

PROMISING PRACTICE

Reading Fluency: A Source of Insight in a Test-Optional World

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The task of college admissions officers is to identify applicants who are likely prepared to succeed at their institution. While student preparation is the domain of the continually changing K-12 educational landscape, it is left to college admission officers to evaluate the extent of that preparation on a student-by-student basis.

Recently, a movement is taking place that has a rapidly increasing number of higher education institutions dropping the requirement for submission of standardized assessment scores for admission consideration (Furuta, 2017). Although authors have argued for and against their use, the task of winnowing qualified applicants from those who are not remains paramount to an institution's success (Buckley et al., 2018). Indeed, in today's world of institutional rankings, the success of every freshman class directly reflects the reported quality of the institution by publications such as U.S. News and World Report (Meyer et al., 2017; U.S. News & World Report, 2020). In the effort to identify qualified applicants, particularly for less selective institutions where the percent of those admitted exceeds the national average of 68% (Clinedinst, 2019), the ability to read and understand college-level texts is still an expectation of professors and has been identified as important to the applicant's success (ACT, 2006; MacPhail, 2019). In this paper, we offer a perspective on the essential role of reading and how institutions might consider it in a mix of indicators predicting student success.

Reading Preparation

Reading acquisition across the K-12 grades involves a complex mix of instruction that prepares students in the decoding strategies necessary to instantly read words, the fluency skills required for smooth reading, and the vocabulary knowledge and comprehension processes necessary to make meaning of text (Castles et al., 2018). To be adequately prepared for college-level reading, students must successfully engage with increasingly complex texts across the K-12 continuum. "Complex" means texts, particularly disciplinary texts, that reflect advanced vocabulary, a variety of syntactic structures reflected in diverse textual genres, nuanced meaning and perspectives, sentence structures that are less coherent and that leave the reader to fill in the gaps, and topics that require the reader to have diverse background knowledge (Fisher, Frey, & Lapp, 2012). For some

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first-generation college students—many of those coming from populations that have long struggled with academic preparation—English-language learners, non-traditional students, and those coming from backgrounds where literacy is not central to daily life, acquiring proficient reading skills can be elusive.

Students often have been inadequately prepared and under-challenged across their K-12 education and have not engaged in the breadth and depth of reading instruction that prepares them for the textual demands found in higher education classes (Balu et al., 2015; Moats, 2017). Consistently, the National Assessment of Educational Progress (2019) finds nearly two-thirds of students across the country read at less than proficient levels. Many of these students will apply for higher education admittance at two- and four-year institutions, which are then challenged to determine if the applicants possess the necessary abilities to succeed. This process can be difficult and result in admittance of students unable to successfully engage in college-level courses. Despite the fact that students are reading fewer books, reading skills are still necessary as there has been an explosion in the number of e-books, digital journals, monographs, and online resources downloaded within university libraries (Cohen, 2019). A study by ACT (2006) found that what differentiated students was not their answers to factual and inferential questions but rather their skill at answering questions about complex texts. The authors found that at an ACT reading score of 21, students who were skilled at answering such questions were better prepared for college level reading. In the absence of such information, institutions are left to assess an applicant's reading ability in some other way, if at all. Because this skill is so critical, complex text instruction it is now routinely emphasized in classrooms across the country (Student Achievement Partners, 2020). For this reason, consideration of an applicant's reading ability may benefit from a more direct evaluation that can reveal what other sources of information may overlook. Such an assessment is reading fluency.

Reading Fluency

Reading fluency is the ability to read a text at something akin to a conversational rate, to correctly pronounce the words (accuracy), and to apply appropriate expression to the text (Samuels, 2007). Each of these three "indicators" is important to a fluent reader for different reasons. As a text is read, content is loaded into working memory, where it is processed for its explicit meaning and where it interacts with the reader's prior knowledge (Kintsch, 1988). However,

working memory can fade quickly and is highly vulnerable to interruptions (Baddeley, 1992). The rate at which a reader decodes text is analogous to the rate at which it is uploaded into working memory. If the reader's rate is slow and labored, text processing in working memory can become disjointed and inefficient and result in loss of meaning. In their effort to pronounce the words, the reader directs their attention to just that, thus leaving less attention to focus on the meaning of the text (LaBerge & Samuels, 1974).

