

Case Technologies to Enhance Literacy Learning

A New Model for Early Literacy Teacher Preparation

Laurie A. Henry, Jill Castek, Leslie Roberts, Julie Coiro, and Donald J. Leu

lahenry@charter.net, jill.castek@comcast.net, lroberts2@earthlink.net, jcoiro@snet.net, and donald.leu@uconn.edu

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Laurie A. Henry is a doctoral student focusing in the area of literacy and technology, **Jill Castek** is a doctoral student in cognition and instruction, **Leslie Roberts** is a graduate of the integrated Bachelor's/Master's program, **Julie Coiro** has completed her third year in educational psychology in the doctoral program, and **Donald J. Leu** holds the John and Maria Neag Endowed Chair in Literacy and Technology at the University of Connecticut, Storrs.

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Improving reading achievement for all students is a critical national issue.¹ Both academic and workplace success depend upon a person's ability to read and write well. All children need early literacy experiences to help them develop these necessary skills. Students who love books are motivated to spend time reading and grow to value the rewards literacy brings. Young students who struggle to acquire literacy rarely make up lost ground and fall further behind each year. For these reasons, well-trained literacy educators who can spark young children's interests in books, foster writing and self-expression, and teach the skills and strategies needed to read and write well are essential in early childhood programs.

Many teacher preparation programs are not able to provide extensive firsthand experiences in actual classrooms. Thus, the opportunities for preservice teachers to apply theory to practice are limited. By using the Internet-based Case Technologies to Enhance Literacy Learning (CTELL) <<http://ctell.uconn.edu>>, preservice teachers can observe exemplary literacy instruction virtually. The videos provide an overview of classroom routines, structure, and instructional components; the observer can listen to the classroom teacher describe his or her instructional beliefs and literacy practices.

Organized by cases, anchor video segments welcome viewers into schools and classrooms to experience literacy-rich learning environments. The video provides an overview of classroom routines, structure, and instructional components as the observer listens to the classroom teacher explain his or her educa-

tional philosophy and practices. The viewer can interactively explore kindergarten and first-, second-, and third-grade activities in order to identify the characteristics of exemplary teaching. Under the guidance of their professor, preservice teachers can discuss individual student assessment and instructional needs on a case-by-case basis. While the CTELL cases are not meant to replace classroom experiences, they are designed to provoke discussion and reflection among student-teachers as they are exposed to high-quality teaching. By reflecting on exemplary teaching, preservice teachers are better prepared to enter their own classrooms ready to help all children become literate.

Twelve Principles of Effective Literacy Learning

Through an extensive literature review, CTELL's four principal investigators (Charles K. Kinzer, Teachers College, Columbia University; Linda D. Labbo, University of Georgia; Donald J. Leu, University of Connecticut; William H. Teale, University of Illinois at Chicago) identified twelve principles of effective literacy instruction that provide the organizational structure for the CTELL cases. Teachers featured in the video segments are skillful lesson designers and decision makers whose knowledge, insight, and orchestration of effective literacy practices in every phase of lesson delivery reflect the twelve principles.

By understanding these twelve principles of effective literacy instruction, teacher librarians can support emergent readers and their

teachers. CTELL has developed these descriptions, examples, and links to segments from our video cases in order to help librarians understand how to maximize literacy learning within their schools.

Language, Culture, Home Background, and Literacy Instruction

Success in learning to read and write requires making connections to a child's language, culture and home background.² Reading achievement and the development of positive reading attitudes are associated with instruction that builds on the socio-cultural and linguistic backgrounds that children have developed prior to entering school.³ Incorporating diverse student backgrounds can easily be accomplished by tapping the expertise of the school librarian and bringing literature representative of many cultures into the classroom. Bilingual books are wonderful resources for students learning English and help create an appreciation of other languages and cultures.

In video segment 1, <http://ctell.uconn.edu/KQuest/sharpley_clip1.htm>, Mrs. Sharpley, an exemplary first-grade teacher, uses classroom interviews to encourage students to share their own language, customs, and beliefs. Their reading and writing experiences help foster a sense of community and an appreciation for diversity among her students.

Emergent Literacy Foundations

Emergent literacy refers to the early literacy concepts, skills, and positive attitudes that form the foundation for subsequent reading and writing achievement.⁴ Teaching that demonstrates left-to-right print directionality, one-to-one matching between spoken and written words, letter recognition, high-frequency word recognition, letter/sound relationships, and other early skills helps build a solid foundation for literacy learning. Students need opportunities to apply these skills, first with support and then on their own. Supported by school library resources, literacy-rich classroom environments and planned, meaning-based literacy experiences can foster the development of these skills and strategies.

In video segment 2, <http://ctell.uconn.edu/KQuest/taxel_clip2.htm>, we see Mrs. Taxel's print-rich kindergarten classroom. Connections between reading and writing are established as students explore classroom centers offering interesting and engaging activities. Students are developing early literacy skills in a socially interactive context that feels more like play than work.

