



Introduction to the Pathways of Progress® Report

Acadience Learning Pathways of Progress offers a means of indexing student progress that can be used to evaluate the effectiveness of instruction, to establish meaningful, attainable, and ambitious goals, and to provide feedback on progress to students and educators. Pathways of Progress is based upon student growth percentiles (Betebenner, 2011). Thus, Pathways of Progress is based on student rates of reading progress relative to other students with similar initial skills. This information provides a normative reference for professionals to consider, along with the Acadience Reading K–6 benchmarks, when establishing a goal and aimline for an individual student. Pathways of Progress is intended to be one of several frames of reference that should be considered when establishing a goal.

Pathways of Progress classifies five types of student reading progress, from Well Below Typical to Well Above Typical. These five pathways are calculated by comparing the end-of-year scores from all students who have the same beginning-of-year Reading Composite Score (RCS). These comparisons are made for every possible beginning-of-year RCS value. For each beginning-of-year RCS, the end-of-year scores at the 20th, 40th, 60th, and 80th percentiles serve as boundaries for establishing the five Pathways of Progress (see *Figure 1*).

Figure 1. Pathways of Progress Descriptors

Pathway Descriptor	Pathway Number	Progress Descriptor	Progress Percentile Range
★★★★★	5	WELL ABOVE TYPICAL	80th percentile and above
★★★★☆	4	ABOVE TYPICAL	60th to 79th percentile
★★★☆☆	3	TYPICAL	40th to 59th percentile
★★★☆☆	2	BELOW TYPICAL	20th to 39th percentile
★☆☆☆☆	1	WELL BELOW TYPICAL	Below 20th percentile

Note. Pathways are calculated based on Acadience Reading K–6 data for students across grades K–6 from ALI’s data-reporting service, Acadience Data Management.

Pathways of Progress provides educators with a research-based tool for (a) establishing individual student progress-monitoring goals; (b) evaluating individual student progress and rate of growth; and (c) reflecting on the effectiveness of support at the classroom, school, or district level.

Overview

One Pathways of Progress feature is called the Pathways of Progress Report, which shows student performance at the beginning and middle or beginning and end of the school year and provides the pathways for each student based on that student’s RCS. This report is available for classrooms or instructional groups. As such, classroom teachers have access to this report. A sample Pathways of Progress Report from Acadience Data Management is included in *Figure 2*.

One intended purpose of the Pathways of Progress Report is to be able to quickly and efficiently look at individual students—where they started, what pathway they are on and how you would describe their progress. Another purpose for the Pathways of Progress Report is to be able to make systems-level decisions. As a system, we want to know how effective instruction is for the whole class in each of the skill areas.

Figure 2. Sample Pathways of Progress Report

School: Jefferson Elementary School
 Grade: Fourth Grade, End of Year
 Year: 2016–2017
 Class: Cento 4

Pathways of Progress® Report

Name	BEGINNING OF YEAR		END OF YEAR COMPONENT SCORE PATHWAYS					END OF YEAR OVERALL PATHWAY	
	Reading Composite Score	ORF Words Correct Score	ORF Accuracy Score	ORF Retell Score	Maze Adjusted Score	Reading Composite Score	Pathway	Pathway	Pathway
Bauey, Ernest	319	136	99%	29	25	406	3	1	5
Bubgu, Patricia	191	61	98%	15	10	235	4	1	4
Corare, Shawn	299	131	99%	66	35	515	4	5	5
Daimble, Terry	204	119	97%	42	30	419	5	4	5
Imblue, Frances	399	141	99%	54	26	465	2	3	4
Keilhauite, Benjamin	266	101	97%	23	18	315	2	1	4
Liberty, Aaron	226	101	99%	42	26	401	3	4	5
Liquisil, Diane	368	163	98%	67	36	545	5	5	5
Lumber, Marilyn	285	119	98%	38	22	387	3	2	4
Minigh, Patricia	52	28	80%	24	10	116	1	4	4
Morrisonite, Earl	422	146	100%	54	24	470	2	3	5
Mossgate, Carol	384	144	100%	45	37	502	3	3	5
Odinite, Ann	404	181	99%	48	40	549	5	3	5
Pearl, Edward	165	78	94%	29	16	272	2	1	4
Plagiofeld, Susan	476	206	99%	73	36	608	5	4	5
Resoble, Martin	328	131	98%	21	38	429	3	1	4
Roacoff, Cheryl	195	71	97%	27	20	301	1	2	4
Rocksa, Juan	402	186	100%	40	22	474	5	2	5
Rutqua, Ernie	497	181	99%	86	38	617	4	5	5
Tieye, Eric	385	166	100%	76	29	554	5	5	5
Variscite, Irene	312	107	98%	40	25	391	1	3	4
Viam, Patricia	122	68	99%	75	17	398	2	5	5
Viviol, Terry	281	155	98%	51	32	489	5	4	5
Wintan, Janet	446	195	99%	46	45	579	5	3	5

