Making the commitment to improve literacy in secondary schools must be at the very heart of school reform efforts. Too often, literacy improvement efforts are parenthetical to other goals in secondary education. Teachers and educators systematically discriminate against those who do not have the literacy skills to meet course demands and against teachers and staff involved in advocating for or providing literacy services. This unfortunate situation lessens the importance of secondary schools in preparing our children to succeed in college and to compete in society. It also has consistently and systematically left millions of students behind.

Recent evidence indicates that policymakers and advocates of secondary school reform are taking seriously the problems of adolescent literacy and are turning their attention to supporting research-based efforts to improve it. These groups place increasing emphasis on students successfully completing more rigorous secondary core content courses, on students meeting standards as measured on state assessments, on schools addressing the needs of an increasing number of English language learners in classrooms, and on moving all students toward a standard of college readiness that will allow them to be successful after high school.

For the past 15 years, a significant research thread at the University of Kansas Center for Research on Learning (KU-CRL) has been to design and test effective schoolwide literacy instruction in secondary schools. A series of studies focused on how to increase the success of high school students in rigorous academic courses revealed several factors that challenge secondary educators who are seriously concerned about improving the performance of all students to make literacy a central part of school improvement and reform agendas:

1. Requirements for teachers to ensure that all students meet standards have put pressure on teachers to teach more content faster. This has led to an instructional focus on breadth of coverage rather than depth of understanding. Consequently, students are required to be more independent and self-sufficient learners, leaving students who have limited literacy skills and strategies unable to acquire the content and, as a result, meet standards.
2. Because many students do not have the literacy skills and strategies necessary to meet these standards, core curriculum teachers must face the challenge of compensating for the lack of these skills and strategies to ensure mastery of critical content, regardless of literacy levels.
3. Attention to the connected development of increasingly complex vocabulary and background knowledge is needed if comprehension is to improve and students are to benefit from instruction in grade-appropriate comprehension strategies.
4. Students must have authentic and successful experiences using newly acquired literacy skills and strategies in core curriculum courses to solve problems and meet high school course demands if they are to become motivated to develop literacy skills.
5. Direct instruction, teacher modeling, and practice in literacy strategies must become authentically embedded in the teaching practices of all secondary teachers so that students will have sufficient opportunities
to practice and generalize these skills and strategies.

6. Secondary core curriculum teachers can promote literacy by planning and focusing on critical content and critical comprehension strategies so that instruction is targeted and mastery is achieved for all learners.

7. Even when instruction, modeling, and practice is provided across secondary courses, many poor readers will need additional intensive instruction and practice in these strategies if they are to master and use them effectively.

8. Students who do not comprehend well but who have developed fluent word recognition skills through the fourth-grade level need opportunities for direct, systematic, and intensive instruction in learning strategies that are appropriate for handling both expository and narrative text.

9. Opportunities for direct, systematic, intensive instruction in sound-symbol correspondence, word automaticity and fluency are needed to address the word recognition skills for those adolescents who are reading below the fourth-grade level.

Collectively, these factors challenge secondary schools to make a dramatic shift in the way they organize and deliver instruction, if both content and literacy goals are to be realized. Only by adopting a schoolwide approach to literacy in which every teacher is committed, involved, and championing coordinated literacy improvement efforts can we make our secondary schools count for all students.

**Meeting the Challenge**

There have been efforts to reform secondary schools to improve learning in ways that lead to outcomes that meet the standard of college readiness and postsecondary success. Most efforts to reform secondary schools have focused on creating infrastructure supports by adding block and flexible scheduling of courses, providing additional time for teacher learning and planning, providing behavioral supports to improve discipline, and creating opportunities for more personalized learning by restructuring schools into smaller learning communities. Other school reform efforts have focused on creating system learning

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**Figure 1: Critical Values for System Change**

**Shared...**

- **Vision**
  - Instructional Core
    - Standards-Informed Curriculum Planning
    - Connected Courses & Coherent Learning
    - Continuum of Literacy Instruction
    - Motivation Strategies
    - Engaging Instructional Materials & Activities
    - Student-Informed Teaching

- **Knowledge**
  - System Learning Supports
    - Progress Monitoring
    - Collaborative Problem Solving
    - Instructional Coaching
    - Professional Learning

- **Leadership**
  - Infrastructure Supports
    - Flexible Scheduling
    - Time for Teacher Learning and Planning
    - Extended Learning Time
    - Behavioral Supports
    - Smaller Learning Communities

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...that respects the individual in the system
supports to more closely monitor student progress, collaboratively make decisions to address problems in learning, encouraging coaching among one another to improve instructional effectiveness, and creating a culture in which staff value and embrace continuing collaborative learning and school improvement.

