

Why State Reading Tests Are Poor Benchmarks of Student Success

by Hugh W. Catts

Proficient reading comprehension is a major goal of early literacy instruction. At the end of each school year starting in third grade, students are given a standardized test of reading comprehension. These state-based tests have become an especially critical benchmark for third graders. Failure to reach proficiency on these tests can lead to students being retained and/or placed in summer school or remedial programs. Whereas such a benchmark has become commonplace in U.S. education, it is an unfair assessment for a number of reasons:

- It is unfair to disadvantaged students who consistently score lower because of knowledge and/or language differences.
- It is unfair to teachers, because the curricula that they are asked to follow are not well matched with the tests that assess success.
- It is unfair to schools and school districts because considerable value is placed on the results of these tests and these results are quite resistant to change.

In this article, I discuss the problems associated with high stakes reading tests and offer suggestions for alternative approaches to evaluating academic success in the early school grades.

Benchmark assessments of reading have had a long history in U.S. education. This is especially the case since the No Child Left Behind (NCLB) Act and affiliated initiatives of Reading First and Early Reading First were enacted. Under this legislation, schools were required to implement on-going assessments and end of year testing to evaluate and assure adequate progress in reading achievement. As part of this process, state assessments of reading became an important benchmark of early school success. This emphasis on the assessment of reading has continued under the Every Student Succeeds Act (ESSA).

Impact on Students

Whereas state reading tests are generally viewed as measures of students' reading ability, they assess much more than reading. These so-called reading tests rely heavily on students' general knowledge and language skills (Cervetti & Wright, 2020). Some have gone as far as to say that these reading tests are knowledge tests in disguise (Hirsch, 2016). So as not to bias students with particular knowledge, state reading tests cover a wide range of topics. But of course, this gives students with broad general knowledge a significant advantage on these tests and presents a serious challenge to those without this knowledge (Hwang & Duke, 2020). Specifically, economically disadvantaged stu-

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dents typically come to school with less knowledge about the topics covered on reading tests, and thus, often perform less well. As Hatton and Lupo (2020) point out, it is not so much that these children have a "knowledge gap" as it is that they lack the specific knowledge that is on reading tests. Without this knowledge, they are more dependent on the information presented in the text and less able to draw the inferences that are needed to answer many questions.

Many economically disadvantaged students also lack the preschool language experiences that are critical for developing the vocabulary and grammar skills needed for reading comprehension. These children also typically have fewer opportunities to acquire the ways of communicating and thinking that are required to understand academic texts (Galloway et al., 2020). The sociocultural and communication contexts that they bring to school are often quite different from those of the writers

of typical school texts. This misalignment can present a significant challenge to academic success and to performance on state reading tests. These various language differences would also be expected to extend to children learning English as a second language, especially if they entered school with limited experience in English. Unfortunately, there are very few opportunities for these groups of children to close the gap in language and knowledge in the early school grades, and it is not surprising to find that as a group, their performance on state reading tests is much lower than monolingual peers.

Impact on Teachers

State reading tests also place undue pressure and expectations on teachers. In many states, teachers' evaluations, job security, and/or salaries are impacted by the performance of their students on state assessments. In value added systems, teachers are rewarded for annual growth in reading scores and penalized for the lack of this growth. This is especially unfair because the curriculum in most schools is not well matched from a content perspective with the materials on state reading tests. Teachers can't teach this content because the content of the tests is not disclosed. Publishers of state reading tests do not share information concerning the topics included in the current assessments. Information may be provided about topics on past exams, but this is of minimal assistance to teachers preparing their students for the current assessments. In the early grades, there also has been a trend to replace instruction in social studies and science with more emphasis on language arts. Language arts curricula generally are focused more on learning skills and meeting standards than they are on imparting knowledge. They do cover a variety of topics but generally don't provide enough coverage of any one topic to allow students to gain the full base of knowledge needed for state reading tests.

