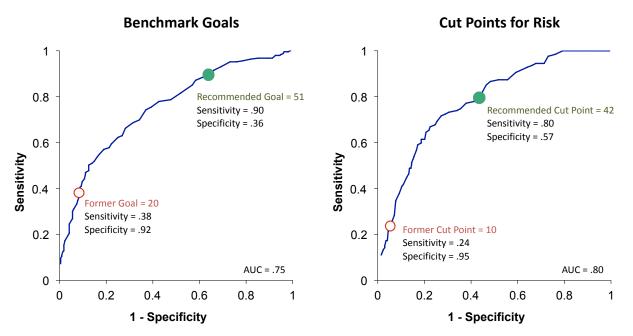


Figure 6. Receiver Operating Characteristic (ROC) curves for middle of Kindergarten Phoneme Segmentation Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Kindergarten Nonsense Word Fluency Correct Letter Sounds Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .80	
Recommended (.90)	34	.90 (.47)	53	77
Former	17	.43 (.92)	31	33
Cut Points for Risk		AUC =	= .78	
Recommended (.80)	25	.80 (.58)	24	57
Former	8	.24 (.96)	10	14

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

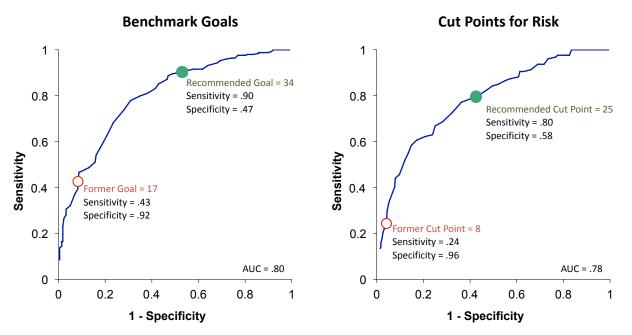


Figure 7. Receiver Operating Characteristic (ROC) curves for middle of Kindergarten Nonsense Word Fluency Correct Letter Sounds using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .80	
Recommended (.90)	44	.90 (.54)	45	73
Former	28	.52 (.87)	27	37
Cut Points for Risk		AUC =	= .78	
Recommended (.80)	35	.83 (.59)	23	55
Former	15	.20 (.98)	9	9

Benchmark Goals and Cut Points for Risk for End of Kindergarten Nonsense Word Fluency Correct Letter Sounds Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

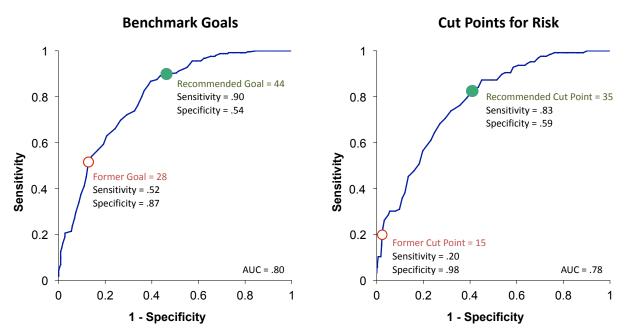


Figure 8. Receiver Operating Characteristic (ROC) curves for end of Kindergarten Nonsense Word Fluency Correct Letter Sounds using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Kindergarten Nonsense Word Fluency Whole Words Read Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .79	
Recommended (.90)	7	.91 (.52)	49	72
Former	-	-	_	_
Cut Points for Risk		AUC =	= .78	
Recommended (.80)	2	.84 (.64)	22	56
Former	_	_	_	_

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former goals not established for Kindergarten WWR.

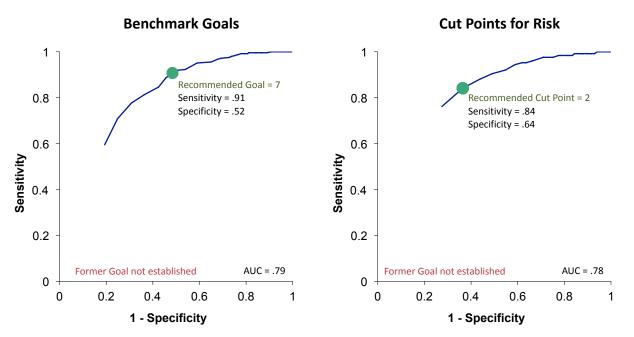


Figure 9. Receiver Operating Characteristic (ROC) curves for end of Kindergarten Nonsense Word Fluency Whole Words Read using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Beginning of Grade 1 Letter Naming Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	77	
Recommended (.90)	58	.90 (.34)	57	80
Former	-	_	_	_
Cut Points for Risk		AUC =	= .78	
Recommended (.80)	47	.80 (.55)	22	57
Former	_	_	_	_

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former goals not established for Grade 1 LNF.

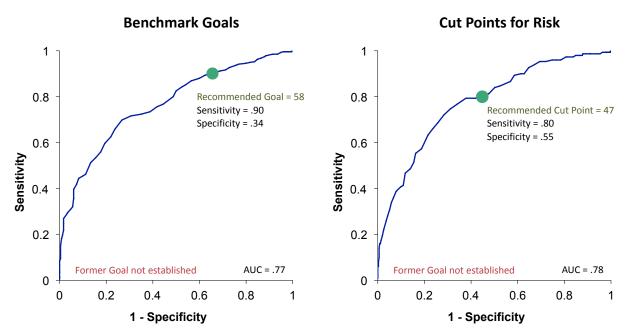


Figure 10. Receiver Operating Characteristic (ROC) curves for beginning of Grade 1 Letter Naming Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .78	
Recommended (.90)	42	.90 (.49)	37	76
Former	27	.60 (.78)	29	44
Cut Points for Risk		AUC =	= .80	
Recommended (.80)	31	.81 (.62)	21	54
Former	18	.35 (.92)	13	20

Benchmark Goals and Cut Points for Risk for Beginning of Grade 1 Nonsense Word Fluency Correct Letter Sounds Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

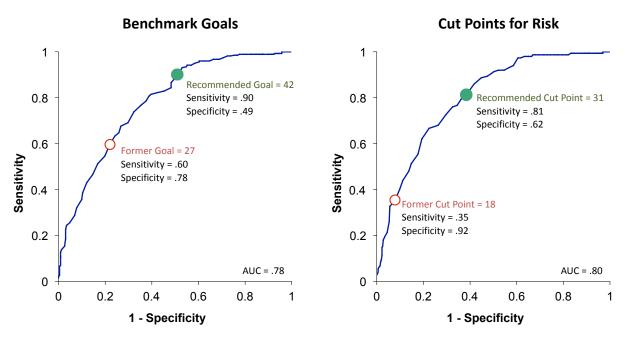


Figure 11. Receiver Operating Characteristic (ROC) curves for beginning of Grade 1 Nonsense Word Fluency Correct Letter Sounds using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .81	
Recommended (.90)	70	.90 (.51)	40	72
Former	43	.51 (.87)	26	35
Cut Points for Risk		AUC =	= .82	
Recommended (.80)	50	.82 (.67)	19	48
Former	33	.37 (.94)	11	17

Benchmark Goals and Cut Points for Risk for Middle of Grade 1 Nonsense Word Fluency Correct Letter Sounds Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

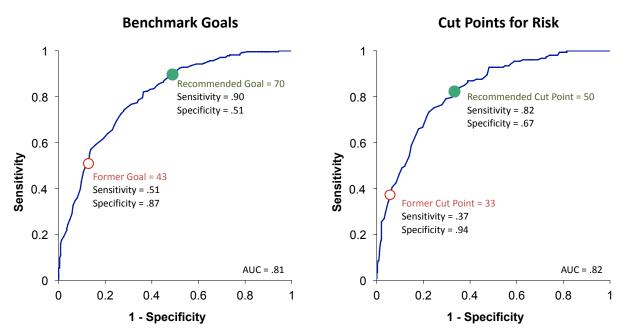


Figure 12. Receiver Operating Characteristic (ROC) curves for middle of Grade 1 Nonsense Word Fluency Correct Letter Sounds using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade I Nonsense Word Fluency Correc	ct
Letter Sounds Using the Recommended Benchmark Goals Sample	

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .79	
Recommended (.90)	96	.90 (.46)	62	72
Former	58	.60 (.81)	22	39
Cut Points for Risk		AUC =	= .80	
Recommended (.80)	63	.80 (.67)	19	44
Former	47	.50 (.86)	13	24

