

Teaching Content *Is* Teaching Reading

Language arts classes should convey key background knowledge, which is the beating heart of verbal skill. **by E.D. Hirsch Jr.**



Every two years the National Assessment of Educational Progress (NAEP), “the Nation’s Report Card,” reports the nation’s average reading and math scores in grades 4 and 8. Despite our strong focus on reading under the 2001 No Child Left Behind law, the recent 2009 reading scores were not statistically different from those of 2007, which had not been statistically different from previous scores back in 2002. By contrast, math scores have shown a clear upward trend in both grades 4 and 8 during the past decade. Why is it so much harder to raise reading scores than math scores?

The stakes could hardly be higher. Verbal scores are highly correlated with students’ life chances and contributions to society; Congress was right to place a strong emphasis on reading under the No Child Left Behind law. But that emphasis has often resulted in a narrowing of the language arts curriculum into little more than preparation for reading tests. This narrowing of education has occurred chiefly because we have given a narrow, process-oriented slant to what we mean by reading. We have misconceived the kind of preparation that will actually enable students to do well on reading tests.

Different approach

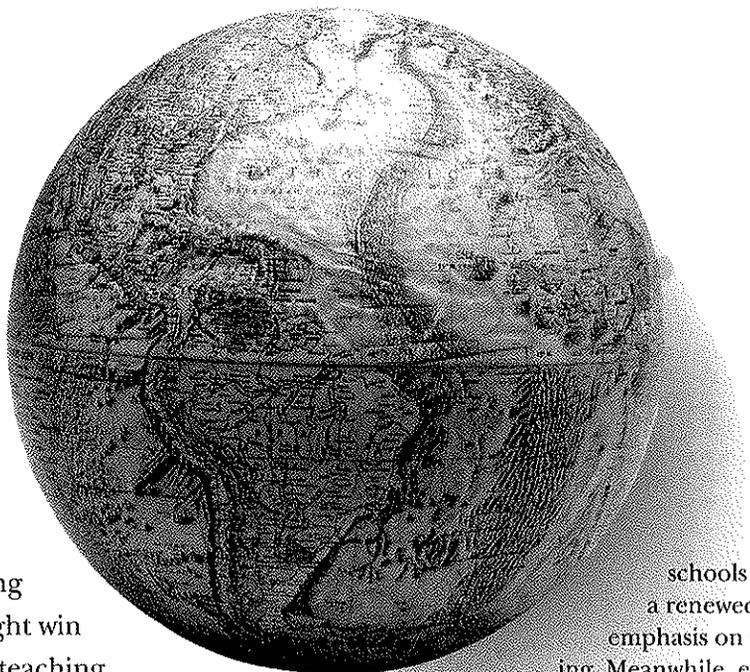
Others, like other people, resist change, as every principal knows. Elementary teachers as a group vote the best for their students and are open to making changes if they are convinced they are not being subjected to "just another fad." The following research findings, once understood, might win their enthusiasm for a new approach to teaching reading—an approach that, by the way, also fits in with the Common Core State Standards for English Language Arts that have recently been approved by about three-fourths of the states.

For knowledge of the subject matter, text is more important to reading comprehension than technical read-kills. You might want to show your viewers a wonderful 10-minute YouTube presentation by the distinguished cognitive scientist Daniel Willingham titled "Teaching Content Is Teaching Reading." Willingham's presentation explains, among other things, why low-income students do so much worse on reading tests than middle class students. The point in the video, Willingham describes an experiment where students had done poorly on an ordinary reading test nonetheless did much better than high achievers when the "poor readers" happened to know more than good readers about the subject of the passage.

The critical role of relevant background knowledge in language comprehension is one of the important findings of cognitive science in the past years. If middle class students tend to do better than low-income students on a reading test, it is chiefly because the advantaged students have gained relevant background knowledge that need to make sense of the passage in the test. Therefore, beyond the

the mechanics of literacy, language arts classrooms should have an equally important aim: to impart to all students the background knowledge they will need to gain high verbal skill.

