

# **Improving Reading, Writing, and Language Skills**

**Necessary  
for Success** *in Challenging  
Subject Matter*

**NATIONAL RESEARCH CENTER ON  
ENGLISH LEARNING & ACHIEVEMENT**



The National Research Center on English Learning & Achievement (CELA) had its beginnings in 1987, when it received a small award from OERI to focus on the teaching and learning of literature. At that time there was considerable discontent with both curriculum and instruction in literature, but very little systematic research on which to base improvements. The Center sought to provide teachers, administrators, and policymakers with a solid base of research on current practice, as well as a set of principled alternatives. As outlined in this document, this initial work had a rapid and significant effect on the nation's literature curriculum, instruction, and assessment.

Even as the Center's work was improving literature education, however, it was apparent that a broader approach was needed to address the language and literacy skills that students would need to develop in the 21<sup>st</sup> century. Accordingly, in 1995 OERI awarded the Center a new grant that broadened its scope to include all aspects of English and language arts teaching and learning, with the goal of helping students achieve the levels of literacy necessary for success in challenging subject matter. Current work is examining how the various parts of the curriculum in English and other subjects can best work together to improve students' reading, writing, and general language skills.

Throughout its history, the Center has placed special emphasis on developing effective practices for schools and classrooms serving children from groups historically at risk for school failure, including students for whom English is not a first language, and the urban poor. In particular, Center research has focused on curriculum, instruction, and assessment practices that insure that all students have the opportunity to develop both the basic and the advanced language and literacy skills necessary for success in challenging subject matter, and in the world of work.



## Changing Policy and Practice:

*Successes* **1987 -**  
**from 1995**

### *Influencing what gets taught*

When the Center began, a public and fairly vehement debate was raging about the kinds of literary works students were being assigned to read. Programs were criticized for having abandoned the traditional canon of Western literature, and at the same time for ignoring the works of women and minorities. There were a multitude of proposals and counter proposals for reform, but little knowledge of what schools were actually doing and little research base for any of the proposals.

The Center immediately undertook a series of national studies of the literature curriculum. A research team surveyed the books assigned in public and private schools across the country and visited a subset of programs that had been nominated as outstanding. They also studied the works included in the most widely used literature

anthologies at each of the junior and senior high school grade levels. Researchers not only described the works being read and compared them to other lists across the 20<sup>th</sup> century, but they also examined differences in the literature assigned in the different types of schools and to different tracks of students.

Together, these studies showed that the literature curriculum had changed very little in the previous 25 years, or indeed since 1900. Few of the books assigned were by minorities or women or were recent publications, while such traditional authors as Shakespeare and Twain remained solidly ensconced in the curriculum. These results surprised teachers as well as policymakers and highlighted the slow pace of change in schools.

These studies had a strong and immediate impact. The results were reported by the Associated Press as one of their top ten stories of the day, and

stories appeared in newspapers across the country as well as overseas. Interview requests from broadcast media, newspapers, and magazines followed and continue today. The National Council of Teachers of English (NCTE) published articles and a book about these studies and used them to reflect with its membership on curriculum and teaching practices. The Association of American Publishers cosponsored a conference with the Center to introduce these results to the publishing community, and the next generations of literature anthologies have included a broader selection of works. Many states used the findings to guide their own decisions about reading lists. In addition, the book reporting these results, *Literature in the Secondary Schools: Studies of Curriculum and Instruction in the U.S.* (NCTE, 1993), continues to be widely read.

### Improving literature teaching and learning

A second series of studies was designed to address complaints about students' lack of knowledge about and understanding of literature. Through case studies of diverse groups of students and teachers, in preschool through the first year of college, Center researchers examined the cognitive and lin-

guistic strategies used in successful reading of literature and of informational texts. They found that the strategies that were important for reading and understanding literature were surprisingly different from those taught in traditional reading instruction. They also identified a set of principles that underlie successful literature lessons, and provided research-based frameworks for teachers to use in implementing such instruction.