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

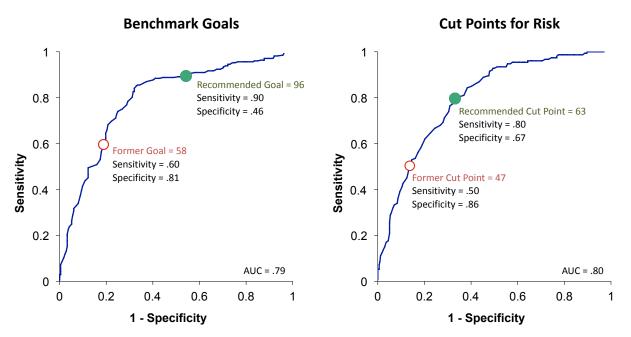


Figure 13. Receiver Operating Characteristic (ROC) curves for end of Grade 1 Nonsense Word Fluency Correct Letter Sounds using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Beginning of Grade 1 Nonsense Word Fluency
Whole Words Read Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .74			
Recommended (.90)	7	.91 (.48)	40	76
Former	1	.58 (.74)	25	50
Cut Points for Risk		AUC =	= .73	
Recommended (.80)	3	.84 (.53)	24	63
Former	0	- (-)	_	23

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

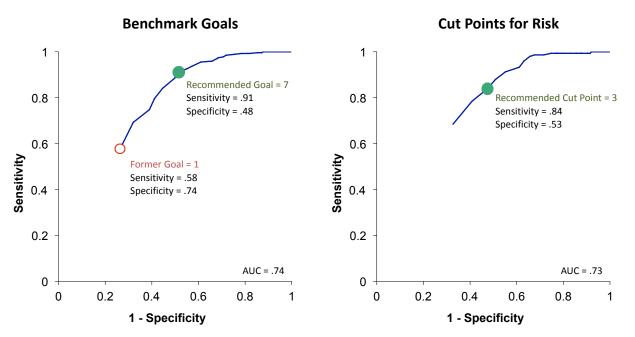


Figure 14. Receiver Operating Characteristic (ROC) curves for beginning of Grade 1 Nonsense Word Fluency Whole Words Read using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .78	
Recommended (.90)	21	.90 (.51)	40	72
Former	8	.48 (.85)	24	36
Cut Points for Risk	AUC = .79			
Recommended (.80)	13	.84 (.62)	20	52
Former	3	.39 (.88)	15	22

Benchmark Goals and Cut Points for Risk for Middle of Grade 1 Nonsense Word Fluency Whole Words Read Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

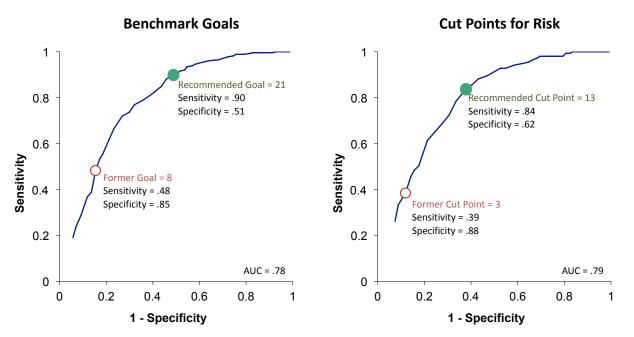


Figure 15. Receiver Operating Characteristic (ROC) curves for middle of Grade 1 Nonsense Word Fluency Whole Words Read using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .79	
Recommended (.90)	30	.90 (.50)	59	71
Former	13	.52 (.87)	22	31
Cut Points for Risk		AUC =	= .79	
Recommended (.80)	18	.80 (.65)	19	45
Former	6	.31 (.91)	11	15

Benchmark Goals and Cut Points for Risk for End of Grade 1 Nonsense Word Fluency Whole Words Read Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

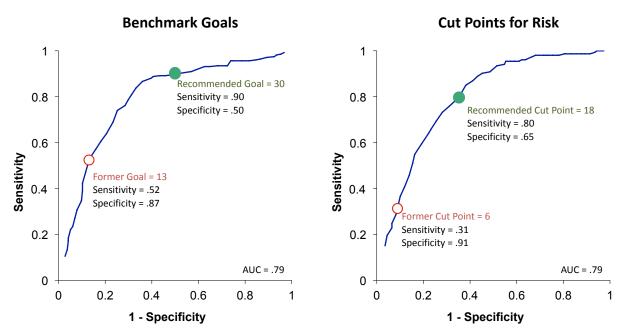


Figure 16. Receiver Operating Characteristic (ROC) curves for end of Grade 1 Nonsense Word Fluency Whole Words Read using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Grade 1 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .92	
Recommended (.90)	34	.90 (.77)	40	61
Former	23	.66 (.94)	26	41
Cut Points for Risk		AUC =	= .92	
Recommended (.80)	21	.82 (.86)	12	36
Former	16	.62 (.95)	7	24

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

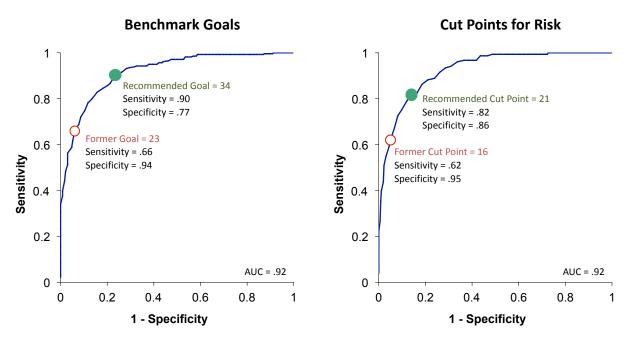


Figure 17. Receiver Operating Characteristic (ROC) curves for middle of Grade 1 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 1 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .92	
Recommended (.90)	69	.90 (.74)	48	63
Former	47	.69 (.95)	32	40
Cut Points for Risk		AUC =	= .94	
Recommended (.80)	37	.81 (.90)	11	30
Former	32	.70 (.94)	9	23

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

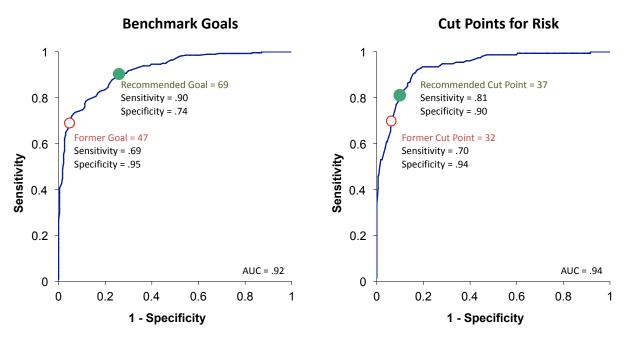


Figure 18. Receiver Operating Characteristic (ROC) curves for end of Grade 1 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .91	
Recommended (.90)	86	.91 (.75)	45	61
Former	78	.68 (.91)	31	43
Cut Points for Risk	AUC = .92			
Recommended (.80)	73	.80 (.88)	12	33
Former	68	.70 (.93)	9	26

Benchmark Goals and Cut Points for Risk for Middle of Grade 1 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

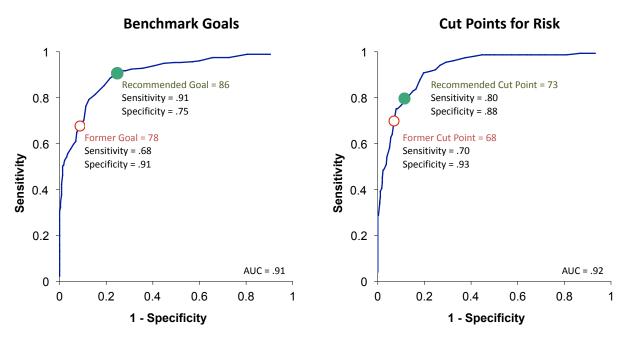


Figure 19. Receiver Operating Characteristic (ROC) curves for middle of Grade 1 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 1 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .89			
Recommended (.90)	98	.92 (.52)	57	74
Former	90	.64 (.94)	29	36
Cut Points for Risk		AUC =	= .93	
Recommended (.80)	88	.80 (.89)	12	31
Former	82	.69 (.95)	8	21