Because teachers lack specific information about what is covered on state exams, they must rely on other aspects of the curriculum to assist them in preparing their students. Language arts curricula do provide guidance on teaching fundamental reading skills and offer opportunities to increase vocabulary—both of which have a direct and important impact on reading comprehension. In addition, language arts curricula typically provide guidance on teaching reading strategies such as “find the main idea” or “monitor your comprehension” in an attempt to improve reading achieve-

ment. Reading strategies have been shown to be effective in aiding comprehension but often are rather general in nature and don't always transfer well across topics and purposes of reading (Willingham, 2006). Also, guidelines from the Common Core State Standards Initiative (National Governors Association Center for Best Practices, 2010) are used to direct instruction in reading comprehension. While these guidelines do stress the importance of background knowledge, focus is most often directed to standards that are so broad and devoid of content that they are likely to have little impact on state reading scores. For example, one of the standards for third grade reading is that students should be able to “describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.” But the ability to provide such a description is clearly dependent on specific content, and if this ability could be taught, it is unlikely to transfer from one topic to another independent of the knowledge involved. Transfer is a critical variable in assessing comprehension because comprehension is not a single construct; it is a multifaceted phenomenon that is dependent on many factors (Snow, 2002). Therefore, a careful consideration of the factors involved is necessary when matching assessment with instruction, and this is seldom the case with state reading tests.

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Finally, because of the lack of options, many teachers resort to “teaching to the test” as a strategy to prepare students for taking state exams. This may involve such activities as having students read an endless number of practice passages and answer multiple choice questions in hopes of improving students' performance on the exam. While helping students become familiar with the types of items and questions on state exams can be beneficial, ex-

tensive practice reading passages not on the exam is unlikely to prepare students to make significant gains in reading achievement.

Impact on Schools

The pressure placed on teachers for their students to do well on state reading tests often originates at the school or district level. In many states, schools receive a grade based upon their students' overall performance on state reading tests. Schools may also be graded in terms of their ability to reduce the achievement gap between student populations based on race and/or disability status. In this process, some districts are unduly challenged because of a high percentage of economically disadvantaged students. Many of these children not only begin school with less knowledge about specific topics, but they are "double disadvantaged" by often entering schools that have fewer resources available to gain such knowledge (Neuman et al, 2018). These schools have fewer books in general and likely have fewer of the textbooks that provide the specific information on standardized reading tests.

Given the significance placed on state reading tests, schools districts (and states) have actively sought to improve their performance. Beyond the early efforts associated with NCLB, districts/states have implemented various programs designed to improve reading achievement. Some states have also increased the

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credentials that teachers must have to assure they are familiar with the science of reading. Students have been taught how to read words accurately and fluently and how to think strategically to understand what they are reading. However, little attention, for the most part, has been given to the knowledge that is contained on reading tests. It is not surprising, therefore, that across states, there has generally been very little change in reading scores from one

year to the next. For example, in North Carolina, the percentage of students failing to reach proficiency on state reading tests has remained largely unchanged at above 50 percent since 2013/14, when the state passed its K-3 Read to Achieve literacy act (Koon, Foorman, & Galloway, 2020). Such a finding is consistent with the results from a national reading assessment. Reading scores on the National Assessment of Educational Progress (NAEP), administered biannually to selected groups of 4th and 8th graders (and every 4 years to 12th graders), have remained virtually unchanged at a national level over the last 20 years (NAEP, 2019).

While rare, some states have made progress in improving reading achievement. Specifically, Mississippi has gone to great lengths to improve reading scores in the primary grades. The state has developed early learning collaboratives for preschoolers, invested in early identification and intervention in the early school grades, provided teachers with professional development on the science of reading, and added literacy coaches to assist with instruction. As a result, their NAEP scores have shown a steady climb, and Mississippi was the only state in the nation to post significant gains on fourth-grade reading scores in 2019.

Whereas Mississippi has shown progress in improving reading scores, it is important to note that when the state reading initiatives were first put in place, their NAEP scores were well below the national average and recent gains now place the state near the national average. A possible explanation for this change is that Mississippi's reading initiatives have been quite successful in improving fundamental reading skills and strategies, which has allowed children to access the information on reading tests. However, two-thirds of Mississippi's young readers are still reading below the proficient level on the NAEP, most likely due to a lack of knowledge of the topics on the test. If this is the case, Mississippi will find, as have other states, that further gains in national/state reading tests are difficult to achieve.

The problem faced by Mississippi and other states again is a mismatch between instruction and assessment. Schools have gone to great efforts, and will continue to do so, to improve reading instruction. The science of reading has been raised to the forefront in education today, and it is having a significant impact on the quality of instruction. The solution to poor reading scores is not simply better instruction, it is also better assessment—assessment that is matched more closely to what is taught in the classroom.