End-of-year Reading Composite Score with associated pathway (indicated by number of stars)

End-of-year scores for each component Acadience Reading measure with associated benchmark status and pathway

Beginning-of-year Reading Composite Score

BEGINNING OF YEAR

All pathways are based on the beginning-of-year composite score.

END OF YEAR

COMPONENT SCORE PATHWAYS

Component score pathways are compared to other students with the same beginning-of-year composite score.

To support overall reading proficiency, more growth is needed in a student's areas of relative weakness.

END OF YEAR OVERALL PATHWAY

A student's overall pathway is based on the student's end-of-year composite score compared to other students with the same beginning-of-year composite score.

Explanatory information to assist in navigating and interpreting the information

Key for interpreting the benchmark status

Rate of progress compared to students with similar initial skills:

- WELL ABOVE TYPICAL 5
- ABOVE TYPICAL 4
- TYPICAL 3
- BELOW TYPICAL 2
- WELL BELOW TYPICAL 1

Key for interpreting the pathway number and the star rating

- At or Above Benchmark / Likely to Need Core Support
- Below Benchmark / Likely to Need Strategic Support
- Well Below Benchmark / Likely to Need Intensive Support

Using Pathways of Progress for Evaluating Students' Progress

When using Pathways of Progress Reports to evaluate student progress within classrooms, the pathways are evaluated relative to typical progress for students with the same initial skill. We can describe the progress the student has made across the school year in this context. Evaluation of progress can be done at the individual student level and the classroom level.

When interpreting the Pathways of Progress Report, follow these steps:

- 1. Review the RCS pathway for each student.** The number of stars corresponds to the Pathway of Progress (e.g., three stars for Pathway 3). The pathway for the RCS represents the overall progress each student made relative to other students with the same beginning-of-year RCS.
- 2. Review the component measure scores for each student.** The end-of-year component scores and pathways (circled number[s]) are reported for each student. The symbols next to each score correspond to the student's benchmark status on that score. The component measure pathways and whether or not the student reached the end-of-year benchmark for component measures can contribute to understanding the overall pathways.

Individual Student Analysis Case Examples

Case examples from the sample Pathways of Progress Report in *Figure 2* illustrate the possibilities for interpretation. Ernie Rutqua and Eric Tieye are both students who started the year At or Above Benchmark on the RCS, made Well Above Typical progress overall, and made at least Typical Progress over the year on the component skill measures. These students also ended the year At or Above Benchmark on the RCS and the component measures. The pattern for these students indicates that the reading instruction they received met their needs.

Name	Reading Composite Score	ORF Words Correct Score	Pathway	ORF Accuracy Score	Pathway	ORF Retell Score	Pathway	Maze Adjusted Score	Pathway	Reading Composite Score	Pathway
Rutqua, Ernie	497 ■	181 ■	4	99% ■	3	86 ■	5	38 ■	3	617 ■	★★★★★
Tieye, Eric	385 ■	166 ■	5	100% ■	3	76 ■	5	29 ■	3	554 ■	★★★★★

Martin Resoble also started and ended the year At or Above Benchmark on the RCS, but made Typical Progress overall. His ORF Retell score at the end of the year was Well Below Benchmark and he made Well Below Typical Progress on this component skill as well as Well Below Typical Progress on ORF Accuracy. This pattern is of concern and should be examined further.

Name	Reading Composite Score	ORF Words Correct Score	Pathway	ORF Accuracy Score	Pathway	ORF Retell Score	Pathway	Maze Adjusted Score	Pathway	Reading Composite Score	Pathway
Resoble, Martin	328 ■	131 ■	3	98% ■	1	21 □	1	38 ■	5	429 ■	★★★

Patricia Bubgu started the year Well Below Benchmark on the RCS, made Well Below Typical Progress overall, and ended the year Well Below Benchmark on the RCS. Despite her At or Above Benchmark score and Above Typical Progress on ORF Accuracy at the end of the year, her end-of-year ORF Words Correct, Retell, and Maze adjusted scores indicate a need for instructional support. This pattern suggests that the instructional support in reading was either ineffective for Patricia or that other factors prevented her from benefitting from instruction (e.g., high rates of absence).