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

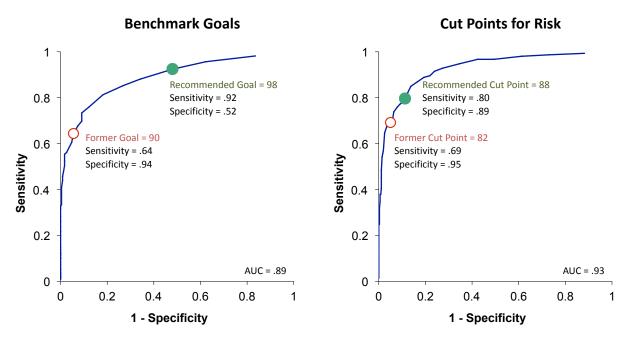


Figure 20. Receiver Operating Characteristic (ROC) curves for end of Grade 1 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals		AUC =	= .79	
Recommended (.90)	74	.91 (.49)	46	65
Former	54	.64 (.77)	27	43
Cut Points for Risk		AUC =	= .77	
Recommended (.80)	57	.81 (.60)	19	47
Former	35	.28 (.91)	11	17

Benchmark Goals and Cut Points for Risk for Beginning of Grade 2 Nonsense Word Fluency Correct Letter Sounds Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

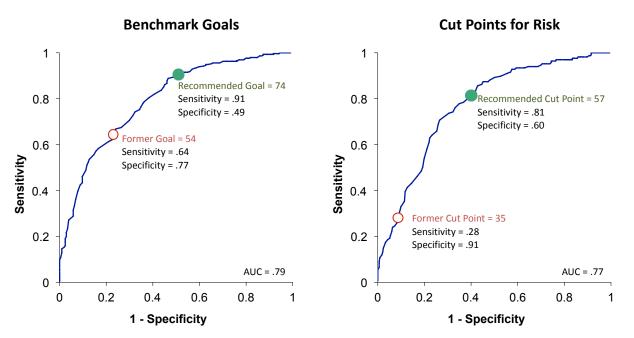


Figure 21. Receiver Operating Characteristic (ROC) curves for beginning of Grade 2 Nonsense Word Fluency Correct Letter Sounds using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .79			
Recommended (.90)	22	.90 (.50)	40	65
Former	13	.69 (.75)	26	45
Cut Points for Risk	AUC = .75			
Recommended (.80)	13	.80 (.63)	18	45
Former	6	.53 (.79)	15	28

Benchmark Goals and Cut Points for Risk for Beginning of Grade 2 Nonsense Word Fluency Whole Words Read Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

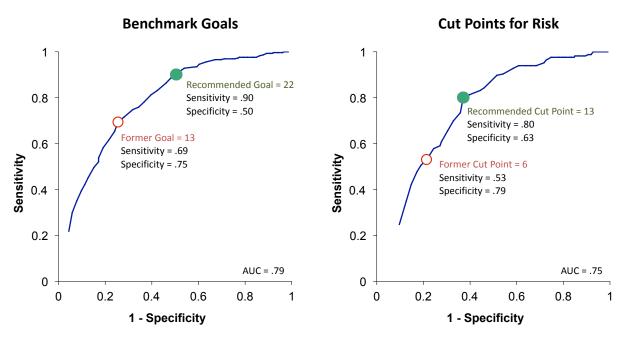


Figure 22. Receiver Operating Characteristic (ROC) curves for beginning of Grade 2 Nonsense Word Fluency Whole Words Read using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .82			
Recommended (.90)	80	.90 (.48)	43	73
Former	52	.59 (.86)	25	41
Cut Points for Risk	AUC = .84			
Recommended (.80)	56	.80 (.70)	14	45
Former	37	.61 (.90)	8	24

Benchmark Goals and Cut Points for Risk for Beginning of Grade 2 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

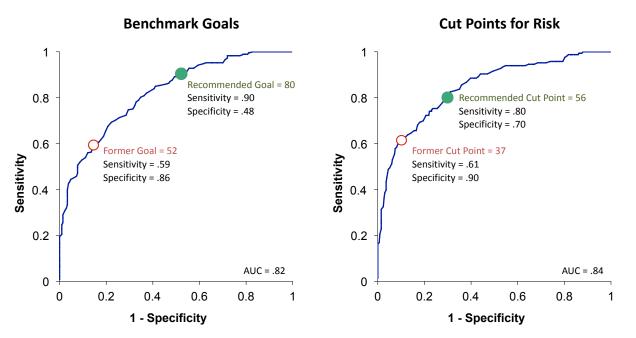


Figure 23. Receiver Operating Characteristic (ROC) curves for beginning of Grade 2 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Grade 2 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .86			
Recommended (.90)	100	.90 (.58)	50	69
Former	72	.60 (.89)	27	38
Cut Points for Risk	AUC = .89			
Recommended (.80)	73	.80 (.79)	11	39
Former	55	.62 (.93)	6	24

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

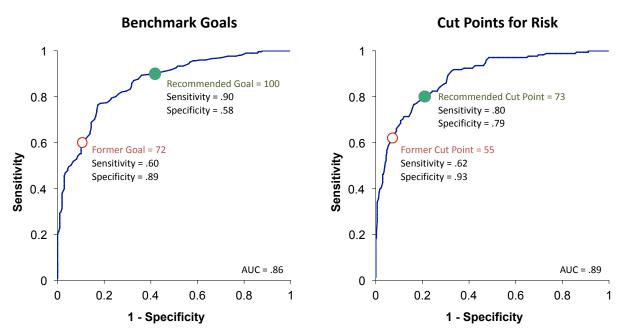


Figure 24. Receiver Operating Characteristic (ROC) curves for middle of Grade 2 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 2 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .86			
Recommended (.90)	111	.90 (.60)	53	68
Former	87	.66 (.89)	26	40
Cut Points for Risk	AUC = .90			
Recommended (.80)	84	.81 (.81)	10	37
Former	65	.59 (.96)	5	20

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

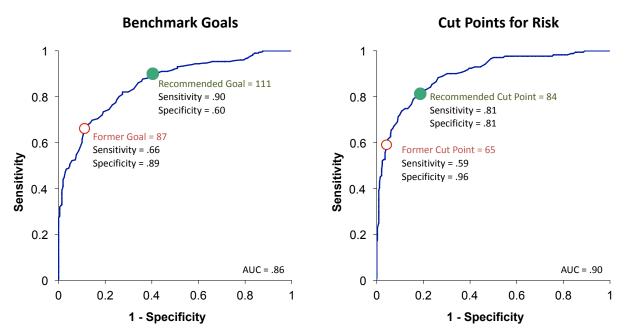


Figure 25. Receiver Operating Characteristic (ROC) curves for end of Grade 2 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	99	.94 (.25)	53	88
Former	90	.51 (.86)	27	34
Cut Points for Risk	AUC = .83			
Recommended (.80)	93	.81 (.68)	15	45
Former	81	.45 (.95)	5	16

Benchmark Goals and Cut Points for Risk for Beginning of Grade 2 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

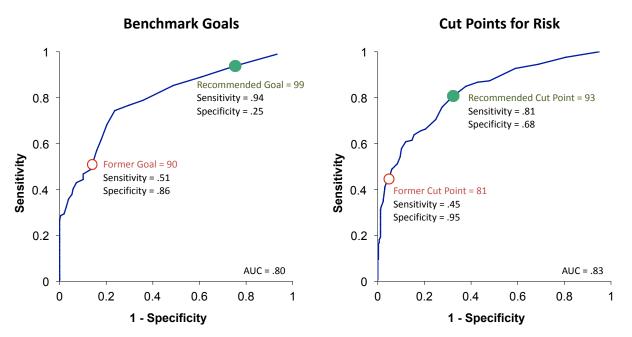


Figure 26. Receiver Operating Characteristic (ROC) curves for beginning of Grade 2 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	99	.81 (.63)	41	70
Former	96	.54 (.88)	40	37
Cut Points for Risk	AUC = .87			
Recommended (.80)	98	.88 (.66)	15	54
Former	91	.56 (.93)	5	20

Benchmark Goals and Cut Points for Risk for Middle of Grade 2 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

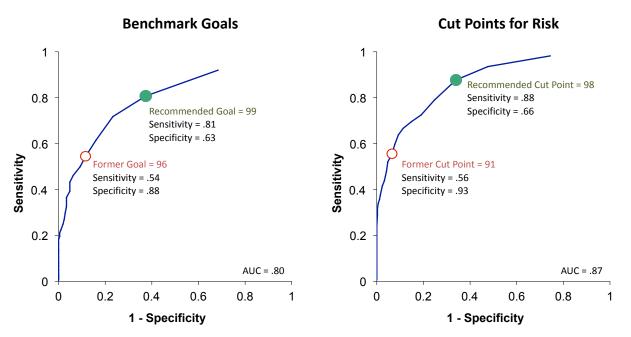


Figure 27. Receiver Operating Characteristic (ROC) curves for middle of Grade 2 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 2 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	99	.72 (.69)	40	66
Former	97	.53 (.93)	40	36
Cut Points for Risk	AUC = .85			
Recommended (.80)	99	.84 (.59)	19	66
Former	93	.51 (.97)	4	18