The principles and frameworks resulting from this work had an immediate impact on both assessment and instruction. Beginning in 1992, the National Assessment of Educational Progress (NAEP) revised its framework to distinguish between reading literature and reading for information. NAEP objectives and test items now differ based on the kind of passage students are asked to read. In addition, 43 states are currently using the NAEP state-by-state assessment, which incorporates these distinctions. CELA's research on literature teaching and learning has also informed the work of most state education departments, where assessment frameworks now have separate categories and outcomes for literary and informational reading tasks.

Classroom instruction has changed as well, influenced by

changes in many state and district curriculum guides. Among the many states that have used CELA's research-based framework to redevelop their English language arts curricula are California, Connecticut, Florida, Maryland, New York, North Carolina, Pennsylvania, Texas, and Vermont.

In addition, the Association of American Publishers introduced the Center's findings to the major publishers of instructional materials. The four major English language arts publishers (Glencoe, Holt, McDougal Littell/Houghton Mifflin, and Prentice Hall) have all incorporated these frameworks into their materials to meet the needs of the states. Twelve journal articles and two books have presented this work to a wider audience. In 1992 *Literature Instruction: A Focus on Student Response* was published by the 90,000 member National Council of Teachers of English; similarly, *Envisioning Literature: Literary Understanding and Literature Instruction* (Teachers College Press, 1995) was selected



by the International Reading Association to be distributed to its nearly 100,000 members.

### ***Improving instruction for children considered at risk***

In another series of studies funded by OERI, Center researchers focused on the practices and policies of literacy and language arts instruction



in preschools and elementary schools that serve large numbers of children living in poverty. These studies found an overall lowered level of expectation for children from diverse economic and linguistic backgrounds. For example, Head Start programs were bound to “developmentally appropriate” instruction that prevented any direct literacy instruction for four-year-olds because it was believed that they were not cognitively ready. A related set of studies focused on students with special needs and found that such children were often taught by uncertified paraprofessional aides and in remedial programs with little connection to the regular curriculum.

These findings from CELA researchers led to changes in the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA) and Title I legislation and, subsequently, in school and district policies and practices. For example, it is now expected that all Title I students will 1) achieve the same rigorous standards as all other students, 2) participate in the same challenging curriculum, and 3) fully participate in national and state testing programs.

Key national organizations have also used the findings from these studies in making policy recommendations for literacy education. For example, the International Reading Association recommended that credentialing requirements be established for aides hired with Title I funds. And the National Association for the Education of Young Children changed its guidelines for developmentally appropriate instruction to include literacy instruction.

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### ***Rethinking the curriculum***

A fourth body of Center work was concerned with how to find a more effective focus for the notoriously ill-defined curriculum in English language arts. Case studies of elementary and secondary school classrooms were used to examine how teachers create a sense of continuity and direction for the work in their classrooms.

The major result of the study was a framework that treats curriculum as a domain for conversation, and instruction as ways to help students enter into the conversation. Students in such classrooms learn both the content and the norms of the subject area through rich reading, writing, and talk that explores significant issues within the domain. In classrooms in which these explorations reflect the real conversations that take place in a particular field (e.g., history, literature, science, the arts), students acquire both the factual knowledge and the ways of handling those facts (e.g., weighing evidence, drawing conclusions, and developing effective arguments) that enable them to participate effectively. Not only are they familiar with the significant questions and issues of the field, they also develop the supporting “basic skills” necessary for successful performance.

Captured in the book *Curriculum as Conversation: Transforming Traditions of Teaching and Learning* (University of Chicago Press, 1996), this research provides a way for curriculum developers as well as teachers to conceptualize and offer curriculum that emanates from the significant questions in a field. The book describes how

to organize and structure a curriculum to be most effective in reaching the dual goals of students learning both content knowledge and discipline-appropriate ways to work with and communicate knowledge of that content.