Although many of these secondary school reform efforts have addressed important problems that have been barriers to improving the academic achievement of students, they have not been able to significantly affect the quality of classroom instruction provided nor improve the outcomes of academically diverse groups of students. More recently, it has become clear that structural and systemic supports must be accompanied by attention to improvement to the instructional core of the secondary school. This instructional core must include attention to an aligned instructional system that is based on standards-informed instruction, connected and coherent courses, engaging instructional materials and activities, and instruction that is informed by the knowledge and backgrounds of students to anchor relevant and meaningful learning. Furthermore, the instructional core must be centered on a view of secondary schools that is grounded in providing a continuum of literacy instruction that ensures the ongoing development of those learning skills and strategies required for college readiness and postsecondary success. (See Figure 1)

As a result of our research, the staff of the KU-CRL has developed a framework called the Content Literacy Continuum (CLC; Lenz & Ehren, 1999). This structure provides a vehicle for (a) considering the factors that influence the success of secondary literacy efforts, (b) leveraging the talents of secondary school faculty, and (c) organizing instruction to increase in intensity as the deficits that certain subgroups of students demonstrate become evident.

The CLC has been used to guide the use of interventions in the Strategic Instruction Model (SIM) developed by KU-CRL over the past 27 years. However, as a framework, the CLC is sufficiently comprehensive in scope to accommodate any research-validated intervention that has been effective with adolescent populations. In short, the CLC is a tool for enabling all secondary teachers and administrators to participate in the development and evaluation of a literacy initiative that is consistent with the goals of secondary education for all students and that will dramatically improve literacy outcomes for those who are at risk of academic failure.

The five levels or types of instruction associated with the CLC are presented and described in Figure 2. These five levels are based on keeping content as a central focus in literacy efforts, defining roles and responsibilities of all school-level educators, providing a continuum of instructional intensity for ensuring success for a wide range of students, and providing a framework for integrating a variety of literacy improvement efforts. Each of these levels collectively represent a framework for organizing secondary reform around the goals of improved literacy.

It is important to note that secondary educators must work collaboratively to synchronize instruction across the five levels to ensure the success of a schoolwide literacy effort. The continuum of instruction represented in the CLC framework is more than a way of sorting or organizing instructional practices and commercial educational programs. Several instructional principles define how the levels of instruction should be implemented to complement and reinforce one another to ensure a coherent learning experience for students. First, the instruction provided at each level should reinforce a common set of literacy strategies that can be enhanced and leveraged at each level of the continuum. This cross-level focus ensures that students are learning a set of critical core strategies with sufficient opportunities to practice different applications across different content areas and under different conditions. Second, content enhancements used to ensure content area learning at Level 1 of the CLC that compensates for poor learning strategies should be built on and around the critical core set of literacy strategies taught and practiced at the other levels of the continuum. Third, the literacy strategies that define Levels 2 and 3 should help students apply the skills acquired from instruction in Level 4. Fourth, the intervention provided by a speech-language professional represented in Level 5 should be informed by the core set of literacy strategies...
and content enhancements. In other words, CLC should not be thought of as framework for siloing programs that seem to fit at a given level. Regardless of the program, there are instructional conditions that must be created across the levels regardless of the goals of individual programs to create the type of instructional synergy necessary to improve literacy in secondary schools.

The CLC Adoption and Implementation Process

Adopting the CLC requires a focused schoolwide effort. A school interested in putting the CLC in place needs to take stock of the literacy and content mastery performance of students, as well as its existing efforts to meet literacy needs. Faculty should consider how the efforts already under way fit into each of the five CLC levels and learn how to integrate SIM and other necessary components into current practices. Initial adoption takes place over a three- to five-year period as school staff work through activities associated with the phases of planning, implementing, and sustaining a literacy improvement initiative. A commitment for the duration of the adoption process on the part of the administration and faculty is a necessary component.