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

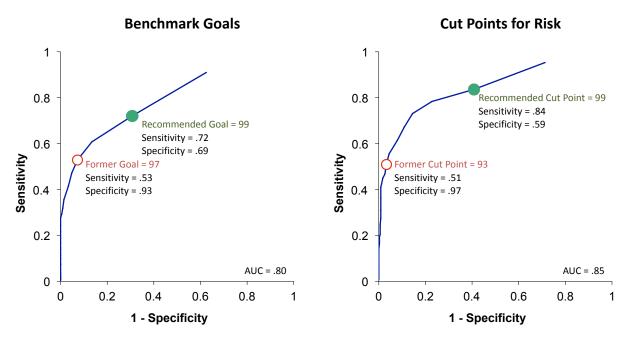


Figure 28. Receiver Operating Characteristic (ROC) curves for end of Grade 2 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .84			
Recommended (.90)	97	.90 (.51)	48	71
Former	70	.65 (.83)	39	39
Cut Points for Risk	AUC = .84			
Recommended (.80)	73	.80 (.70)	14	43
Former	55	.55 (.90)	8	25

Benchmark Goals and Cut Points for Risk for Beginning of Grade 3 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

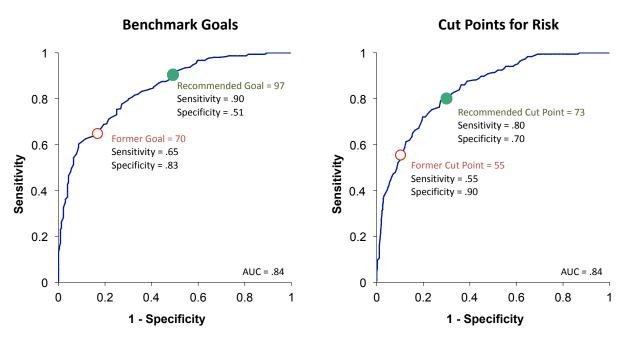


Figure 29. Receiver Operating Characteristic (ROC) curves for beginning of Grade 3 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Grade 3 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .85			
Recommended (.90)	115	.90 (.52)	56	71
Former	86	.63 (.88)	23	39
Cut Points for Risk	AUC = .85			
Recommended (.80)	89	.79 (.74)	12	42
Former	68	.50 (.90)	8	22

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

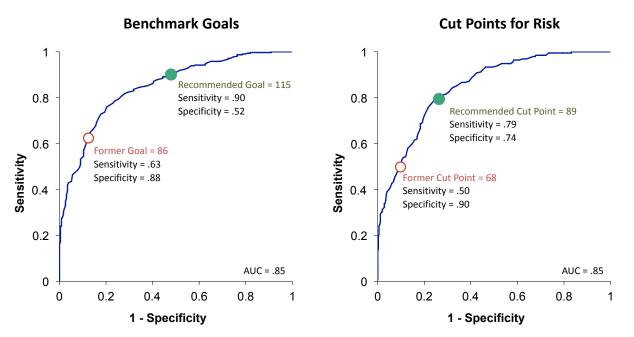


Figure 30. Receiver Operating Characteristic (ROC) curves for middle of Grade 3 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 3 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .85			
Recommended (.90)	123	.89 (.55)	50	67
Former	100	.68 (.85)	28	43
Cut Points for Risk	AUC = .85			
Recommended (.80)	101	.80 (.73)	12	45
Former	80	.54 (.91)	7	23

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

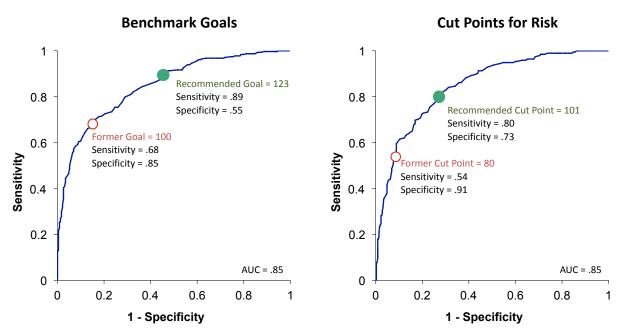


Figure 31. Receiver Operating Characteristic (ROC) curves for end of Grade 3 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	99	.93 (.32)	50	86
Former	95	.62 (.82)	43	41
Cut Points for Risk	AUC = .80			
Recommended (.80)	97	.87 (.51)	20	61
Former	89	.39 (.93)	7	17

Benchmark Goals and Cut Points for Risk for Beginning of Grade 3 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

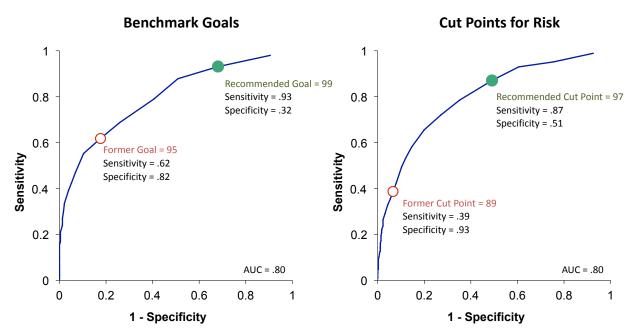


Figure 32. Receiver Operating Characteristic (ROC) curves for beginning of Grade 3 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	99	.80 (.61)	43	72
Former	96	.46 (.95)	39	30
Cut Points for Risk	AUC = .81			
Recommended (.80)	98	.78 (.68)	15	53
Former	92	.30 (.97)	4	14

Benchmark Goals and Cut Points for Risk for Middle of Grade 3 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

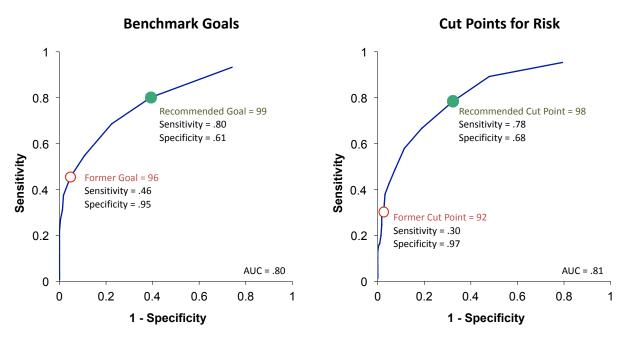


Figure 33. Receiver Operating Characteristic (ROC) curves for middle of Grade 3 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 3 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	99	.81 (.60)	43	72
Former	97	.55 (.91)	39	38
Cut Points for Risk	AUC = .80			
Recommended (.80)	99	.88 (.51)	20	72
Former	94	.37 (.95)	5	17

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

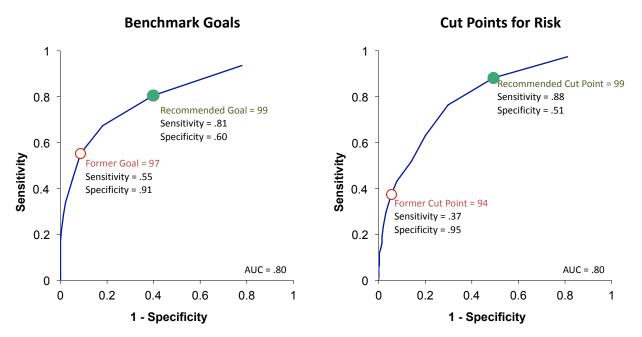


Figure 34. Receiver Operating Characteristic (ROC) curves for end of Grade 3 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Beginning of Grade 3 Daze Adjusted Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	14	.93 (.40)	48	78
Former	8	.61 (.83)	30	42
Cut Points for Risk	AUC = .80			
Recommended (.80)	10	.84 (.59)	17	55
Former	5	.49 (.88)	8	25

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

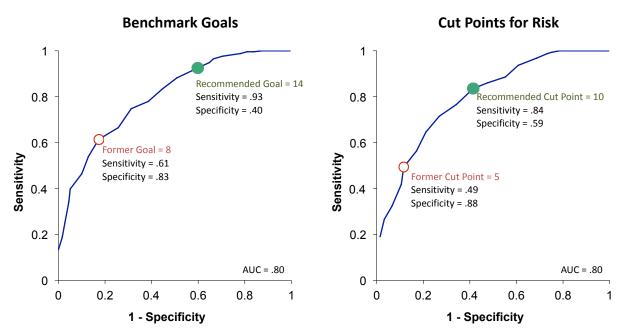


Figure 35. Receiver Operating Characteristic (ROC) curves for beginning of Grade 3 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .81			
Recommended (.90)	21	.91 (.40)	54	81
Former	11	.53 (.88)	23	40
Cut Points for Risk	AUC = .79			
Recommended (.80)	15	.82 (.59)	16	58
Former	7	.31 (.95)	5	19