Phonemic Awareness Instruction

Phonemic awareness activities develop a child's ability to recognize and manipulate sound patterns in oral speech. Playing with oral language by matching, isolating, segmenting, manipulating, and blending sounds increases reading achievement for early emergent readers and writers.⁵ Phonemic awareness instruction can include identifying and producing pairs of rhyming words during a read-aloud or practicing segmenting words into their individual sounds (phonemes) during writing activities. By asking teachers to keep them abreast of the particular focus of their instruction, school librarians can gather and display trade books that reinforce the particular phonemic awareness skills that the students are currently working on in their classrooms.

In video segment 3, <http://ctell.uconn.edu/KQuest/taxel_clip3.htm>, Ms. Taxel involves parents of her kindergarten students in their children's learning of sound-symbol correspondence. Students and their families are asked to locate and bag objects at home that begin with a specific letter. Later, students' sound bag objects are shared in the classroom to reinforce their learning.

Decoding Instruction

Decoding instruction (often called phonics instruction) supports students in learning the sound-symbol relationships of language. This knowledge is positively related to student achievement in reading.⁶ In the context of meaningful reading and writing in the classroom, decoding instruction develops students' working understanding of how sounds are represented alphabetically. School librarians can invite youngsters to associate letters and sounds as they share big

books, alphabet books, and books with rhyming words, such as those by Dr. Seuss.

In video segment 4, <http://ctell.uconn.edu/KQuest/sherry_clip4.htm>, Mrs. Sherry's third-grade students manipulate letter tiles to make words, which builds sound recognition and helps students internalize common spelling patterns and phonograms.

Comprehension Instruction

The central purpose for reading is understanding or "meaning making." Comprehension instruction consists of activities that develop children's abilities and strategies for understanding written language.⁸ Comprehension is fostered when students ask questions and discuss literature they have read themselves or books that have been read to them. The school librarian can support the classroom teacher by providing access to books that students are able to read and enjoy. Together, these professionals can develop thematic units that integrate literacy with content areas, creating opportunities for exposure to many genres of text. These collaborative efforts can result in an increase in student comprehension and enhanced reading achievement. Activating students' prior knowledge before reading and sharing connections to content are instructional methods that foster students' personal responses to texts. Further, when reading aloud, teachers and school librarians may model comprehension strategies using a "think aloud," a method of explicitly demonstrating the metacognitive strategies that successful readers use.

In video segment 5, <http://ctell.uconn.edu/KQuest/mc_collum_clip5.htm>, Mrs. McCollum develops thematic units in which students are reading and practicing literacy skills while learning science and social studies content. By applying strategies orally and in writing, students learn to make meaning in a genuine context.

Independent Reading

The journey to lifelong reading proficiency is paved with a variety of interesting texts and opportunities to read.⁹ When teachers and librarians introduce a variety of texts that have wide appeal for K-3 students (such as pattern books, ABC books, poetry, fairy tales, popular trade books, and informational texts) students'

reading motivation increases. Independent reading can foster enjoyment and promote reading fluency as well as comprehension. Setting aside time within the school day to independently select, read, and discuss books is an important way to promote reading development. Allowing open access to the library and providing special areas for independent reading can increase motivation. Rotating collections of colorful and entertaining books, magazines, and other texts at a variety of levels tempt students to explore topics that interest them.

In video segment 6, <http://ctell.uconn.edu/KQuest/granato_clip6.htm>, Mrs. Granato's second-grade classroom environment is conducive to independent reading. She plans ample time during the school day for reading a variety of texts. Granato incorporates show-and-tell experiences to interest students in topics to explore during independent reading sessions. Each child has a book bin filled with materials at an independent reading level that can be enjoyed on his or her own and shared with others.

Fluency Instruction

Reading achievement and increased comprehension can be developed through fluency.¹⁰ When students independently reread texts at a conversational rate, it helps them develop an expressive reading style, recognize common words, and attend to punctuation cues. Performing a story in Reader's Theatre format is a motivational way to teach students to represent voice and intonation in their oral reading. Buddy reading provides an enjoyable context for fluency practice. In shared reading, the teacher guides a group reading of an enlarged text (big book) with the use of a pointer. Students chime in as they feel comfortable, reading in cooperation with the group. Creating opportunities for students to read orally or in cooperation with others builds students' reading fluency skills in an enjoyable context. School librarians have the resources to provide Reader's Theatre texts, big books, and other media to support fluency instruction, and they provide the environment in which some of these activities can occur.

In video segment 7, <http://ctell.uconn.edu/KQuest/mc_collum_clip7.htm>, Mrs. McCollum, a first-grade teacher, reads aloud expressively from a variety of texts, including

storybooks and informational texts. This technique not only ignites interest and excitement in students but provides an opportunity for students to hear what a fluent, expert reader sounds like. After students hear expressive readings by their teacher, they have many opportunities to develop their own fluency.