Name	Reading Composite Score	ORF Words Correct Score	Pathway	ORF Accuracy Score	Pathway	ORF Retell Score	Pathway	Maze Adjusted Score	Pathway	Reading Composite Score	Pathway
Bubgu, Patricia	191 □	61 □	1	98% ■	4	15 □	1	10 □	1	235 □	★

Benjamin Keilhauite started the year Below Benchmark on the RCS and made Well Below Typical Progress overall. His end-of-year RCS and all of the component measure scores indicate a need for instructional support. This pattern suggests that reading instruction was either ineffective for reducing risk for Benjamin or that other factors prevented him from benefitting from instruction.

Name	Reading Composite Score	ORF Words Correct Score	Pathway	ORF Accuracy Score	Pathway	ORF Retell Score	Pathway	Maze Adjusted Score	Pathway	Reading Composite Score	Pathway
Keilhauite, Benjamin	266 ▣	101 ▣	2	97% ▣	1	23 ▣	1	18 ▣	1	315 ▣	★

Terry Daimble, Aaron Liberty, and Patricia Viarn all started the year Well Below Benchmark on the RCS. These students made Above or Well Above Typical Progress overall. Aaron made at least Typical Progress on all component measures and ended the year At or Above Benchmark on the RCS, while Terry made at least Typical Progress on all component measures except for ORF Accuracy, but also ended the year At or Above Benchmark on the RCS. Patricia made at least Typical Progress on all but one component measure, ORF Words Correct. The pattern of performance for these students indicates reading instruction was generally effective in reducing overall risk and contributed to them meeting the RCS benchmark at the end of the year. Despite the overall reduction of risk, Patricia’s end-of-year component measure scores suggest she continues to need intensive instructional support in two key skill areas.

Name	Reading Composite Score	ORF Words Correct Score	Pathway	ORF Accuracy Score	Pathway	ORF Retell Score	Pathway	Maze Adjusted Score	Pathway	Reading Composite Score	Pathway
Daimble, Terry	204 ▣	119 ▣	5	97% ▣	2	42 ▣	4	30 ▣	5	419 ▣	★★★★★
Liberty, Aaron	226 ▣	101 ▣	3	99% ▣	4	42 ▣	4	26 ▣	5	401 ▣	★★★★
Viarn, Patricia	122 ▣	68 ▣	2	99% ▣	5	75 ▣	5	17 ▣	4	398 ▣	★★★★★

Classroom Level Analysis

Now, we will use this same report (*Figure 2*) to illustrate how to examine these data for classroom systems. There are several ways to examine these data for classroom analysis, but one place to start is to examine end-of-year outcomes relative to both the RCS benchmark and pathway. In this classroom, 17 of the 24 students (71%) were At or Above Benchmark on the RCS at the end of the year. Of these 17 students, most of them (13; 76%) made at least Typical Progress over the course of the year. All six of the students who ended the year Below or Well Below Benchmark on the RCS made Below or Well Below Typical progress. Overall, slightly over half (54%) of students in this classroom made Typical Progress or better. Of these students, most of them made Above Typical or Well Above Typical Progress. However, 46% of the students in this classroom made Below Typical or Well Below Typical Progress, which is of concern.

We can also examine the information in this report with respect to specific skill areas. Instruction appears to be having a good impact on accurate word reading—end-of-year scores are At or Above Benchmark for ORF Accuracy for most (79%), but not all, students. Of the five students who ended the year Below or Well Below Benchmark on ORF Accuracy, three of them are very close to the benchmark of 98% accuracy. In addition, when considering all of the students in this classroom, most (71%) are making Typical Progress or better (Pathway 3, 4, or 5) on this skill.

Another area of relative strength is in regard to reading for meaning and talking about what has been read. Most students made Typical Progress or better (Pathway 3, 4, or 5) with respect to ORF Retell and Maze. Furthermore, most students who made Above or Well Above Typical Progress on both measures earned At or Above Benchmark scores at the end-of-year assessment for both indicators of reading comprehension (Maze and Retell).