Benchmark Goals and Cut Points for Risk for Middle of Grade 3 Daze Adjusted Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

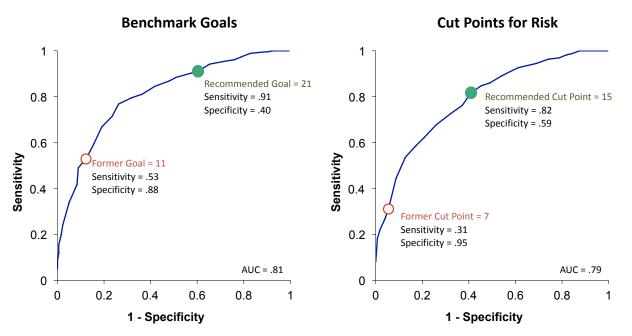


Figure 36. Receiver Operating Characteristic (ROC) curves for middle of Grade 3 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	26	.91 (.41)	52	76
Former	19	.68 (.79)	29	45
Cut Points for Risk		AUC =	= .82	
Recommended (.80)	19	.80 (.71)	10	45
Former	14	.50 (.87)	8	23

Benchmark Goals and Cut Points for Risk for End of Grade 3 Daze Adjusted Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

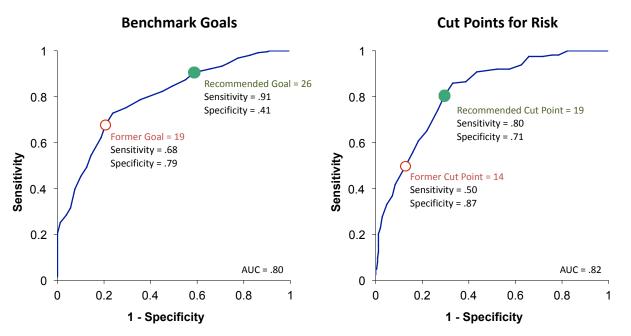


Figure 37. Receiver Operating Characteristic (ROC) curves for end of Grade 3 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .82			
Recommended (.90)	111	.90 (.53)	46	69
Former	90	.72 (.76)	34	49
Cut Points for Risk	AUC = .81			
Recommended (.80)	92	.81 (.60)	19	51
Former	70	.60 (.84)	11	30

Benchmark Goals and Cut Points for Risk for Beginning of Grade 4 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

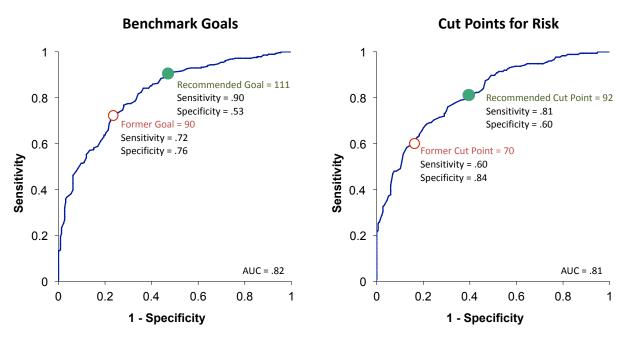


Figure 38. Receiver Operating Characteristic (ROC) curves for beginning of Grade 4 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Grade 4 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .83			
Recommended (.90)	130	.90 (.50)	47	70
Former	103	.60 (.87)	24	41
Cut Points for Risk	AUC = .82			
Recommended (.80)	111	.80 (.67)	16	49
Former	79	.46 (.93)	8	21

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

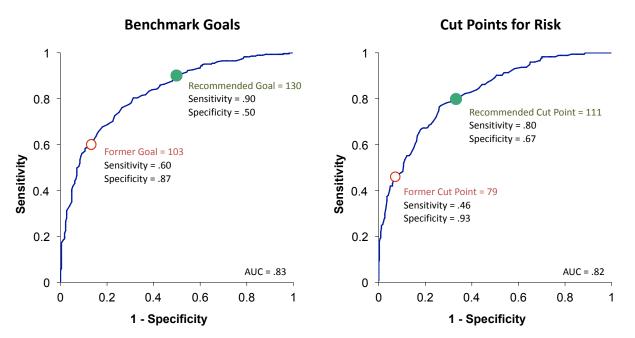


Figure 39. Receiver Operating Characteristic (ROC) curves for middle of Grade 4 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 4 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .81			
Recommended (.90)	144	.90 (.51)	52	72
Former	115	.60 (.84)	26	41
Cut Points for Risk	AUC = .81			
Recommended (.80)	125	.80 (.62)	19	53
Former	95	.47 (.93)	8	22

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

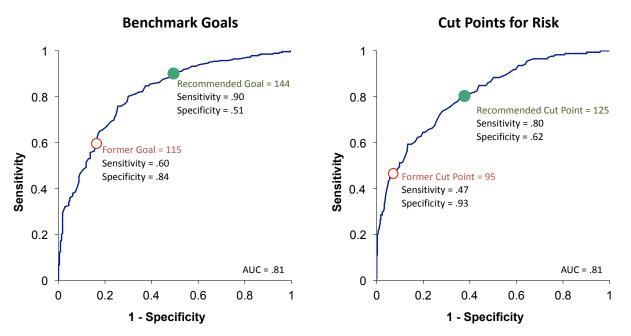


Figure 40. Receiver Operating Characteristic (ROC) curves for end of Grade 4 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .74			
Recommended (.90)	99	.85 (.39)	44	81
Former	96	.56 (.78)	42	42
Cut Points for Risk	AUC = .76			
Recommended (.80)	98	.83 (.51)	23	65
Former	93	.45 (.90)	8	24

Benchmark Goals and Cut Points for Risk for Beginning of Grade 4 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

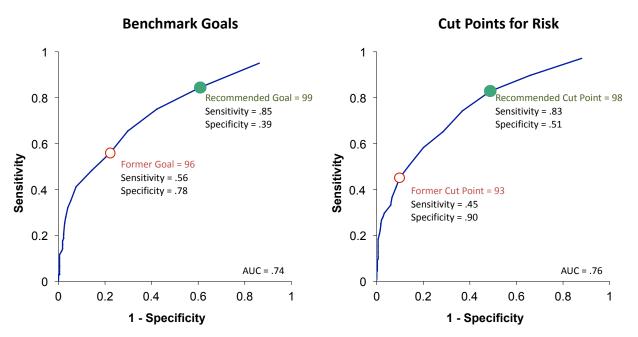


Figure 41. Receiver Operating Characteristic (ROC) curves for beginning of Grade 4 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .79			
Recommended (.90)	99	.73 (.72)	40	67
Former	97	.40 (.92)	39	33
Cut Points for Risk	AUC = .77			
Recommended (.80)	99	.78 (.60)	20	67
Former	94	.33 (.97)	6	16

Benchmark Goals and Cut Points for Risk for Middle of Grade 4 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

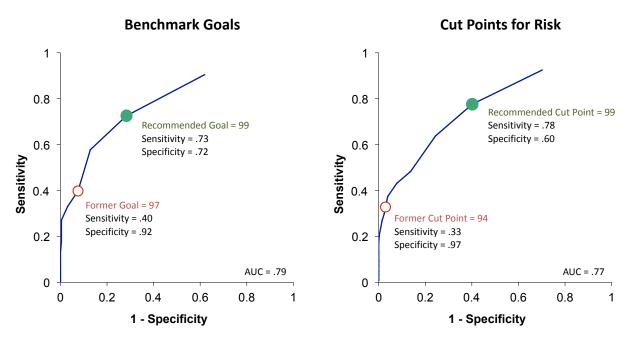


Figure 42. Receiver Operating Characteristic (ROC) curves for middle of Grade 4 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 4 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .70			
Recommended (.90)	99	.59 (.73)	38	57
Former	98	.40 (.88)	37	34
Cut Points for Risk	AUC = .70			
Recommended (.80)	99	.63 (.64)	24	57
Former	95	.26 (.97)	6	11

