Reading Assessment Strategies for On-Line Learners

Jeonghee Huh
Atsusi "2c" Hirumi
University of Central Florida

Abstract

Compared to conventional classroom settings, e-learning relies heavily on a student's reading ability. However, many students, particularly those at-risk or those who may have already dropped out of conventional schools, tend to have low reading ability that affects their ability to learn online. The problem is that relatively little has been done to address reading problems confronted by online distance learners and educators. E-learning often begins with an assumption that students can read. This study (a) identifies empirical-supported reading assessments employed by conventional schools, and (b) proposes reading assessment strategies for use by online educators. A review of reading assessment literature reveals that in conventional schools settings, classroom teachers are the primary people who detect students' potential reading problems; reading specialists are often called upon to further diagnose and treat reading problems; authentic assessments and reading software are being used as an integral part of classroom instruction to help students enhance their reading skill. The proposed assessment strategies include extant data analysis, learner-self and informant assessments, and reading-specific and performance-based assessments.

Introduction

Attracted by the potential of online distance education, many virtual schools are being established nationwide that are expanding curricula options for a wide range of students. Clark (2001) reported continued growth of virtual schools, with a trend from virtual high schools to virtual K-12 schools. Fourteen States had approved virtual schools and it was estimated that 40,000 to 50,000 K-12 students would take online courses in 2001-2002 (Clark, 2001).

The problem is that there is little empirical research to help guide distance educators and learners faced with reading difficulties. It is often assumed that students taking online courses and/or entering virtual schools can read. However, many students, particularly those at-risk or those who may have already dropped out of conventional school, tend to have low reading ability that affects their ability to learn online. While focus is being placed on address reading issues in conventional schools, there is a dearth of studies and information on how to address reading problems at a distance; when instructors and reading specialists are separated from the learner by geographic distance. Considering online courses rely heavily on a student's reading ability, the potential problems are evident. Empirically supported methods are needed to assess and treat reading problems confronted by online distance learners and educators.

Conventional K-12 schools are expending considerable time, effort and resources to enhance students' reading skills and to meet state reading standards enacted by the No Child Left Behind (NCLB) Act of 2001 (NCREL, 2002). The reading standards count for virtual schools as well, especially if they receive state-funding. In a virtual learning environment, however, it can be more difficult to monitor student progress than in the conventional setting: one reason is that, in the virtual environment, it is neither as easy to trace a student's problems, nor to determine their causes (Easton, 2003). "There are no visual cues that suggest when a student is frustrated, confused, fired, or bored" in a virtual learning environment (Easton, 2003, p. 89). To the point, student reading ability remains significant to the progress of virtual schooling.

It is apparent that if a student has reading problems, he or she may have difficulty in progress through online courses and may eventually dropout. Reading problems result from the deficit of cognitive development, comprehensive skills, or unfamiliarity to vocabulary or curriculum (Blachowicz, 1999). Online educators need reading assessment strategies to determine whether or not a low-achieving student has reading problems. Online educators also need a systemic approach to address such problems once they have been identified.

The purpose of this study is to identify optimal reading assessment strategies for use by online educators across the curriculum. Specifically, this study (a) identifies empirical-supported reading assessment practices employed by conventional schools, and (b) proposes reading assessment framework for use by online educators.

Literature Review

Four basic questions guided the review of literature. The findings were then used to formulate the reading assessment framework presented after the review.

What are current reading assessment practices and how are they administered?

The types of reading assessments put in practice vary from school to school. Denton (1999) reported that school districts employ national examinations, state-developed or state-recommended tests, and various informal measures to assess reading. However, if schools purchased assessment tools other than the state developed or recommended, they would not receive state-funding or reimbursement (Denton, 1999).

The National Assessment of Educational Progress (NAEP) is administered once a year for students in grades 4, 8, and 12 to measure student progress in reading as well as other subject areas (NCES, 2003). The NAEP results are based on a sample of student populations, and NAEP does not provide individual scores for students or schools (NCES, 2004).

Examples of state-developed tests include Georgia's Basic Literacy Test (BLT) for K-5, Delaware's State Testing Program for grades 3-4, Arkansas' checklists for K-4 and Louisiana Literacy Profile for K-1. State-recommended tests include, but are not limited to the verbal subset of the California Test of Basic Skills (CTBS) for K-1 recommended for use in Maryland and a reading comprehension subset of the California Achievement Test (CAT) for grade 2 recommended in Oregon (Baker & Smith, 2001; Denton, 1999), and Oklahoma's Priority Academic Skills and Phonics Took Kit for grades 1-12 (Denton, 1999).

