

Improving Reading Comprehension in Middle and High School

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Over the past decade, several CELA studies have investigated the most effective ways to improve adolescent literacy achievement. Researchers and developers from the Center continue to work with teachers, administrators, and policymakers seeking to change curriculum and instruction to better serve the needs of adolescents to ensure that they acquire the high-level literacy skills they need to succeed in school, work, and life – and provide evidence of their accomplishment on their states' high stakes literacy tests.

This article will summarize some of the key findings from across CELA studies. They come primarily from CELA director Judith Langer's "[Beating the Odds](#)" Studies in middle and high schools, which she conducted from 1995-2000. Since that time, Langer and colleagues have conducted other major experimental studies whose findings confirm those I am focusing on here. In one of these, we worked with teachers to implement these and other findings and then measured what effect that had on adolescent literacy achievement. Data analysis of that study continues, and preliminary results are very promising. They will appear on this website as soon as they are available.

Another study took place in five states, examining 974 students in 64 middle and high school English classrooms in 19 schools. Here's what it found: Students who experienced **high level comprehension instruction** with an emphasis on **critical thinking, substantive discussion, connected curriculum, and challenging material** made greater gains across the school year than students who did not. These results have been reported in the American Educational Research Journal ([Applebee et al. 2003](#)) as well as in a recent online issue of this newsletter. They confirm what Langer had found in her "Beating the Odds" study, which I'd like to turn to next and use it to paint a picture of what it looks like when schools provide this kind of instruction for their adolescent students.

Langer and her team studied 88 classrooms of 44 teachers in 25 schools in 4 of our most populous states – CA, TX, FL, NY – in a range of economic and cultural communities, including in these states' largest urban centers (e.g., Miami-Dade, NYC).

14 of the 25 schools got better than typical results on their state literacy assessments, and 11 were typical, although teachers and administrators in all were working hard to make a difference. By better than typical, we mean that their students outscored demographically similar students in other schools. The research team's goals were to identify what made the higher performing schools different – both in terms of the professional lives of the teachers and the kind of instruction they offered students. Although the focus was English teachers and instruction, because so many of the English teachers were part of cross-disciplinary teams – as well as members of broader school leadership teams – findings reach beyond just the English language arts classroom to the broader school context. Langer has addressed all of this in a variety of peer-reviewed articles as well as in articles and books for a more general audience.

Let's look at what she found. What is it that effective schools do that is different from their typical counterparts?

- They invest in professionalism
- They give the academic program frequent “tune ups”
- They use high stakes tests to *enrich* the curriculum
- Instruction aims high and responds to student needs
- Parents, community and school work together

Effective schools invest in professionalism – and it pays off

What do we mean by this? Basically it has to do with school culture, and it has many aspects. Some of those aspects are

- Professional development is treated as instructional development. The focus of professional development is on instruction – what works and why to improve adolescent comprehension and performance.
- Teachers are *expected* to keep up with their fields. To attend meetings of the National or State Council of Teachers of English, for example. And when they return to their building, to discuss what they have learned with their colleagues. Time is made for this professional discussion to happen – it might be in regularly scheduled department or team meetings, or in whole faculty meetings. In fact, in the more effective schools, faculty meetings do not deal with administrivia – those matters are handled via memo or other means. Rather, faculty meetings are gatherings of professionals who spend their time together to work on things that will improve teaching and learning for the students in that school. These discussions help faculty develop a coherent approach to learning and teaching, and this coherence makes a difference – a positive difference – in student learning and achievement.
- Teachers and administrators work together to develop, carry out, and monitor coordinated improvement efforts. The school climate fosters ongoing critical analysis of their program and supports efforts to improve it.

Let me give you one short example of what an active professional community looks like: *Langer had been invited by an English language arts coordinator in Texas to come talk about her studies to a districtwide committee that was working on ways to improve their scores on the TAAS, the Texas high stakes assessment, while not losing what they felt was a thought-provoking English curriculum that they had carefully honed over the last decade. So she prepared a talk and flew to Texas. However, when she arrived, she learned that they had already read her research and instead of needing to hear about it, they wanted to probe with her specific areas that they were working on. They wanted her help, not her lecture. She spent the entire two hours answering their questions and helping them define the options to consider in choosing a research-based course of action to help their students do better.*

By using this example, I do not mean to devalue what we call “awareness sessions” to introduce an audience to new knowledge or ideas. But in more typical settings, professional development often does not go beyond such awareness sessions. Nor are the concepts brought in by the outside expert then thoroughly discussed by teachers and administrators, and the ideas accepted or rejected as being consistent, or not, with the needs of the students and the goals and instructional approaches of the school or district.