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

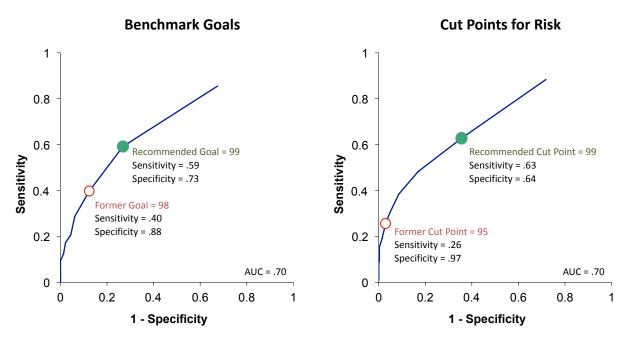


Figure 43. Receiver Operating Characteristic (ROC) curves for end of Grade 4 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Beginning of Grade 4 Daze Adjusted Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	20	.91 (.36)	46	80
Former	15	.77 (.69)	38	58
Cut Points for Risk	AUC = .78			
Recommended (.80)	15	.84 (.57)	18	58
Former	10	.55 (.85)	10	29

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

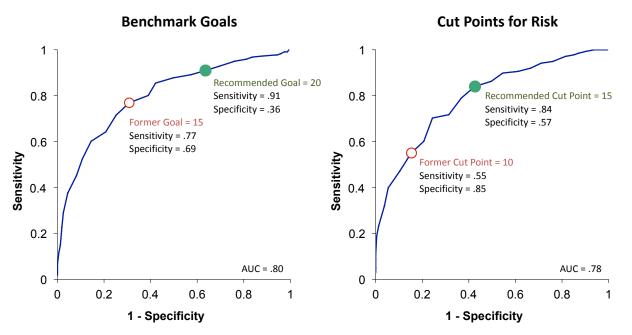


Figure 44. Receiver Operating Characteristic (ROC) curves for beginning of Grade 4 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .79			
Recommended (.90)	23	.91 (.40)	45	78
Former	17	.70 (.77)	32	52
Cut Points for Risk	AUC = .76			
Recommended (.80)	19	.81 (.52)	20	61
Former	12	.38 (.90)	10	25

Benchmark Goals and Cut Points for Risk for Middle of Grade 4 Daze Adjusted Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

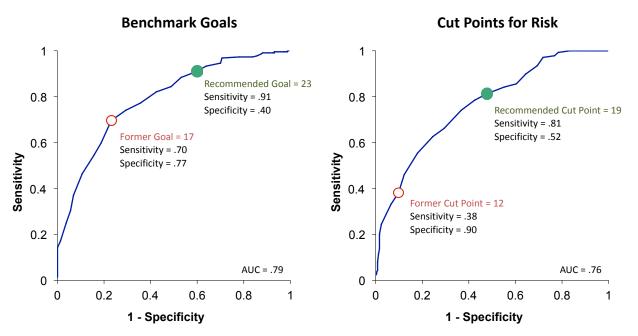


Figure 45. Receiver Operating Characteristic (ROC) curves for middle of Grade 4 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .78			
Recommended (.90)	31	.92 (.44)	44	75
Former	24	.60 (.78)	30	43
Cut Points for Risk		AUC =	= .79	
Recommended (.80)	27	.83 (.50)	21	60
Former	20	.51 (.88)	8	23

Benchmark Goals and Cut Points for Risk for End of Grade 4 Daze Adjusted Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

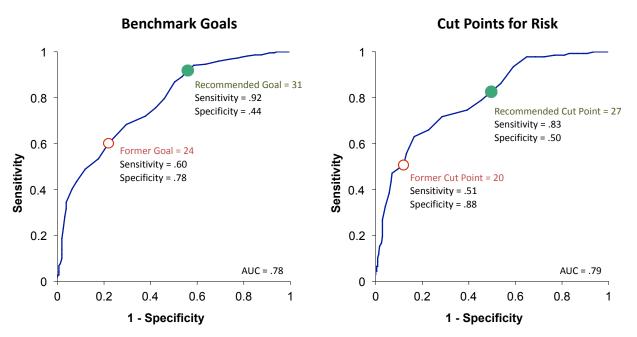


Figure 46. Receiver Operating Characteristic (ROC) curves for end of Grade 4 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .85			
Recommended (.90)	132	.90 (.56)	52	69
Former	111	.73 (.81)	41	50
Cut Points for Risk		AUC =	= .86	
Recommended (.80)	104	.81 (.77)	14	43
Former	96	.73 (.83)	12	35

Benchmark Goals and Cut Points for Risk for Beginning of Grade 5 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

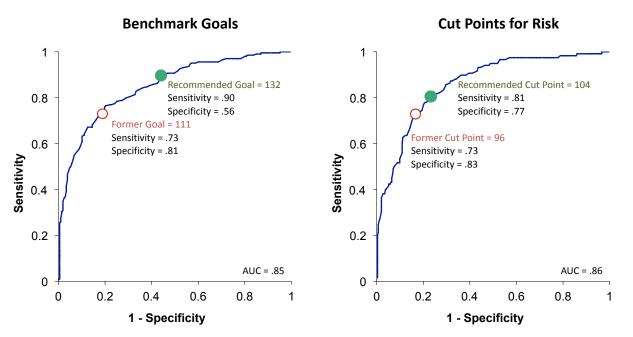


Figure 47. Receiver Operating Characteristic (ROC) curves for beginning of Grade 5 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Grade 5 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .83			
Recommended (.90)	150	.90 (.46)	69	75
Former	120	.68 (.82)	41	49
Cut Points for Risk	AUC = .83			
Recommended (.80)	118	.81 (.74)	14	47
Former	101	.46 (.90)	9	23

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

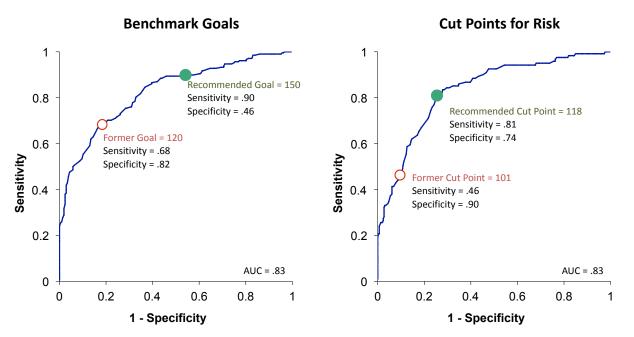


Figure 48. Receiver Operating Characteristic (ROC) curves for middle of Grade 5 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 5 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .83			
Recommended (.90)	155	.91 (.49)	58	74
Former	130	.64 (.82)	36	48
Cut Points for Risk		AUC =	= .83	
Recommended (.80)	133	.80 (.70)	17	50
Former	105	.49 (.90)	8	25

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

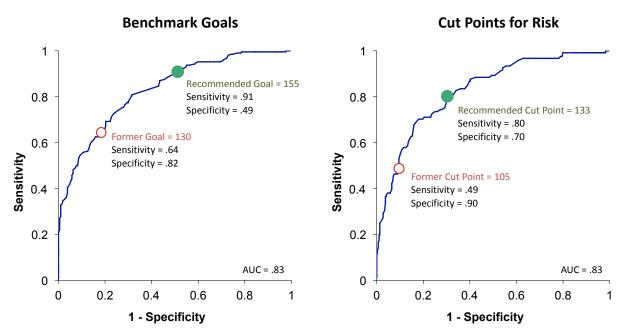


Figure 49. Receiver Operating Characteristic (ROC) curves for end of Grade 5 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .76			
Recommended (.90)	99	.73 (.64)	54	71
Former	98	.62 (.86)	50	50
Cut Points for Risk	AUC = .75			
Recommended (.80)	99	.78 (.55)	26	71
Former	95	.43 (.91)	9	20

Benchmark Goals and Cut Points for Risk for Beginning of Grade 5 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

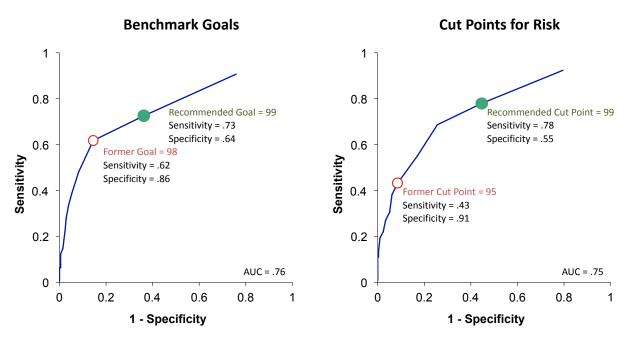


Figure 50. Receiver Operating Characteristic (ROC) curves for beginning of Grade 5 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .73			
Recommended (.90)	99	.64 (.71)	45	66
Former	98	.47 (.90)	43	41
Cut Points for Risk	AUC = .76			
Recommended (.80)	99	.73 (.64)	22	66
Former	96	.33 (.97)	5	16