A hallmark of the entire adoption process is that it is co-constructed with school leaders, resulting in a growth partnership. It is clear that one of the reasons that secondary school reform efforts have failed to significantly improve the academic performance of all students is that few efforts have addressed the unique culture that shapes the likelihood of change in secondary schools. System change in secondary schools must be closely tied to the individual in the system responsible for the nature and quality of classroom instruction. Therefore, the success of literacy-centered secondary school reform is likely to hinge on the ability of school leaders to collaboratively co-construct change with teachers. School leaders must be able to create a shared (a) vision that allows for individual contributions, (b) knowledge base that leads to individual learning, (c) system of leadership that seeks the voice of individuals, (d) sense of responsibility that shapes individual planning and action, (e) system of evaluation that guides self assessment, and (f) accountability system that motivates individual action. Using this set of values to guide reform would call into question traditional systemic approaches that rely solely on top-down models to accomplish school change.

Conclusion

Although professional development is required to implement the CLC, it is more appropriate to conceptualize CLC adoption as a school-improvement initiative requiring more than professional development. Adopting the CLC is framed in the context of helping schools meet their school-improvement goals. The current focus of schools and school districts on meeting the No Child Left Behind requirements regarding Adequate Yearly Progress (AYP) typically enhances the motivation of schools to target improvement efforts on behalf of all learners. Serious attention must be paid to tapping into or creating the infrastructures to promote individual and systemic change, including data-based decision making, effective leadership activities, and the creation of professional learning communities.