State mandated reading assessments take place at least once a year, focusing on assessing a student's early reading skills and monitoring their reading progress over time (Denton, 1999). Most school districts in the Southern Regional Education Board (SREB) states conduct early reading assessments at least once a school year. The majority of students range from Kindergarten through grade 3 but many districts extended reading assessments to grade 8 and even grade 12 to monitor students' progress (Denton, 1999). The timing of reading assessments, however, does vary by state. For example, Tennessee school districts employed early reading assessment for prekindergarten through grade 3; South Carolina school districts employed it for grades 1-2; and Georgia school districts employed it for K-12 by modifying the levels of the assessment (Denton, 1999). Furthermore, NCLB Act requires that tests be administered every year in Grades 3 through 8 in math and reading in all schools beginning in the 2005-2006 school year (NCREL, 2002).

Formal reading assessments are administered face-to-face by trained individuals in local schools either in one-on-one or small group settings. No instances of formal reading assessments were found in the literature that were administered at a distance. Furthermore, to ensure the coherence of assessment practices, the SREB states provide classroom teachers with training programs on administering the assessment (Denton, 1999). Although variance was found, the consensus among educators is that assessment practices should be balanced and coherent with instructional events to ensure a student's acquisition of early reading skills; that the assessment employed should have evidence for reliability and validity based on research results, or alternative actions should be made to ensure the consistency of assessment practices (Denton, 1999). For example, Georgia Department of Education developed and implemented the Basic Literacy Test (BLT) for ongoing reading assessments, and used Iowa Test of Basic Skills (ITBS) to assess the effectiveness of BLT to ensure classroom teachers' and students' needs in reading (Denton, 1999)

Table 1 depicts a current paradigm of reading assessment practiced in conventional schools. The current paradigm includes both formal and informal reading assessment practices described so far. Only a few examples of assessments are listed in the table based on the literature to help distinguish the categories.

Table 1. *Current Reading Assessment Paradigm in Conventional Schools**

Teacher-Generated Assessments
  - Direct:
    o Concepts About Print, phonemic awareness, phonics, & rubric-based assessments (Grades K-6)
    o Concepts About Print, phonemic awareness, phonics, literature response journals, & rubric-based assessments (Grades K-3)
    o Phonics awareness, running records, informal reading inventories, reading miscue analysis, qualitative reading inventories, & rubric-based assessments (Grades 4-6)
  - Indirect: Interviews, observations, analysis of writing samples or journals, teacher-crafted questionnaires, text discussions, etc. (All grades)

District-Mandated or School-Mandated Assessments
  - Paper-Based Tests:
    o Arkansas' Reading Recovery Programs (Grade 1 with low reading skills)
    o Georgia's BLT: Basic Literacy Tests (Grades K-12)
    o Louisiana's DRA: Developmental Reading Assessment (Grades 1-3)
    o Mississippi's Reading Instructional Intervention Supplements (Grades K-8)
    o Oregon's Oral Reading Fluency (Grades 1-3)
    o Virginia's PALS: Phonological Awareness and Literacy Screening (Grades K-1)
  - Computer-Based Tests:
    o Accelerated Reader 5.0** (Grades not specified)
    o Autoskill Reading Program (Grades not specified)
    o Reading Mastery I & II*** (Grades 1-3)
    o Success-Maker Comprehensive Courseware System (Grades K-8)
    o SuccessMaker** (Grades K-8)
    o Yopp-Singer Test of Phonemic Segmentation*** (Kindergarten)

State-Mandated Standardized Assessments: Administered onsite and at least once a year.
  - Delaware State Testing Program (Grades 3-4)
  - Georgia Kindergarten Assessment Program
  - Oklahoma's use of the Iowa Tests of Basic Skills (Beginning in the grade 3)
  - OSA: Oregon State Assessment (Grade 3)
  - West Virginia's Statewide Assessment Programs (Grades 1-12)

National Standardized Assessments: Administered once a year. (Grades 4, 8, & 12)

* indicates the table depicts only selected examples of assessments from the literature reviewed.
** indicates the software as being assessment-specific tool.
*** indicates the software as being intervention purpose.

Teacher-generated assessments are divided into two groups: Direct and Indirect. Direct assessments are practiced by reading teachers for monitoring student reading progress, whereas the indirect assessments are typically administered by teachers to monitor student achievement of specified learning objectives (not necessarily reading). District-mandated or School-mandated assessments are depicted in two groups: Paper-based and Computer-based tests. Paper-based tests consist of state-developed assessments, while computer-based tests consist of reading instructional and assessment-specific software. State-mandated standardized assessments include state-developed or recommended tests. Finally, the national standardized assessments are shown with a little bit information about administration and target students.