The College Board drew on this work in developing its Pacesetter English course, a twelfth-grade course designed to be appropriate for all students. And the National Council of Teachers of English recognized the significance of *Curriculum as Conversation* by awarding it the 1998 David H. Russell Award for Distinguished Research — the most prestigious research award the Council gives.



## Together, the results

**of CELA's previous research, described above, have had a significant impact on teachers, administrators, and policymakers across the nation, and in turn have played a significant role in helping elementary and secondary students at all levels of ability reach high standards of literacy achievement.**

## Current Studies:

**Putting the 1996 -  
Parts Together 2001**

Through 1995, CELA's research focused primarily on the teaching of literature. Although the research had an immediate impact on curriculum, instruction, and assessment, it was limited in its ability to consider the broader context within which literature instruction takes place. Under its present grant, CELA is examining how the various parts of the curriculum can work together to support the development of higher levels of literacy achievement across the elementary and secondary school grades. This work addresses the national concern that all students develop both the basic and the advanced literacy skills necessary to achieve success in challenging subject matter in all areas of the academic curriculum, as well as in life and the world of work.

The research is based in key sites selected to reflect the diversity in problems and approaches in schools across the nation. Five major lines of inquiry focus on exemplary elementary instruc-

tion; exemplary middle and secondary school instruction; literacy in the special contexts of school subjects, home, and community; the effects of technology on literacy; and professional development. Each line of inquiry is described briefly



below, followed by the findings that are emerging across all the studies.

### ***Exemplary elementary language arts instruction***

The elementary school language arts curriculum is one of the most contentious parts of education in the U.S. today. Teachers are caught between conflicting ideologies about the most effective approaches to early reading instruction. At the same time, they have to respond to national calls for students who are able to read, write, and think at ever-higher levels of accomplishment. CELA research seeks to illuminate effective practice. Rather than championing one side of the debate or

the other, researchers are examining the characteristics of classrooms where students are achieving at unusually high levels, whatever the ideological orientation of the program as a whole.

Research sites were chosen to provide geographic and demographic diversity, as well as contrasting state policies governing literacy instruction. Sites include contrasts between exemplary and more typical classrooms serving comparable populations of students. Results from these studies will describe the characteristics and outcomes of effective elementary language arts curriculum and instruction at different grade levels, including the characteristics of approaches that are most effective in helping poor, inner city students become literate.

### ***Exemplary instruction in middle and secondary schools***

Middle and high school classrooms are under increasing pressure to insure that all their students perform well on high-stakes tests indexed to high performance standards. Yet different classrooms and schools produce very different results even when their student populations are similar. CELA research teams are investigating the kinds of English instruction that help students — especially poor students — develop advanced literacy skills.

Three major sets of data are being collected in research sites across the country, including four of the five largest school districts in the U.S. One set of studies is contrasting middle and high school programs that are “beating the odds:” Their students are demonstrating higher reading and writing achievement than students in schools serving similar populations. A second set is examining interdisciplinary instruction, in which English is taught in conjunction with other subjects (e.g., history, science); this approach has been popular in school reform but there is little systematic research about its effects. A third set of studies examines how features of curriculum, instruction, assessment, and policy interact to affect learning and achievement in a broader and more typical sample of classrooms.

### ***Literacy for life: The role of school subjects, home, and community***

To meet the new, higher standards of performance being called for nationally, students must learn that different purposes and occasions require different reading, writing, and language skills. For example, each school subject area has its own vocabulary, specific formats for reading and writing, and acceptable types of argument and evidence. So, too, do different social situations and jobs. Students’ courses in all

subjects thus contribute to their development of general literacy skills. Home and community also foster literacy in ways that have important historical as well as present day dimensions. The literacy required in today's workplaces differs greatly, for example, from that at the turn of the century, just as the literacy required of customers at a fast food outlet differs from that at a bank. It is important to understand not only the literacy demands of various situations, but also how students learn to negotiate these demands and demonstrate achievement within and across them.

