

Preliminary Cut Points for Risk

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Rapid Automatized Naming (RAN) is the “ability to name, as quickly as possible, visually presented familiar symbols, such as digits, letters, colors, and objects” (Georgiou et al., 2013, p. 218). RAN involves both speed and accuracy. Students must name items both quickly and without error. Thus, a student must be familiar with the items to be named for the task to be considered a RAN task. Initial research indicates that Acadience RAN provides additional information for educators above and beyond the information provided by the Acadience Reading Composite Score and also measures skills not entirely captured by Letter Naming Fluency (Gray et al., 2020).

Acadience RAN measures are brief and individually-administered assessments based on established procedures for creating and interpreting RAN tasks used in decades of research by multiple researchers (see Araújo et al., 2015). Acadience RAN is composed of three brief measures: RAN Objects, RAN Letters, and RAN Numbers. Students begin with RAN Objects and proceed to RAN Letters. RAN Numbers is only administered if a student discontinues on RAN Letters. The RAN Total score is the time to complete RAN Objects plus the time to complete RAN Letters. If the RAN Letters task is discontinued, then the RAN Total score is the time to complete RAN Objects plus the time to complete RAN Numbers. Additional information is available in the *Acadience RAN Assessment Manual*, available for free download from our website at www.acadiencelearning.org.

To establish preliminary cut points for risk for the English version of Acadience RAN, we examined the likelihood or probability of being At or Above Benchmark on the Reading Composite Score (RCS) at a later benchmark period as a function of the RAN Total score in a series of logistic regression analyses. These analyses were conducted using a large sample of kindergarten and first-grade students’ data from Acadience Data Management and Acadience Learning Online. The preliminary cut points are provided in the table below. The cut points are described as preliminary because we will reexamine them once we obtain additional data.

Additional information about the development of the beginning-of-year kindergarten cut points for risk can be found in *RAN Total Time Low-Risk and At-Risk Values for Beginning-of-Year Kindergarten (Technical Report No. 30)* (Good & Powell-Smith, 2021), available at www.acadiencelearning.org. Details of the development of the subsequent cut points for risk will be provided in an additional technical report, which will also be available on our website.

Using the Cut Points for Decision Making

The purpose of this document is to report the Acadience RAN preliminary cut points. The cut points for risk aid in the use and interpretation of RAN measures by allowing educators to identify particularly at-risk students. While RAN itself is not a teachable skill, the incremental validity of RAN means that it can be useful in identifying students who are at risk for reading difficulties.

Students who earn RAN Total scores in the Low-Risk range are unlikely to be at additional risk, provided their scores on other Acadience Reading K–6 measures are At or Above Benchmark and they are receiving high-quality, evidence-based core instruction. Students whose RAN Total scores fall in the Some-Risk range may be at increased risk, in particular if their scores on other Acadience Reading measures fall into the Below

or Well Below Benchmark range. These students may need strategic support to achieve important reading outcomes in the future. Finally, students who earn RAN Total scores in the At-Risk range are at increased risk of reading difficulties, in particular if their scores on other Acadience Reading measures fall in the Below or Well Below Benchmark range. Students in the At-Risk range likely will need intensive support to meet subsequent reading outcomes.

Acadience RAN Total Score Preliminary Cut Points for Risk by Time of Year and Grade

Grade	Score Level	Beginning of Year	Middle of Year	End of Year
Kindergarten	Low-Risk	195 or less	139 or less	125 or less
	Some-Risk	196 – 229	140 – 169	126 – 153
	At-Risk	230 or greater	170 or greater	154 or greater
First	Low-Risk	138 or less	96 or less	85 or less
	Some-Risk	139 – 164	97 – 123	86 – 110
	At-Risk	165 or greater	124 or greater	111 or greater

Note. Cut points are in seconds and applicable only to the English version of Acadience RAN. The RAN Total score is composed of either (a) the sum of RAN Objects time and RAN Letters time or (b) the sum of RAN Objects time and RAN Numbers time.

References

Araújo, S., Reis, A., Petersson, K. M., & Faisca, L. (2015). Rapid automatized naming and reading performance: A meta-analysis. *Journal of Educational Psychology, 107*(3), 868–883.

Georgiou, G. K., Parrila, R., Cui, Y., Papadopoulos, T. S. (2013). Why is rapid automatized naming related to reading? *Journal of Experimental Child Psychology, 115*, 218–225.

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