Effective schools frequently “tune up” their academic program so that it is coherent and consistent for each student

The previous section suggested that teachers and administrators are expected to keep up with their fields and bring new ideas to their colleagues for discussion – and adoption or rejection. In such places, the academic program is constantly being assessed and changed to meet changing needs or adopt more effective practices. This assessment is done within the context of the big picture of what the school is about. Another common feature of the more effective schools that Langer studied is that programmatic changes are comprehensive and complete. They are not piecemeal or fragmented, as they are in more typical schools. To have a coherent program in a middle or high school requires consistency within a department and often, especially at the middle school, within a cross-disciplinary team. And, in addition, with the ESL program, special education, and, now, tutoring services and extra help. Two key elements of effectiveness are that lone effective teachers are not enough to make a real difference for students; and the program that each student experiences needs to be coherent across grades and subjects. And – something most frequently forgotten – the coherence and connections need to be made overt to students. So often teachers and administrators see the connections and assume the students will, too. But often they do not. We must tell them and show them.

One area of programmatic disconnect in typical schools is extra help or tutoring. Under the NCLB requirements, some schools are even hiring these services out to outside firms. In New York State, the Academic Intervention Services (AIS) teachers in many districts are separate from the rest of the school – hired on a different budget line, responsible to a different administrator, and disconnected from the regular academic program. They neither meet with the faculty or department, nor have any say in what gets taught or learned or with what approach, etc.

But let’s see what it looks like in a school that has successfully integrated special education and extra help: in one effective middle school in New York State, students who need special services are not pulled out of the classroom. They spend the entire day in the regular program, sometimes with the help of the special education teacher or other assistance. The school has established a period at the end of the day for “team time,” and it is then that the “pull-out” services are provided. At this time all students have an opportunity for special help from their classroom teachers, and the teacher can request time to work with individual students – arranging with the special education and remedial reading teachers to do so, if the student was scheduled for the special service. The specialist teachers are part of department and instructional teams, so they know what is being taught, as well as the subject area teachers’ goals and what they consider

the essential knowledge and strategies for all students to learn. The specialists then can use the end-of-day session to reinforce what the teachers are doing in the classroom. In addition, the school offers an evening tutorial program for parents and students, again completely integrated with the overall school program.

In effective schools, high stakes tests are used to enrich the curriculum

I am sure you have heard – perhaps even made – the complaint that the current climate of high stakes testing is causing a narrowing of the curriculum; and it is, in typical schools. However, more effective schools have found ways to go *beyond* the assessments. Groups of teachers and administrators “deconstruct” the tests, figure out what underlying knowledge and skills they demand, and work together to integrate the teaching of those knowledge and skills into the curriculum. For example, if we were to examine a writing test for middle or high schoolers, we would be very likely to find an extended writing assignment – the five-paragraph essay, often with a prompt asking the student to persuade someone of something. Now, we might say, “Aha! We need to teach our students to write a five-paragraph persuasive essay,” and ensure that every English teacher includes that in the curriculum. Or we might go deeper, and say, “Our students need to understand that there are different purposes for writing, and they need to learn when to use each and how the purpose affects the organization, syntax, and word choices that they make.” These two responses lead to very different kinds of curricular and instructional decisions – and results.

Personally, my favorite example from Langer’s study is the one about two schools that took these different approaches. For the first few years after they changed instruction to try to improve student performance on their state’s 11th grade assessment, both schools’ scores went up. But in the fourth year, the state changed the prompt to a different kind of writing, and you know the result: The scores of the school that drilled students on the five-paragraph persuasive essay plummeted, while the scores at the school that focused on the purposes of writing remained high.

In effective schools, instruction aims high and responds to student needs

It is impossible for me to discuss this finding without addressing at least three aspects of instruction that relate to really engaging students in “minds on” work and ensuring that they acquire – really come to “own” – the knowledge and skills they need to succeed not just today and tomorrow but well down the road in school and in life.

1) Given how the human mind learns, it is essential that teachers help students develop what Langer calls “envisionments” of what they are studying. This requires starting with what students are thinking about any particular text or assignment, using questioning techniques that help students articulate what they are thinking about, connect what they are learning in one lesson to what they already know, teaching them to step back and analyze the materials as well as their own thinking, etc. Such instruction builds on prior knowledge, improves comprehension, extends thinking, supports students to go deeper and higher.