Benchmark Goals and Cut Points for Risk for Middle of Grade 5 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

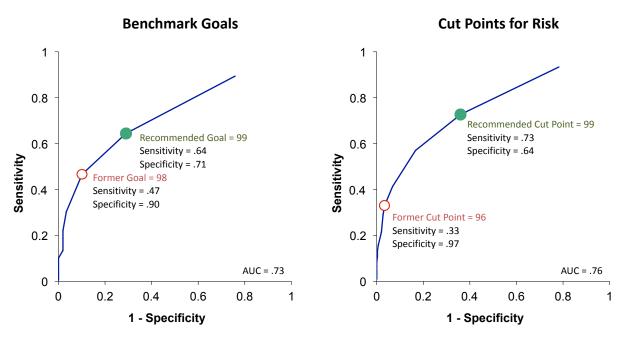


Figure 51. Receiver Operating Characteristic (ROC) curves for middle of Grade 5 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .75			
Recommended (.90)	99	.60 (.84)	45	58
Former	99	.60 (.84)	45	58
Cut Points for Risk		AUC =	= .75	
Recommended (.80)	99	.67 (.73)	17	58
Former	97	.40 (.92)	7	20

Benchmark Goals and Cut Points for Risk for End of Grade 5 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

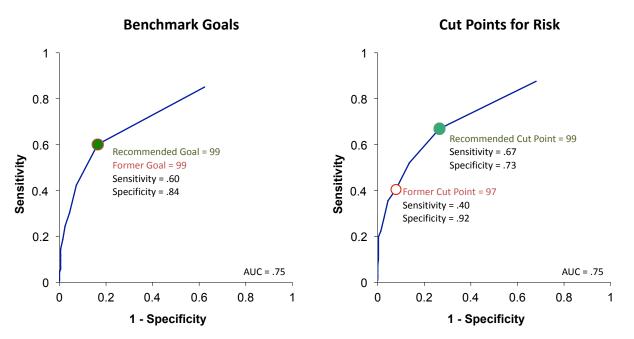


Figure 52. Receiver Operating Characteristic (ROC) curves for end of Grade 5 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Beginning of Grade 5 Daze Adjusted Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .77			
Recommended (.90)	21	.91 (.44)	58	76
Former	18	.81 (.68)	50	62
Cut Points for Risk		AUC =	= .84	
Recommended (.80)	15	.83 (.68)	17	50
Former	12	.69 (.85)	10	35

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

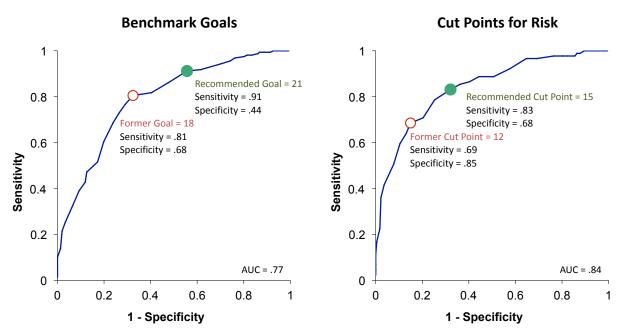


Figure 53. Receiver Operating Characteristic (ROC) curves for beginning of Grade 5 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .74			
Recommended (.90)	25	.90 (.33)	50	83
Former	20	.73 (.60)	45	64
Cut Points for Risk		AUC =	= .77	
Recommended (.80)	20	.81 (.53)	24	64
Former	13	.37 (.91)	8	24

Benchmark Goals and Cut Points for Risk for Middle of Grade 5 Daze Adjusted Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

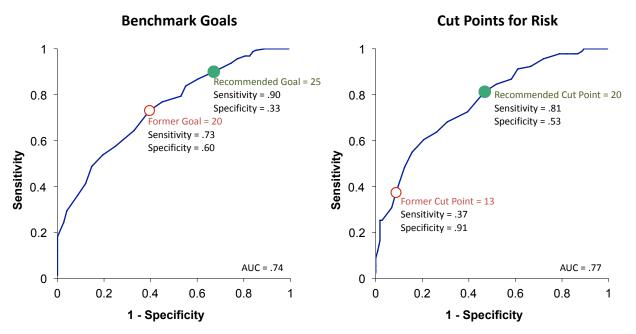


Figure 54. Receiver Operating Characteristic (ROC) curves for middle of Grade 5 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .77			
Recommended (.90)	32	.90 (.40)	50	77
Former	24	.63 (.73)	42	48
Cut Points for Risk		AUC =	= .80	
Recommended (.80)	27	.83 (.52)	25	60
Former	18	.46 (.90)	8	21

Benchmark Goals and Cut Points for Risk for End of Grade 5 Daze Adjusted Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

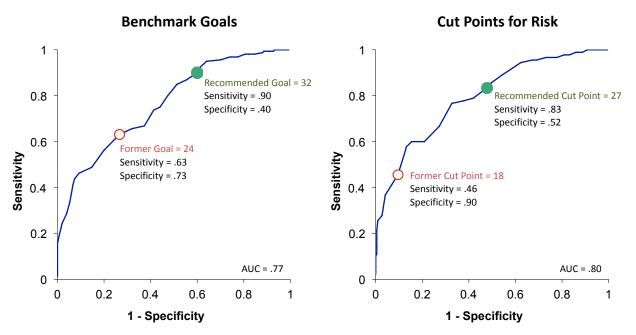


Figure 55. Receiver Operating Characteristic (ROC) curves for end of Grade 5 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	150	.90 (.50)	56	72
Former	107	.34 (.95)	21	21
Cut Points for Risk		AUC =	= .80	
Recommended (.80)	128	.80 (.65)	20	49
Former	90	.32 (.97)	6	10

Benchmark Goals and Cut Points for Risk for Beginning of Grade 6 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

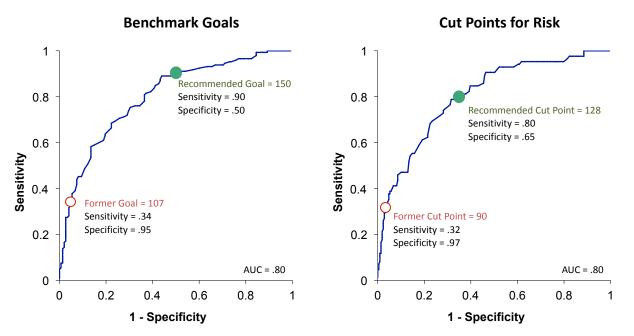


Figure 56. Receiver Operating Characteristic (ROC) curves for beginning of Grade 6 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Middle of Grade 6 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .80			
Recommended (.90)	151	.91 (.51)	57	69
Former	109	.36 (.89)	31	24
Cut Points for Risk		AUC =	= .80	
Recommended (.80)	131	.80 (.64)	21	48
Former	92	.33 (.96)	6	13

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

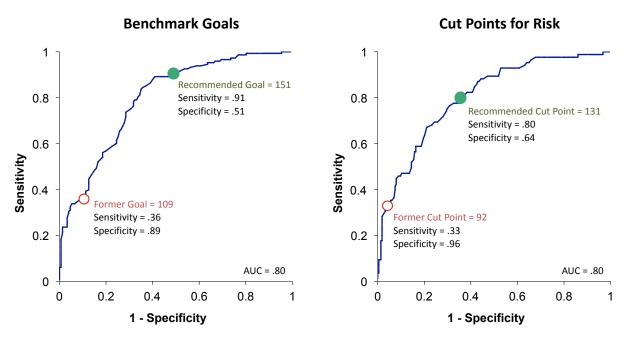


Figure 57. Receiver Operating Characteristic (ROC) curves for middle of Grade 6 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 6 Oral Reading Fluency Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .79			
Recommended (.90)	162	.90 (.48)	50	70
Former	120	.41 (.91)	34	25
Cut Points for Risk		AUC =	= .82	
Recommended (.80)	140	.82 (.67)	20	48
Former	95	.30 (.98)	5	9