Four sets of studies are addressing these issues. All are particularly concerned with the kinds of talk and writing that are appropriate in particular situations, and how this talk and writing shapes the development of literacy skills.

- ◆ The first is a large-scale quantitative study that examines reading, writing, and talk in over 100 ninth-grade English and social studies classrooms.
- ◆ The second involves a close analysis of the literacy demands of the national science and mathematics standards and related curriculum and assessment materials.
- ◆ The third examines the special problems that speakers of English as a second language encounter as they navigate different subject matters in inner city classrooms.
- ◆ And the fourth looks at the role of home, community, and other institutions in shaping literacy expectations and supporting literacy development.

### *The role of technology in literacy achievement*

Technology is another issue in the national debate about effective instruction. Not only must schools prepare students for a world increasingly dominated by technology; they are also being asked to harness that technology to help students learn. To do either, schools need to know more about current technologies and the ways they can be used most effectively to foster literacy learning. This knowledge can help teach-

ers, administrators, and policymakers make decisions about what technology to invest in and how best to use it to increase student achievement. Because technology is potentially so important in literacy learning, a series of CELA studies is investigating not only the literacy skills required to effectively use new technologies (e.g., multimedia, the world wide web), but also the characteristics of effective instruction employing these new technologies.



### *Teacher education and professional development*

Teachers today are being asked to teach an increasingly diverse student population and to help all of their students meet ever-higher standards of performance. Yet we have very little research on how to help new teachers or members of the current teaching force acquire the knowledge and skills necessary for success at this difficult task. If we do not understand how to ensure that program improvements are carried out by new graduates and practicing teachers, such improvements will have little effect. Through a series of longitudinal studies of teacher preparation programs and continuing education at sites in different parts of the country, CELA researchers are identifying features of professional development programs that lead teachers to adopt practices that promote higher levels of student literacy achievement — and that help teachers sustain those practices in the field.

# Emerging Results:

## *Finding a Balance in Curriculum and Instruction*

From its current studies, the Center on English Learning & Achievement is developing a set of research-based recommendations useful to researchers, practitioners, and policy makers in the national debate about how to insure that all students attain the highest levels of achievement. These recommendations extend the Center's earlier work on literature education, but with some new insights that arise from the Center's broader scope and from the changing policy environment.

One of the results that is emerging from a variety of studies is the importance of balance in the most effective curriculum, instruction, and assessment. For example, a continuing debate at all levels of English and language arts instruction has been between advocates of a skill-oriented curriculum and advocates of a meaning-oriented curriculum that places more emphasis on higher-order processes such as reasoning and critical thinking. Most recently, the loudest debate has been about beginning reading, but it has counterparts in the teaching of writing and literature at all grade levels. CELA studies suggest that rather than using one or the other approach, effective programs find a balance in which basic skills and meaningful activity support and enrich one another.

In contrast, the public debate — and much previous research — has set such approaches in opposition to one another, and thus has worked against providing students with the most effective English and language arts programs. A better question is how to integrate these different facets of effective programs rather than segregating them. The critical issue in achieving balance is

not *how much* of one approach or the other, but *how* they are interrelated.

The effectiveness of balance in curriculum and instruction is a specific instance of a set of general findings that are emerging across the various research studies currently undertaken by the Center. As these are enriched and clarified in CELA's continuing research, they are leading to specific recommendations for the improvement of literacy learning across subjects and at all levels. For example, to date CELA researchers are finding that the most effective environments for insuring achievement in English and literacy have the following features:

### ***Strategic curriculum that requires ongoing consideration of students' knowledge and needs***

In the most successful classrooms, lessons are continuously reworked to help students achieve longer-term goals. In such classrooms, curriculum is carefully considered to insure that it will be challenging, coherent across the grades, and adapted to the local contexts of classroom, home, and community. It is strategically planned and strategically enacted on a day-to-day basis in each classroom. For example, such curriculum is responsive to the demands of high stakes tests by insuring that needed language and literacy skills and strategies are learned in the context of meaningful activities planned throughout the year and across the grades. In contrast, in many classrooms curriculum is treated only at the level of broad topics or texts that will be covered, with little attention to the kinds of new language and literacy skills that are necessary for high and lasting achievement.