Integrating Writing and Reading

Integrating writing and reading instruction enhances achievement in both areas.¹¹ By writing in response to reading, students are constructing meaning from text as they practice sound-symbol relationships. Sharing personal written responses to literature, writing e-mail to others, and writing about various subjects support literacy in authentic contexts.¹² School librarians and classroom teachers who plan together to meet mutual or complementary objectives share responsibility for students' development of writing skills. The school library is also one of many places in the school to display samples of student writing, especially if they are responses to library books.

In video segment 8, <http://ctell.uconn.edu/KQuest/frost_clip8.htm>, Dr. Frost uses a writer's workshop format with shared and independent readings to integrate reading and writing on a daily basis in her multi-age, primary classroom.

Enthusiasm for Reading and Writing

Teaching in ways that foster young children's enthusiasm for, and engagement with, reading and writing enhances the likelihood that they will learn to read and write successfully and become lifelong readers and writers.¹³ Enthusiasm is generated by connecting reading and writing in thematic units, fostering peer collaboration, and creating opportunities for purposeful sharing of student writing. When students read and write about topics that engage their intellect, curiosity, and imagination, their enthusiasm and motivation grow. Savvy librarians purchase and make available select fiction and nonfiction resources that supplement teachers' thematic units as well as other resources appropriate to the interests and skill levels of the students. They create a desire for books through read-alouds, book talks, and imaginative displays.

In video segment 9, <http://ctell.uconn.edu/KQuest/florin_clip9.htm>, Miss Florin, a second-grade teacher, incorporates an interactive writing process that demonstrates idea generation, composition, and editing. Each member of the class is invited to share the pen to help construct a nonfiction report on a specific penguin species using facts collected by students. As they write, the class learns to practice sound-symbol relationships, conventions of writing, and their understanding of grammar. Students are motivated to learn from each other and feel empowered when their books become reading material for the whole class.

Technology and Early Literacy Development

Not only does the use of technology in the classroom enhance motivation and generate excitement, it also provides important opportunities for students to develop new literacy skills. Integrating technology into literacy instruction gains more prominence each year.¹⁴ Access to computers and Internet technologies in early elementary classrooms can develop foundational skills in both conventional and digital literacies.¹⁵ Librarians make themselves indispensable when their knowledge of software programs fosters the development of skills on which teachers are focusing.

In video segment 10, <http://ctell.uconn.edu/KQuest/gaulding_clip10.htm>, Ms. Gaulding uses technology to encourage the mastery of emergent literacy concepts. Each morning students compose a digital message, which is then read by a text-reader program. Students are encouraged to join in a choral reading of the big-book computer message. Finally, to encourage rereading, copies of the morning message are printed for each student.

Early Assessment and Instructional Intervention

Monitoring students' early literacy development through ongoing classroom assessment and then planning lessons and instructional intervention based on the diagnostic information obtained enhances achievement.¹⁶ The International Reading Association and National Council for Teachers of Education have developed goals and procedures for teachers to use as guidelines for

the assessment of literacy.¹⁷ Analysis of story retellings and running records inform teachers of students' use of strategies. Lessons in phonemic awareness, comprehension, fluency, or word identification can build competency. Teachers can maximize students' reading success by building on their strengths and providing reading experiences designed to meet their individual needs. Teachers who develop and share goals for children needing extra assistance with the librarian will find that they have an instructional ally.

In video segment 11, <http://ctell.uconn.edu/KQuest/granato_clip11.htm>, Mrs. Granato emphasizes the importance of ongoing assessment to gain insight on how to best to support each student in her class.

Teacher Knowledge, Insight, and Orchestration of Instruction

A teacher's knowledge and insight inform daily teaching decisions and the orchestration of instruction.¹⁸ Teachers continually make decisions about what to teach and how to deliver instruction, modifying instruction to meet each child's needs and drawing upon a particular "literacy framework" to link their practice to theory.¹⁹ During preservice education, each prospective teacher develops a personal literacy framework based on his or her own classroom learning experiences, philosophy and beliefs about literacy acquisition, and teaching in general. This is put into action through planning and execution of lessons during field experiences, then reflecting on those experiences and modifying that framework as needed. Through this process, preservice teachers develop effective teaching strategies to use in their future classrooms to foster student achievement.

CTELL Project: Implementation

CTELL's online video cases are being used at selected universities to prepare effective educators. Teachers have improved their understanding of the twelve research-based principles of effective literacy instruction, and implementation of these practices is increasingly evident in classrooms around the United States.

Preliminary research findings suggest that CTELL's video cases are effective in raising

preservice teachers' understanding of best practices of effective literacy instruction.²⁰ As graduates begin their careers as elementary teachers, data collection will continue to inform the researchers about the effect of the video cases on student achievement. This effect will be measured by examining implementation of the twelve research principles in classrooms of first-year teachers who were instructed using CTELL during their teacher preparation program. For additional information about this project, visit CTELL's informational site at <<http://ctell.uconn.edu>>. ●

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