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

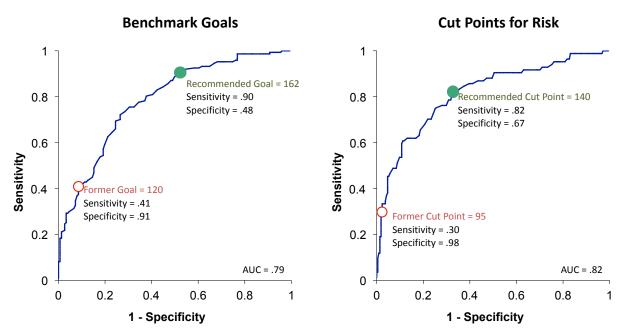


Figure 58. Receiver Operating Characteristic (ROC) curves for end of Grade 6 Oral Reading Fluency using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .67			
Recommended (.90)	99	.60 (.68)	43	64
Former	97	.25 (.90)	43	22
Cut Points for Risk	AUC = .71			
Recommended (.80)	99	.68 (.64)	24	64
Former	94	.13 (.98)	5	6

Benchmark Goals and Cut Points for Risk for Beginning of Grade 6 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

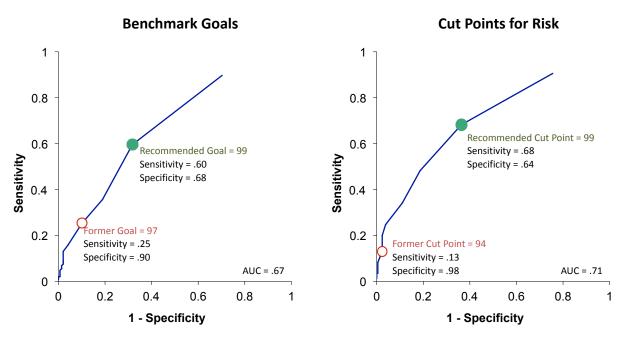


Figure 59. Receiver Operating Characteristic (ROC) curves for beginning of Grade 6 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .72			
Recommended (.90)	99	.66 (.70)	45	63
Former	97	.33 (.93)	43	22
Cut Points for Risk	AUC = .77			
Recommended (.80)	99	.75 (.63)	23	63
Former	94	.24 (.97)	5	9

Benchmark Goals and Cut Points for Risk for Middle of Grade 6 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

*Note.* SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

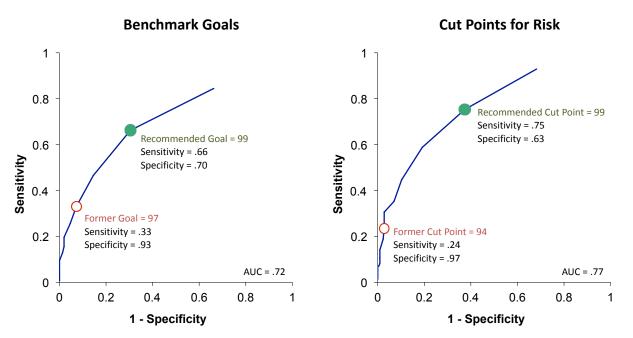


Figure 60. Receiver Operating Characteristic (ROC) curves for middle of Grade 6 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for End of Grade 6 Oral Reading Fluency Accuracy Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .71			
Recommended (.90)	99	.54 (.75)	45	56
Former	98	.37 (.90)	43	30
Cut Points for Risk	AUC = .72			
Recommended (.80)	99	.60 (.69)	24	56
Former	96	.29 (.95)	9	12

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

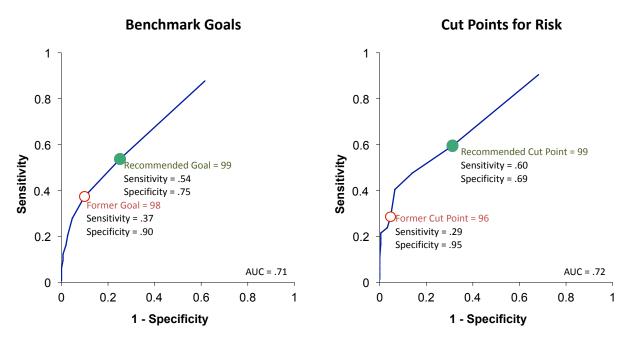


Figure 61. Receiver Operating Characteristic (ROC) curves for end of Grade 6 Oral Reading Fluency Accuracy using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

Benchmark Goals and Cut Points for Risk for Beginning of Grade 6 Daze Adjusted Using the Recommended Benchmark Goals Sample

				DDS
		Sensitivity	SAT10	Percentile
	Goal	(Specificity)	Median	Rank
Benchmark Goals	AUC = .79			
Recommended (.90)	23	.90 (.50)	50	71
Former	18	.57 (.85)	36	38
Cut Points for Risk	AUC = .82			
Recommended (.80)	19	.79 (.73)	18	47
Former	14	.38 (.93)	8	17

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

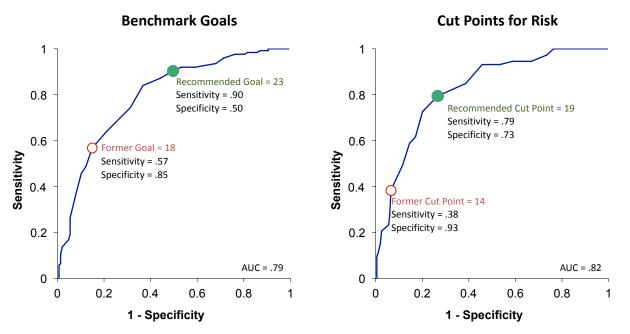


Figure 62. Receiver Operating Characteristic (ROC) curves for beginning of Grade 6 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS	
		Sensitivity	SAT10	Percentile	
	Goal	(Specificity)	Median	Rank	
Benchmark Goals	AUC = .75				
Recommended (.90)	31	.90 (.42)	48	76	
Former	19	.44 (.87)	27	30	
Cut Points for Risk	AUC = .75				
Recommended (.80)	26	.80 (.51)	27	60	
Former	14	.26 (.95)	8	12	

Benchmark Goals and Cut Points for Risk for Middle of Grade 6 Daze Adjusted Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

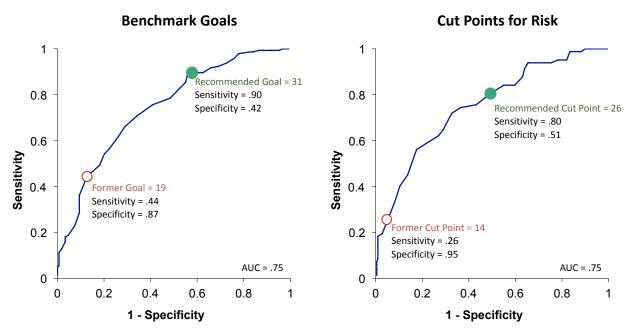


Figure 63. Receiver Operating Characteristic (ROC) curves for middle of Grade 6 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

				DDS	
		Sensitivity	SAT10	Percentile	
	Goal	(Specificity)	Median	Rank	
Benchmark Goals	AUC = .77				
Recommended (.90)	31	.91 (.42)	50	78	
Former	21	.45 (.89)	33	32	
Cut Points for Risk	AUC = .77				
Recommended (.80)	27	.82 (.52)	27	62	
Former	15	.29 (.95)	7	13	

Benchmark Goals and Cut Points for Risk for End of Grade 6 Daze Adjusted Using the Recommended Benchmark Goals Sample

*Note*. SAT10 Median = median end-of-year SAT10 Total Reading percentile rank for students within four points of the benchmark goal or below the cut point for risk; AUC = Area Under the Receiver Operating Characteristic (ROC) Curve (.75 is minimum standard for benchmark goals); Recommended = new DIBELS Next goals using sensitivity of .90 (benchmark goals) or .80 (cut points for risk); Former = original goals associated with DIBELS Next.

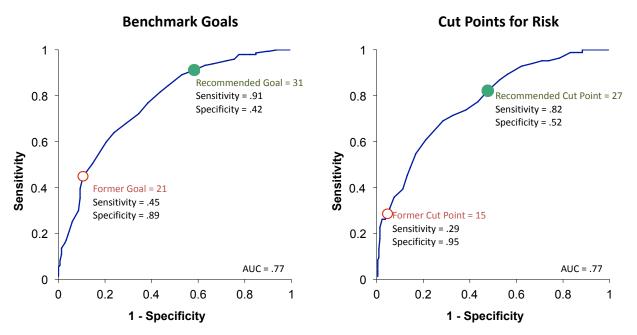


Figure 64. Receiver Operating Characteristic (ROC) curves for end of Grade 6 Daze Adjusted using the recommended benchmark goals sample. AUC = Area Under the ROC Curve (.75 is minimum standard for benchmark goals).

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