References


**Figure 2: The Content Literacy Continuum**

**A Framework for Guiding the Development of Schoolwide Literacy Services in Secondary Schools**

<table>
<thead>
<tr>
<th>Level of Instruction</th>
<th>Teacher Actions</th>
<th>Example</th>
<th>Professional Competence</th>
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<tr>
<td><strong>Level 1: Enhanced Content Instruction</strong>&lt;br&gt;Goal: Students learn critical content required in the core curriculum regardless of literacy levels.</td>
<td>Teachers: (a) ensure mastery of critical core content for all students regardless of literacy levels by leveraging the principles of universal design in explicit teaching routines, (b) ensure that all students acquire the vocabulary and background knowledge required for basic literacy associated with comprehension and communication through classwide accommodations, individual accommodations, or technology, and (c) respond to increasingly complex content demands requiring strategic manipulation of content such as categorizing, developing analogies, comparing, questioning, or evaluating.</td>
<td>Teachers use Content Enhancement Routines such as The Unit Organizer Routine to deliver content. Teachers use standards-based planning models to target critical content that needs to be enhanced.</td>
<td>Teachers responsible for ensuring content mastery must select the critical content, learn how to enhance that content for mastery, and then implement these enhancements through the use of explicit and sustained teaching routines. Special service providers must help core curriculum teachers provide this type of instruction. This facilitates a mindset in which instruction is delivered in ways that students acquire content information as well as active approaches to learning and responding.</td>
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<td><strong>Level 2: Embedded Strategy Instruction</strong>&lt;br&gt;Goal: Students are presented opportunities to learn and apply a set of powerful learning strategies for improving literacy across core curriculum classes to learn critical content.</td>
<td>From a small set of powerful learning strategies, teachers select one or two strategies that match the specific demands needed to learn the critical content in their core curriculum courses. Teachers use direct explanation, modeling, and group practice to teach the strategy and then prompt student application and practice in content-area assignments throughout the school year. For students receiving more intensive strategy instruction (Level 3), teachers assist them in generalizing strategy use to core curriculum courses. Instruction in strategies is embedded across a number of instructional settings, including settings in which tutoring is provided.</td>
<td>Teachers teach the steps of a paraphrasing strategy (RAP), regularly model its use, and then embed paraphrasing activities in course activities through the year to create a culture of &quot;teaching to retell.&quot; Graphic organizers (e.g., The Unit Organizer) introduced as part of Level 1 instruction are used to model and prompt paraphrasing of critical chunks of content.</td>
<td>Teachers adopt a mindset that it is important to embed instruction in learning strategies within content-area instruction. Content teachers learn a shortened form of an Eight-Stage Instructional Sequence for selected learning strategies (e.g., Paraphrasing, Self-Questioning, etc.) that they can use to provide classwide instruction. Teachers assist in the generalization of strategies that may emerge from Level 1 instructional routines; these emerging strategies may guide students in strategic approaches to content literacy demands such as making comparisons, categorizing, or questioning.</td>
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<td>Level 3: Intensive Strategy Instruction</td>
<td>Level 4: Intensive Basic Skill Instruction</td>
<td>Level 5: Therapeutic Intervention</td>
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<td><strong>Goal:</strong> Students who need more intensive strategy instruction than what can be provided through embedded strategy instruction are provided more intensive and explicit strategy instruction.</td>
<td><strong>Goal:</strong> Students develop the foundational decoding, fluency, and comprehension skills associated with K-3 literacy through specialized, direct, and intensive instruction.</td>
<td><strong>Goal:</strong> Students with underlying language disorders learn the linguistic, related cognitive, metalinguistic, and metacognitive underpinnings they need to acquire content literacy skills and strategies.</td>
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<td>Special education teachers, reading teachers, and other support personnel provide more intensive instruction through additional learning experiences. These may be provided in the general education classroom, in a pullout program, through the offering of a separate course, or through beyond-school tutoring programs. Assessments for screening and ongoing data-based decision making are put in place to help identify students who may profit from these courses. These students are generally those who minimally have developed the decoding skills and fluency levels associated with reading proficiency at the third- to fourth-grade level and need to develop the comprehension strategies to successfully meet the reading demands of the core curriculum.</td>
<td>Special education teachers, reading specialists, and speech-language pathologists team to develop intensive and coordinated instructional experiences designed to address several literacy deficits. Special education teachers and reading specialists will most likely deliver these services. They also assist content teachers in making appropriate adaptations in content instruction to accommodate severe literacy deficits. Intensive instruction in listening, speaking, and writing can also be part of these services. Services may be delivered in a pullout program, through the offering of a separate course, or through beyond-school programs.</td>
<td>Speech-language pathologists deliver curriculum-relevant language therapy in collaboration with special education and other support personnel who are teaching literacy. Speech-language pathologists collaborate with special education teachers to assist content teachers in making appropriate modifications or accommodations in content instruction to address the needs of students with language disorders. Speech-language pathologists work with special education teachers to help students with language disorders acquire learning strategies.</td>
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<td>Instructional options such as additional courses are created to systematically and intensively teach learning strategies that students need to meet course demands. When core curriculum teachers notice students having difficulty learning and using strategies such as paraphrasing, they work with support personnel to provide more intensive instruction.</td>
<td>The staff develops course options for support services that directly address deficits that cannot be addressed through less intensive efforts. Students still participate in the history class because the teacher is presenting content in ways that take into consideration literacy problems. Intensive research-based programs, such as The Corrective Reading Program, typically are chosen.</td>
<td>Students identified as language impaired may have difficulty learning The Paraphrasing Strategy. They may need support to provide more language-sensitive instruction or clinical intervention delivered by speech-language pathologists who can address the linguistic and metalinguistic underpinnings of the Paraphrasing Strategy (RAP) and the academic content.</td>
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<td>Special education and other support personnel learn how to provide intensive and explicit instruction, practice, and feedback in specific learning strategies and the process of strategic tutoring that shows students how to apply strategies as they complete assignments. Professional development focuses on helping teachers learn the strategies and course management competencies required to provide the intensive instruction required to ensure student mastery of learning strategies.</td>
<td>Special education teachers and reading specialists learn research-based approaches to implement programs that develop foundational literacy skills and strategies in students who read below a fourth-grade level.</td>
<td>Speech-language pathologists learn curriculum-relevant approaches to language therapy that interface with other intensive intervention provided to students. Speech-language pathologists and special education teachers learn to collaborate to provide coordinated and integrated services.</td>
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