However, there is a target of opportunity related to accurate and fluent reading of connected text, in particular for students who began the year Below or Well Below Benchmark on the RCS. A target of opportunity is a skill area where instruction could be improved by increasing the focus of instruction, opportunities for practice, and the explicitness of instruction to improve outcomes. Most students (6 of 10; 60%) who began the year Below or Well Below Benchmark on the RCS

made Below Typical or Well Below Typical Progress (Pathway 1 or 2) on ORF Words Correct, and three of these six students also made Below Typical or Well Below Typical Progress on ORF Accuracy. Yet, 64% of students who began the year At or Above Benchmark on the RCS made Above or Well Above Typical Progress (Pathway 4 or 5) on ORF Words Correct. While we would not want the teacher to reduce the focus on reading for meaning, a target of opportunity is to provide an increased instructional focus on fluent word reading and accurate decoding.

Considerations for Use

Important considerations when reviewing the Pathways of Progress Report include the accuracy of scores and the Highly Skilled Learners criteria.

Accuracy of Scores

Do you have confidence in the accuracy of the student scores on which the pathway is based? If yes, proceed with interpreting the Pathways of Progress Report. If no, then retest with alternate materials to validate those scores (see the discussion of Step 2 of the Outcomes-Driven Model in Chapter 1 of the *Acadience Reading K–6 Assessment Manual*; Good et al., 2021). The accuracy of scores may be called into question for a variety of reasons including: (a) suspected data entry error, (b) an error in the standard administration, or (c) an unusual pattern across students or teachers (i.e., unexpectedly low or high scores compared to past scores). The need to check the accuracy of scores should occur rarely. It is important to train assessors to administer and score the assessment with accuracy. Refresher trainings and checking administration and scoring accuracy through the use of the Acadience Reading Assessment Accuracy Checklists is strongly recommended (see Chapter 2 of the *Acadience Reading K–6 Assessment Manual*).

Reviewing Results for Highly Skilled Learners

Highly Skilled Learners are students who are solidly on track in learning basic early literacy and reading skills and are very likely to stay on track in the following year. The Highly Skilled Learners criteria in *Table 1* are based upon end-of-year reading expectations for each grade level. Values in bold correspond to Above Benchmark performance (i.e., the 60th percentile or higher on national norms); values in italics correspond to performance at or above the benchmark for each grade level.

Highly Skilled Learners are those students in grades K–6 whose Acadience Reading benchmark scores are all equal to or higher than the scores reported in *Table 1*. A student must meet the Highly Skilled Learners criteria for **each measure** listed in *Table 1*, for the grade in question, in order to meet the Highly Skilled Learners criteria.

Table 1. Acadience Reading Scores for Highly Skilled Learner Criteria

Grade	RCS	PSF	NWF CLS	NWF WWR	ORF	Accuracy	Retell	Maze
K	152	<i>40</i>	40	4	-	-	-	-
1	208	-	<i>58</i>	<i>13</i>	67	97	<i>15</i>	-
2	287	-	-	-	104	99	<i>27</i>	-
3	405	-	-	-	118	<i>97</i>	<i>30</i>	23
4	446	-	-	-	133	<i>98</i>	<i>33</i>	28
5	466	-	-	-	143	<i>99</i>	<i>36</i>	28
6	478	-	-	-	151	<i>98</i>	<i>32</i>	30

Note. The criteria are subject to change from year to year. RCS = Reading RCS; PSF = Phoneme Segmentation Fluency; NWF CLS = Non-sense Word Fluency Correct Letter Sounds; NWF WWR = Nonsense Word Fluency Whole Words Read; ORF Word Correct = Oral Reading Fluency Words Correct. Values in bold correspond to Above Benchmark performance (i.e., the 60th percentile or higher using national norms). Values in italics correspond to performance at or above the benchmark for the grade level. For the Highly Skilled Learner criteria for prior years, e-mail info@acadiencelearning.org.

For grades K–1, students may meet the Highly Skilled Learners criteria only at the end of the year, because the measures and the RCS change during the course of the year. For grade 2, students may meet the Highly Skilled Learners criteria at the middle or end of the year (but not at the beginning of the year), because the measures and RCS remain consistent between the middle and end of the year. For grade 3–6, students may meet the Highly Skilled Learners criteria at the beginning, middle, or end of the year, because the measures and RCS remain consistent over the year.