2) Going deeper and higher means not stopping when students “get it.” It means requiring them to generate new knowledge by using what they learned in a new way. It also includes teaching them strategies for thinking about the content and how to use it.

Let me give an example that comes out of a program for at-risk students in a high school business academy. This academy offers an academic program that combines with a career path that uses bilingual skills. The teacher in this case created a unit on affirmative action and debate for her 11th graders. Initially she required that they read one book or article for and one against affirmative action. She facilitated classroom discussions in which the students discussed their reactions to the two articles in ways that helped them come to understand the arguments and their own thinking about the issue. This is where many typical teachers would stop – not this one. She wanted students to develop even stronger envisionments on the topic and to develop and practice new skills. So she had them analyze and learn ways to structure an argument (needed for their statewide writing test) and to work through their ideas related to civil rights. Next she had them write argumentative papers from their own perspectives. After that they had to adopt the opposite perspective and give a short speech. Thus she offered these at-risk students opportunities to learn and practice a host of essential skills in reading, writing, listening, speaking, and thinking, as well as acquire the tools to rethink their own perspectives and come to appreciate the views of others. This is an example of instruction that makes students go higher and deeper than what is typical.

3) And the more effective schools use a blend of instructional types. This is especially important to note in a climate in which one group or another might claim that *their* approach to instruction is the silver bullet that should be adopted wholesale. Langer found that when programs and teachers rely heavily on only one type of instruction, no matter what type, their students perform less well than students in programs that use a combination of three types of instruction that she classifies as separated, simulated, and integrated.

Let me illustrate with a simple non-school example – but I think you can imagine how it translates into the classroom. If you know a young child who has self-generated the rule for forming the past tense in English, you might need to help him or her to learn ran rather than runned. So you might teach the correct form directly and separately, with examples: “The dog ran away. I ran to answer the phone. Yesterday you ran to meet mommy when she came home.” If you want the child to practice, you might engage him or her in conversation by suggesting that you tell each other about everything you did the day before. In doing so, the child would be practicing past tense forms (a simulated activity). And then you might make up a bigger activity with a larger purpose, but one that required the child to use the new skill. For example, you might write a letter to a cousin or friend to tell him/her about something you did (you writing what the child dictates). The letter writing has a larger communicative purpose into which you have integrated the use of the past tense. Note that you took on this teaching task at a point when the child needed it. Now imagine how this transfers to the English classroom for the teaching and learning of mechanics, grammar, syntax, literary devices, etc.

Effective schools work in partnership with parents and the community

In schools that work well, parents and community members are partners with teachers and administrators; the schools also understand their communities – their educational experiences, goals, needs. And this is true in suburb as well as city. Parents and community members are part of the school teams that deal with issues of management, academics, leadership, upkeep, problems, and dreams – real members, not just tokens. *In one New York State school, for example, a Building Cabinet sets goals and priorities for the school, including processes and plans to reach them. Although 2-3 administrators sit on that panel, they are outnumbered by teachers, teacher assistants, parents, and students, and no administrator ever chairs the Cabinet.*

Of course the school must foster an atmosphere of trust and truly welcome parents into the building, including its classrooms.

The school can be a resource and reach out into the community by offering services for parents – evening courses on study skills or adolescent literature, partnerships with individuals or agencies that can help with needs beyond the academic (parenting, anger management, substance abuse, tobacco use). And just as the more effective schools ensure that all their academic program offerings are part of a comprehensive and coherent program, so, too, are their after school or evening offerings an extension of the regular program. In some of the typical schools studied, the evening outreach programs might have a totally different administration and not be linked to the day school at all. Yet the two programs serve the same community.

Perhaps most important, in effective schools, all the adults are focused on what is best for students and work together to ensure the success of those children. And not insignificantly, the more effective schools are caring schools – places that care for adults and children alike, that cultivate community and a culture of caring.

Overall, parents and community are seen as partners in all aspects of the school – a resource to draw on and into the school community.

Through the examples above, I have tried to show how these features might be enacted in a variety of settings. For additional details about each feature, see Langer's [*Getting to Excellent*](#), which also includes a checklist for each feature that allows you to rate your school as more effective or more typical along a number of aspects of each effective feature.