### ***Knowledge from action that engages students in meaningful conversations within fields of study***

The most effective contexts for literacy learning involve students in important fields of knowledge by helping them to participate in the debates and activities that give those specialties interest and usefulness. That is, they are taught to *engage in* the activities of such fields as science, literature, or history, rather than merely being asked to study *about them*. Such engagement gives meaning to what they are learning, providing a



need to learn both relevant content (information) and the modes of argument and evidence that are uniquely appropriate to each field. Rather than focusing on knowledge out of context, such curricula focus on the disciplinary and interdisciplinary conversations in which students should be able to participate, and on the language and literacy skills they will need in order to participate effectively.

### ***Thinking communities that understand that learning is a social activity***

Learning and achievement in English have important social and cognitive dimensions and occur most effectively when there is a sense of community — of teachers and students working together on intellectual tasks. Within such communities, students interact with each other and with their teachers on activities requiring thoughtful use of reading, writing and language. Effective thinking communities both support and challenge students in their learning, setting high standards of performance from all participants while providing them with the safety to take the risks that are necessary for new successes. Students and teachers may belong to many overlapping communities that support effective language and literacy learning, with roots in the home, the school, the classroom, and the larger world of work and society. In contrast, many less-effective classrooms treat learning as an individual activity, denying students opportunities to make essential connections and limiting their ability to have their ideas developed and shaped in interaction with one another.

### ***Orchestrated connections that create coherence and continuity within what students are learning***

CELA studies show that the most effective instruction helps students develop increasingly rich cognitive networks of knowledge, skills and strategies that connect new learnings to one another and to students' previous knowledge and experiences. The connections provide many kinds of coherence: they link new ideas

to one another and to what students already know; they provide meaningful contexts within which to acquire new skills and strategies; they link concepts across content areas; and they link learners to the world beyond school. These connections provide structure that helps students manage an ever-increasing amount of information. To best support learning and achievement, the connections must be apparent to the learner, whether they are discovered by the students or highlighted by their teachers, their classmates, or the instructional materials. In contrast, some less-effective approaches to literacy instruction have sought to isolate important knowledge and skills in order to make them easier to learn.

### ***Generative learning that allows students to go beyond what is taught***

Efforts to improve student achievement in language and literacy have sometimes focused simplistically on such features as time on task or student engagement. CELA studies suggest that the most effective contexts for learning go beyond simple engagement or mere application of knowledge. Rather, they emphasize generative understanding: they provide students the knowledge, skills, and strategies to reach new and deeper understandings. Such learning requires concentrated involvement with subject matter, including an awareness of underlying principles; familiarity with important content; and the ability to transfer new learning to unfamiliar contexts.

## **These broad characteristics**

of effective teaching and learning hold across the wide variety of settings CELA is studying, including classrooms at elementary, middle and secondary school levels, in English language arts as well as other subjects, and with students of widely varying levels of proficiency in English as a first or second language. They also apply to effective contexts for professional development and to effective uses of technology. The continuing research of the Center is testing these early findings and elaborating them further, to see how well they hold up as researchers turn them from broad characteristics of successful approaches to specific recommendations for policy and practice.

# Future Directions:

## *Design and Implementation of Effective Practices*

**C**ELA's research has contributed directly to the national debate about how best to assure that students reach high standards of achievement in challenging subject matter. The Center's studies have been clarifying the factors that contribute to effective teaching and learning, with a particular emphasis on helping all students attain both the basic and advanced reading, writing, and language skills necessary for success in school and beyond. The Center has been developing a rich knowledge base about what is involved in effective English teaching and learning across the elementary and secondary levels. But there is still much to be learned about how to use this knowledge to reform school programs to insure that students develop the reading, writing, and general language skills that they need for success in English and other subjects.