In our analysis, students who met the Highly Skilled Learners criteria at the end of one school year had the following outcomes at the end of the next school year (averaged across grades; exact percentages varied somewhat by grade):

- 69% earned scores at or above the 80th percentile the following year,
- 70% met the Highly Skilled Learners criteria the following year,
- 91% earned scores in the Above Benchmark range (60th percentile or higher) the following year, and
- 99% earned scores in the At or Above Benchmark range the following year.

These percentages are consistent even if the student met the Highly Skilled Learners criteria at the end of the year and had made Below Typical or Well Below Typical Progress (Pathways 1 or 2) over the course of the year. Consequently, for the purpose of summarizing the number of students who have made adequate progress, students who meet the Highly Skilled Learners criteria will be assigned to Pathway 3 (Typical Progress) or higher at the end of the year. For example, if a student who is a Highly Skilled Learner is on the Below Typical Progress pathway (Pathway 2) at the end of the year, they will be assigned to Pathway 3 for reporting purposes. If a student who is a Highly Skilled Learner achieves Above Typical Progress (Pathway 4) or Well Above Typical Progress (Pathway 5), then no changes will be made to their Pathway for reporting purposes.

For some students who meet the Highly Skilled Learners criteria, it may be appropriate to shift instructional emphasis to more advanced skills in the scope and sequence of basic early literacy and reading skills—and potentially to skills above their grade placement. For example, kindergarten students who meet the Highly Skilled Learners criteria and have very high skills in phonemic awareness and basic phonics may benefit more from an instructional emphasis on advanced decoding and overall reading proficiency instead of continued emphasis on phonemic awareness and basic phonics. Likewise, for students in first grade and above who meet the Highly Skilled Learners criteria and have high

levels of text-reading proficiency (i.e., reading for meaning, at an adequate rate, with a high degree of accuracy), it may be more valuable to invest instructional time in applying their reading skills to more advanced or challenging reading materials (e.g., above-grade level texts) rather than focusing on further improvements in reading grade-level text.

For students in grades 3–6 who meet the Highly Skilled Learners criteria, it may be especially important to shift the instructional emphasis from further building their reading proficiency to investing instructional time in using their high levels of reading proficiency to build their knowledge of other content areas. For example, Daryl is a Highly Skilled Learner at the beginning of fifth grade. The teacher’s goal for Daryl might be to maintain his high level of reading proficiency and for Daryl to use his reading skills to build further critical thinking and reasoning skills, as well as knowledge in science, social science, literature, and the arts. We recommend that these decisions involve teacher judgment and consideration of the pattern of student scores and performance in other domains.

Students who meet the Highly Skilled Learners criteria should still participate in Acadience Reading benchmark assessments and be included in the Acadience Reading assessment at the end of the year to ensure they are maintaining their high levels of reading skills and to enable systems-level reporting for the school and classroom. On the Summative Growth and Pathways of Progress Reports, students in grades K–6 who meet the Highly Skilled Learners criteria at the end of the year will be assigned to Pathway 3 or higher as appropriate. For example, consider Jenna, a student who met the Highly Skilled Learners criteria. If Jenna continued to be a Highly Skilled Learner at the end of second grade—even though her Acadience Reading scores did not improve (or even declined slightly) from the middle of the year—she would be assigned to Pathway 3 (Typical Reading Progress) for Pathways of Progress and Summative Growth Reports. A footnote will appear on the Pathways of Progress Report stating, “Student achieved Pathway 3 via Highly Skilled Learners criteria.” As another example, consider Daryl, our fifth-grade student. If Daryl continued to be a Highly Skilled Learner at the end of fifth grade even though his Acadience Reading scores did not improve (or even declined slightly) over the course of the year, he would be assigned to Pathway 3 (Typical Reading Progress) for Pathways of Progress and Summative Growth Reports. The same footnote will appear on the Pathways of Progress Report stating, “Student achieved Pathway 3 via Highly Skilled Learners criteria.”

References

- Betebenner, D. W. (2011). *An overview of student growth percentiles*. National Center for the Improvement of Educational Assessment. http://www.state.nj.us/education/njsmart/performance/SGP_Detailed_General_Overview.pdf (retrieved 2014-06-10).
- Good, R. H., III, Kaminski, R. A., Cummings, K. D., Dufour-Martel, C., Petersen, K., Powell-Smith, K. A., Stollar, S., & Wallin, J. (2021). *Acadience Reading K–6 Assessment Manual*. Dallas, TX: Voyager Sopris Learning.