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Alternative Approaches

Because of the challenges with state reading tests, alternative approaches to instruction and assessment are being considered. One recent approach has been to build knowledge through content-rich English Language Arts (ELA) instruction. Programs such as Core Knowledge Language Arts and Wit & Wisdom take this approach and embed content knowledge in a systematic manner within the ELA curriculum (Cabell & Hwang, 2020). Traditionally, reading instruction has been provided separately from content instruction in science, social studies, and other subjects. In content-rich ELA curricula, students receive literacy and vocabulary instruction within one or more content areas with the intent to build the literacy skills and the knowledge bases needed for reading comprehension. The content selected is coherent and cumulative over time so as to build knowledge and skills for reading. Results from integrated literacy and knowledge building approaches are quite promising (Cervetti & Wright, 2020). A recent systematic review showed that when compared to traditional programs in which literacy and content instruction were provided separately, integrated content-rich programs resulted in students scoring significantly better on measures of vocabulary, oral language comprehension, and reading comprehension (Cabell & Hwang, 2020). Not surprising, significant gains were also made in content knowledge.

While integrated approaches appear promising, it is not clear what the impact of such approaches will be on students' performance on state reading tests. Of course, this would likely depend on how well the content in the integrated curricula matched that of the state exam. An approach that may better match instruction with assessment has been made available within the guidelines of the Every Student Succeeds Act Assessment Pilot Program. This program encourages local involvement in the development of the next generation of assessments. It allows states, with approval by

the Department of Education, to pilot new and innovative assessments in place of state exams, initially in a few districts before moving to statewide implementation. To date, five states have received approval to develop these assessments. Most notably, Louisiana has replaced its state reading assessment in some districts with periodic reading and writing assessments of humanities and social studies content that is directly taught as part of the state's recommended curriculum. Thus, the content of the test has become well matched with the instruction students receive. Initial response to the change in assessment has been positive, but the pandemic has prevented a careful evaluation of its impact.

With continued success of these pilot projects, other districts and states may also begin to implement reading assessments that are more closely linked to the curriculum. Such assessments would be fairer and more equitable for all those involved. Students would have the opportunity to learn from content-rich curricula and be assessed based on what they have learned. Content-rich curricula can be especially engaging and can draw students' interest to reading and learning. Of course, such curricula and assessment do not immediately solve the challenges faced by economically disadvantaged children or those with limited English proficiency. However, with some local control, schools could build on the knowledge that their students come to school with, while at the same time, introduce them to rich and diverse bodies of knowledge. For example, McWayne et al. (2019) have initiated a program called Readiness through Integrative Science and Engineering. This program takes a home-to-school approach to connect new knowledge with culturally relevant knowledge concerning the people, places, and objects that students interact with on a daily basis. They propose that by understanding, appreciating, and connecting with this knowledge, learning can be especially enhanced for disadvantaged students. Also, because assessments would be linked to the content-rich curriculum, there should be a greater opportunity over time to reduce the achievement gap experienced by these children. In fact, there is some initial evidence of this effect in a recent study from the Fordham Institute (Tyner & Kobourek, 2020). This study found that additional instructional time spent on content knowledge involving social studies resulted in higher reading scores, and this effect was strongest for children from economically disadvantaged households and those with limited English proficiency.

With the use of curriculum-based assessments, teachers would benefit from knowing what content to teach and how well their students are learning this content. Of course, quality reading instruction would continue to take place—there would still be a strong focus on teaching fundamental reading skills, and there would be sufficient time allotted to it in the curriculum. However, most work on reading comprehension would be embedded in content-rich curricula. Teachers would teach some of the same strategies and approaches they have used in traditional ELA curricula, but this instruction would be blended with instruction in the content area. Rather than reading about volcanos one day and the Civil War the next, reading passages would come from an integrated content-rich curriculum in which knowledge could accumulate over time. Students would be taught vocabulary and strategies needed to understand passages from a science or history text and to do so for specific purposes related to the discipline. For example, science texts often require evaluating an argument or an explanation, and thus, instruction concerning the judgment of the relevance, accuracy, and sufficiency of information would be taught (Britt, Richter, & Rouet, 2014). Such goal directed reading instruction would allow students to acquire disciplinary knowledge and skills and perform well on reading assessments aligned to the curriculum.