Reading tests are progressively less tests of background knowledge. This fact about tests explains why an intense focus on reading strategies and a neglect of coherent content has failed to improve test scores. Professor Joseph Torgesen and his colleagues at Florida State University made an analysis of the skills reading tests are actually probing. In third grade, the emphasis is on fluency and accuracy of turning written symbols into sounds and words. In those early tests, the background knowledge required for comprehension is relatively undemanding. But as the tests progress from grade 4 up to grade 8 and beyond, decoding skill, though necessary, becomes less determinative of a student's test score. With each subsequent grade, tests become more and more assessments of relevant background knowledge until finally by grade 8, they become de facto tests of general knowledge. This explains why there was a momentary rise in NAEP



schools placed a renewed emphasis on decoding. Meanwhile, eighth-grade scores have shown a slight decline, and a downward trend has been even more pronounced in the grade 12 NAEP scores.

These later reading scores reflect students' knowledge accumulated over the years, built up from kindergarten and earlier, when listening, not reading, plays the chief role. Reading skill in young students never exceeds their listening skill. In fact, it's not until seventh grade that reading catches up to listening. In kindergarten and grades 1 and 2, the activities of sounding out words take up so much of students' mental capacity that their listening and speaking abilities far exceed their ability to read and write. Their ultimate reading ability will be limited by their listening ability, so it's essential that we start right away in the earliest grades to improve their listening and speaking skills by enhancing their background knowledge through listening. A great deal of emphasis in kindergarten through third grade should be placed on orally imparting the knowledge that will ultimately enhance students' language proficiency.

Instruction in reading strategies is of limited value and, beyond 10 lessons, useless. The educational research literature is full of evidence that teaching reading strategies such as "questioning the author" and "finding the main idea" help students

chers have shown that the
 ble reason for the initial boost
 eaching strategies is to make
 students aware that the text
 ents a person speaking to them,
 elping them conceive of the
 a verbal communication from
 ody, not as some exotic, magi-
 ect. Initially that insight—that
 g is like oral communication—
 ough students quite a bit.
 er, once that basic insight is
 l, its utility is exhausted. In fact,
 er researchers have pointed out,
 ng young children to engage
 conscious comprehension and
 nitoring techniques impairs
 it comprehension on the whole
 se it takes up limited mental
 in working memory that would
 vise be directed to textual
 ng.

bulary growth is glacially slow,
 l only modestly by explicit
 dary study, which should be
 aringly and in connection
 herent subject matter. It's
 aid that young children learn
 / words a day. That's true, but
 hen you start counting back-
 /ith successful students after
 e 17 years old. Depending on
 ill count as a separate word,
 abulary size of a good high
 graduate is about 80,000 words.
 assume that word learning starts
 2, and that the student has been
 ing words for 15 intervening
 hat computes to some 15 words
 rom age 2. But how misleading
 ath is!

process is slow and subtle. Each
 : learn a tiny bit about hun-
 of words along a broad front.
 s several meaningful exposures
 ord before we gain a confident
 erness of its ranges of meaning.
 ere's a key insight: An unfamiliar
 ight be more quickly under-
 if the surrounding context
 liar. It's estimated that word
 re occurs four times faster in a

domain of knowledge. Hence the key
 function of explicit vocabulary study is
 to explain a few critical words during
 the effective teaching of a knowledge
 domain, making the domain more
 and more familiar.