Building on this work, a natural next step in CELA's program of research will involve design, implementation, and professional development studies that use the insights gained in the past to design programs for schools and districts that are seeking to improve student learning and achievement in English. These studies will have a number of important goals, including:

- The redesign of local curriculum, instruction, and assessment practices to reflect the characteristics of effective English language arts programs specified in CELA's earlier research.
- The redesign of local curriculum, instruction, and assessment practices in other subject matters to support the development of the literacy skills specific to each subject matter.
- The design of preservice and inservice professional development programs that build the capacity to implement more effective programs in English and the language arts.
- Evaluation of long-term success of redesigned programs, as reflected in students' literacy achievements and their success in meeting high standards in challenging subject matter.
- The effective use of technology, both as an element in redesigned curriculum, instruction, and assessment and as a tool for professional development.

### **CELA research has**

**provided detailed information about how good classrooms work. Now it is time to look more directly at how to make less-successful classrooms work better.**

# Partnerships for **Improving Literacy Learning**

Over the years, the publications, presentations, and on-line resources of the Center on English Learning & Achievement have played an important role in the national dialogue about effective, research-based practice. CELA now receives a steady stream of requests for collaborations, from state education departments, other federal projects such as the National Assessment of Educational Progress (NAEP), testing organizations such as the College Board, and individual districts throughout the country. Four of the five largest school districts in the U.S. are part of CELA's current research. As part of its continuing efforts to develop research-based practice, in late 1998 CELA accepted an invitation to work with the National Writing Project on a pilot project to evaluate the effectiveness of this nation-wide, professional development program.

CELA has long worked closely with the NAEP in the assessments of reading, writing, mathematics, and science achievement. Results from Center research were used to shape the framework for the NAEP reading assessment, and, more recently, for the proposed voluntary national test of reading achievement. The collaborations with NAEP are long-standing and have included analyzing and interpreting NAEP results for a public audience.

CELA has deliberately built partner-

ships with the major organizations with a stake in the improvement of students' reading, writing, and language skills. For example, its national advisory board includes the executive directors of each of the major subject area associations, as well as representatives from the National Education Association and the American Federation of Teachers. Board members insure that CELA is addressing the issues of most concern to teachers and policymakers; they also share CELA's findings through their well-established networks for outreach and dissemination. Their organizations also use CELA as a resource for research-based practice, both in responding to inquiries from teachers, the public, and the press, and in developing their own policies and recommendations.

These partnerships are a strategic resource. On the one hand, they insure that CELA findings reach a large and well-targeted audience of researchers, practitioners, and policymakers involved in the national dialogue about how to improve students' language and literacy. On the other hand, they provide the Center with a large network of colleagues at all levels that its researchers can draw upon in implementing new programs and projects.

CELA represents a unique resource for improving education in the 21<sup>st</sup> century — a community of scholars and practitioners from diverse fields united in their desire to improve the teaching and learning of reading, writing, and language so that all students will have the knowledge and skills necessary for success in challenging subject matter, life, and work. The investment in CELA has created an institution that has both the capacity to mount large-scale, systematic research on a topic of continuing national significance, and the networks in place to insure that the results are disseminated rapidly, effectively, and convincingly to teachers, administrators, and policymakers throughout the country.

**For further information about current activities or copies of CELA publications, visit its website at <http://cela.albany.edu>.**

The Center's name and scope have both changed over the years. It began as the Center for the Learning & Teaching of Literature, a mini-center based at the University at Albany (1987-90). During its second cycle (1991-95), it became the National Research Center on Literature Teaching & Learning. For the period 1996-2001, it expanded its scope to include English and the language arts as they are learned across the curriculum, and the Universities of Wisconsin-Madison, Georgia, and Washington joined the University at Albany as partners in the National Research Center on English Learning & Achievement.



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## For more information

*For a full description of our current research activities, as well as copies of our research reports and newsletters, please visit our website at <http://cela.albany.edu>.*

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