A curriculum-based assessment approach also would have advantages for schools and districts, because this approach would be a more appropriate and fair form of accountability. Educators could work with publishers and policy makers to design and implement a curriculum, and then evaluate how well students are learning to read within it. If students are not meeting expectations, educators would know the relevant content and could “double down” and provide the necessary instruction to improve reading scores—something that has proven to be very difficult with current reading assessments. Also, because goals and outcomes are better understood, these assessments would allow for a more equitable comparison across teachers, schools, and districts. Demographics may still influence performance, but good instruction could have a better chance of reducing the impact over time.

Even with a wider adoption of curriculum-based assessments, it is unlikely that we will move completely away from the use of standardized reading assessments that are not specifically linked to the curriculum. Assessments like the NAEP will likely still be used for

accountability purposes and to make comparisons across states. However, over time, content-rich instruction should have a positive impact on children’s performance on these tests. Internationally, we have seen that countries that have moved to content-rich curricula have had improvements in reading achievement, while those with more skill-based instruction have not (Crato, 2020). Therefore, the potential mismatch in these assessments should not be an obstacle in educators moving to the more appropriate and equitable use of curriculum-based assessments of reading achievement. ■

References

- Britt, M.A., Richter, T. & Rouet, J. (2014). Scientific literacy: The role of goal-directed reading and evaluation in understanding scientific information. *Educational Psychologist*, 49, 104-122.
- Cabell, S. Q., & Hwang, H. (2020). Building content knowledge to boost comprehension in the primary grades. *Reading Research Quarterly*, 55(S1), S99– S107. <https://doi.org/10.1002/rrq.338>
- Cervetti, G. N., & Wright, T. S. (2020). The role of knowledge in understanding and learning from text. In E.B. Moje, P. Afflerbach, P. Enciso, & N. K. Leseaux (Eds.), *Handbook of reading research* (Vol. 5, pp. 237–260). Taylor and Francis Group.
- Crato, N. (2020). *Improving a country's education. PISA 2018 results in 10 countries*. Springer.
- Galloway, E. P., McClain, J. B., & Uccelli, P. (2020). Broadening the lens on the science of reading: A multifaceted perspective on the role of academic language in text understanding. *Reading Research Quarterly*, 55(S1), S331-S345. <https://doi.org/10.1002/rrq.359>
- Hatton, C., & Lupo, S. M. (2020). Rethinking the role of knowledge in the literacy classroom. *Reading Research Quarterly*, 55(S1), S283-S298. <https://doi.org/10.1002/rrq.350>
- Hirsch, E. D. (2016). *Why knowledge matters: Rescuing our children from failed educational theories*. Harvard Education Press.
- Hwang, H., & Duke, N. K. (2020). Content counts and motivation matters: Reading comprehension in third-grade students who are English learners. *AERA Open*, 6(1), 1-17. <https://doi.org/10.1177/2332858419899075>
- Koon, S., Foorman, B., & Galloway, T. (2020). Identifying North Carolina students at risk of scoring below proficient in reading at the end of grade 3 (REL 2020–030). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- McWayne, C.M., Doucet, F. & Mistry, J. (2019). Family-school partnerships in ethnocultural communities: Redirecting conceptual frameworks, research methods, and intervention efforts by rotating the lens. In C.M. McWayne, F. Doucet, & S. Sheridan (Eds.). *Research on family-school partnerships: Ethnocultural diversity and in the home-to-school link*. Springer Publishers.
- National Assessment of Educational Progress (2019). The Nation’s Report Card: Reading. <https://www.nationsreportcard.gov>.
- National Governors Association Center for Best Practices, Council of Chief State School Officers (2010). Common

core state standards for English Language Arts. Washington D.C. : Author. <http://corestandards.org/>

Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2018). A double dose of disadvantage: Language experiences for low-income children in home and school. *Journal of Educational Psychology*, 110(1), 102–118. <https://doi.org/10.1037/edu0000201>

Snow, C. (2020). *Reading for understanding: Toward an R&D program in reading comprehension*. Santa Monica, CA: RAND.

Tyner, A. & Kobourek, S. (2020). *Social studies instruction and reading comprehension: Evidence from the Early Childhood Longitudinal Study*. Fordham Institute.

Willingham, D. T. (2006). The usefulness of brief instruction in reading comprehension strategies. *American Educator*, 30(4), 39–50.



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