From Principle to Practice

Schools have performed better in
 math partly because the substantive
 math knowledge required in state stan-
 dards for grades K-8 is clearly stated,
 grade specific, and cumulative. In con-
 trast, while state standards in language
 arts define processes, they leave to
 chance the development of the back-
 ground knowledge necessary to build
 verbal skill. This contrast between stan-
 dards in math and in reading suggests
 that states should specify the topics for
 each grade that will gradually impart
 the background knowledge needed
 for proficient reading. The new com-
 mon core standards have recognized
 this supremely important principle

It's estimated that word learning occurs
 four times faster in a familiar rather than
 in an unfamiliar domain of knowledge.

and reflect it in their title: Common
 Core State Standards for English
 Language Arts & Literacy in History/
 Social Studies, Science, and Techni-
 cal Subjects. This title represents an
 intellectual shift of monumental and,
 one hopes, decisive importance. No
 longer is language and reading to
 be associated exclusively with poems
 and fictional stories and technical
 processes, though these are important
 topics too. But as these new standards
 rightly emphasize, language arts
 classes should convey key background
 knowledge, which is the beating heart
 of verbal skill.

What, then, can a principal do
 concretely to put these concepts into

that every teacher in the school has
 come to understand that language
 proficiency is gradual and knowledge-
 dependent, and that we will need to
 take a systematic, multiyear approach
 to imparting knowledge both within
 language arts and in the other sub-
 jects, with each grade building upon
 what has been taught in the previous
 grades. We can't depend on current
 basal programs to do that work for
 us since they consist of rather frag-
 mented series of stories, based on
 the incorrect theory that reading
 is an all-purpose formal skill. Some
 basal programs are good for teaching
 phonics, which is a formal skill, but
 experts say we should spend no more
 than one hour a day teaching phonics
 and writing to young children. With
 two hours typically devoted to the lit-
 eracy block, that leaves more than an
 hour for building needed knowledge.
 How should we use that remaining
 language arts time effectively?

In the earliest grades—kindergarten
 and grades 1 and 2—content instruc-
 tion should take place through teacher
 read-alouds and discussion. It is a great
 waste of time to confine all of early lan-
 guage instruction to student-decodable
 texts since students' listening and speak-
 ing skills far exceed their reading and
 writing skills. Read-alouds and discus-
 sion on a given topic should last at least
 two weeks so that topic familiarity is
 built up, with consequent speeding up
 of students' vocabulary gain. The aim of
 these teacher read-alouds should be to
 start building up systematically the key
 knowledge and vocabulary that will be
 needed for later language proficiency
 in literature, the arts, history/social

ts, as the new common core
ards recommend.
s coherent focus on definite
in literature, the arts, history,
cience—at least two weeks spent

on each topic to
induce the necessary
topic familiarity—
should continue in
later grades. But as
fluency of decoding
ses, reading and discussion
l increasingly depend on stu-
ead texts. The whole multiyear
nce of knowledge domains from
ergarten through eighth grade
to be worked out in advance
ordinated with the rest of the
l curriculum so that the build up
nowledge and vocabulary can be
atic and cumulative.

achers are given the critical
ch findings about the knowl-
foundations of verbal skill, and

if they are given the coherent curricu-
lum and the support materials they
need, they will gain a justified confi-
dence that they can create knowledge-
able students from all backgrounds
who will be able to participate in the
larger world as readers, speakers,
and citizens. An exciting side benefit
of the knowledge-based, cumulative
approach to reading described here
is that it brings the whole faculty
together and embraces the collective
efforts of all teachers. The language
skills and the knowledge that will be
required to make students effective
readers by eighth grade cannot be
learned in a single year, but are the
cumulative results of a collective
and cooperative effort. We are all
in this together. 

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Principal ONLINE

Access the following web resources
by visiting *Principal* magazine online:
www.naesp.org/NovDec

Watch **Daniel T. Willingham's**
presentation titled "Teaching Content Is
Teaching Reading."

"**There's No Such Thing as a
Reading Test**" describes why a
reading test is really a knowledge test.

In "The Challenge of Advanced Texts:
The Interdependence of Reading and
Learning," a top reading researcher
explains the most recent **research on
vocabulary learning and verbal skill.**

Examples of materials and methods
for a knowledge-based early reading
program are available on the **Core
Knowledge Foundation's** website.

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