The ability of the reader to quickly and accurately decode words, what is called *word identification accuracy* or simply *accuracy*, reflects the reader's ability to accurately pronounce the words in the text. This occurs whether reading aloud or silently. It is important that a reader can decode nearly all words in a text for the same reason that reading rate is important as it facilitates working memory processing. When stuck on a word, much of the processing in working memory is now *on hold* until the word is released from the reader's attention via an accurate pronunciation. Further complicating the process is the fact that a correct pronunciation of the word immediately unlocks the reader's understanding of the word, assuming it exists in the reader's memory. If readers are unsuccessful at decoding the word, their understanding of the text may be undermined by loss of the word's meaning.

Expression refers to the reader's ability to apply the phrasing and expressive elements of the text that reflect normal conversation. When we speak to each other we use prosody to hold the listener's attention and to add implicit and explicit meaning to our words. We chunk words into phrases, emphasize certain words to add importance, and add inflection or exclamation at the end of a sentence to add emphasis. Reading with expression, whether in conversation or in reading, assists the individual with understanding (Paige et al., 2014).

Fluent Reading and College Admissions

Researchers have found that fluent reading correlates with ACT reading scores. A study conducted by Rasinski et al. (2017) assessed 81 college freshmen attending a large state university in the Midwest who were enrolled in an introduction to education course. The researchers measured the reading rate (the number of words read in one minute) of the students when reading a college-level narrative text. Results showed that 27% of the differences in ACT reading scores were due to reading rate. On the measure of reading rate, students scoring at the 10th, 50th, and 90th percentiles had scores of 113, 147, and 175 words-correct-per-minute respectively. When ACT reading

scores were compared to reading rate scores, results in Table 1 showed that scores of 19, 20, 21, and 22 correlated respectively to reading rate scores of 101, 112, 123, and 134.

Table 1
Comparison of ACT Composite Score to Reading Rate

Reading Rate	101	112	123	134
ACT Composite Score	19	20	21	22

Another study conducted by Cassady (2018) assessed incoming freshmen at a small, private liberal arts university in the South. A total of 95 students read aloud for one minute from a college-level text on a computer and then answered questions about the text. The mean ACT composite score of the sampled students was 25 while the mean ACT reading score was 27. Both of these scores were not statistically different from the freshmen class of over 600. Using predictive statistics, the author sought to determine if a student’s ACT score could be determined by their reading fluency score. Results showed that it was neither reading with expression nor the rate at which students read words that was important. Rather, it was how *accurately* students read words that predicted differences in both ACT reading and composite scores. Reading miscues—the number of times the student did not accurately read words—explained 19.2% of the difference in the ACT reading sub-scores and 24.0% (nearly one-fourth) of the difference in ACT composite scores. What is surprising is that on whole, the students in the sample were exceptionally good readers. For students whose ACT reading scores reflect the national average of 21 or below (Princeton Review, 2020), the number of reading miscues would account for one-fourth to nearly half of the difference between poor and good readers. These results suggest that correctly reading the words is important to all readers.

Conclusion

First, reading ability is important to college success. Second, the implication of the findings in these studies suggests that ACT scores—and perhaps even high school GPA—may not tell the whole story about the reading skills of a student. Third, regarding institutions that have admission applications coming from students scoring at or below the national ACT mean of 21, reading fluency results would show that a much larger

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proportion of students may not possess the ability to engage in college-level reading, thus putting students’ future success at risk. Reading fluency can be quickly evaluated by having students read a college-level narrative text in an online format. Such a text would have a Lexile score of about 1450L (MetaMetrics, 2020). The number of words read aloud by the student in one minute can be digitally recorded. Later, the number of miscues can be counted with the difference equal to the number of words-read-correctly-per minute (WCPM). This number can then be compared to a minimum cut-off score, such as WCPM = 115. Students scoring below the cut-off may not possess the minimum reading ability necessary for college success. Institutions that gather their own fluency data can develop a longitudinal database that reflects their applicant pool. From this data, admissions may then develop predictive models to better inform the applicant selection process.

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