How are potential reading problems identified?
Teachers are the primary people to identify and determine whether or not a student has potential reading problems. As Denton (1999) reported, teachers can use test results of either formal or informal assessment to monitor a student's reading skills. The formal assessments include state-mandated standardized tests for monitoring reading progress, while the informal assessments include school-district or school-wide tests, curriculum-based tests, and teacher-strategic alternatives for ongoing performance assessment (Arthaud, Vasa & Steckelberg, 2000;

Campbell, 2001; Denton, 1999; Rueda & Garcia, 1994 & 2003). Curriculum-based reading tests include vocabulary tests, 'end of unit basal tests,' 'skills continua' and 'end of the book basal tests' to name a few (Arthaud, et al., 2000; Rueda & Garcia, 1994). Teacher-strategic alternatives include, but are not limited to interviews with students, parents or previous teachers, ongoing observations, teacher-crafted questionnaires, text discussions, analyses of writing samples or journals, and monitoring of oral reading (Arthaud, et al., 2000; Rueda & Garcia, 1994 & 2003).

Many states also provided assessment tools for teachers to use in identifying potential reading problems. Examples include, but are not limited to Arkansas' Reading Recovery programs and Virginia's Phonological Awareness and Literacy Screening (PALS) for potentially at-risk students (Denton, 1999). With increased access to computer technology, reading software applications also play an integral role in determining a student's potential reading problems. For example, Thomas Intermediate School in TN used Accelerated Reader 5.0 to assess and track a student's reading progress (Pittner & Coit, 2000).

A teacher's professional judgment is used to decide which assessments are appropriate to determine if a student has a potential reading problem. Variance in teachers' choices is evident in the literature. Campbell (2001) found that the majority practicing teachers in selected K-6 schools, regardless teaching experiences and grades, perceived four assessments to be highly effective: Concepts About Print (41%), phonemic awareness assessment (51%), phonics assessments (46%), and rubric-based assessments (44%). Teaching experiences and grades, however, revealed variance in the teachers' choices; for example, beginning teachers (5 years or less experience) selected 3 assessments as being highly effective, while experienced teachers selected 11 assessments in the same category. K-3 teachers chose five assessments as being highly effective, whereas grades 4-6 teachers chose six assessments in the same category (Campbell, 2001). Similar differences were also evident among special education teachers and elementary bilingual teachers (Arthaud, et al., 2000; Rueda & Garcia, 1994 & 2003). Variance in the use of reading software confirmed that teachers established and used their own criteria as well as adopting policy-makers' recommendations for selecting reading software (Byrd, 2001; Pittner & Coit, 2000; Sibenaller, 2001; "Texas Middle School," 1995).

A teacher's role in determining a student's potential reading problems is evident. Yet, it is anticipated that parents may be able to identity whether or not their child has potential reading problems, based on interactions with their child. In addition, parents who own reading software could use it for teaching their child and monitoring the child reading ability.

If potential reading problems are found, what happens next?

If a teacher thinks that reading problems may be considerable or are symptomatic of other problems, then the teacher typically refers the student to school psychologists or reading specialists for further examination. Blachowicz (1999), for example, described how two children included in a multiple case study were referred to a reading specialist based on their teachers' reports. Valleley, Evans and Allen's case study (2002) described a seven-year-old boy, who was first identified as possibly having learning disabilities by his teacher, was referred to a school psychologist who determined that the boy had specific reading disabilities and was transferred from his public school to an outpatient center for treatment.

Trained teachers or those who are assisted by trained reading professionals can diagnose a student with reading problems using formal reading/achievement assessment instruments, and the diagnostic tests are paper-based and administered onsite (L. Nelson, personal communication, October 8, 2004). The state of Florida, for example, has selected three diagnostic assessment tools for school districts to use: those are 'Fox in a Box,' the 'Diagnostic Assessment of Reading (DAR),' and the 'Early Reading Diagnostic Assessment (ERDA)' (Torgesen, 2004, p. 9). The Fox in a Box is designated to use by teachers who have trained or with advanced experience in administering the tests, whereas the DAR and ERDA are more appropriately used by reading coaches, school psychologists, or diagnosticians (Torgesen, 2004). As seen in Blachowicz's and in Valleley, Evans and Allen's case studies, school psychologists or reading specialists are the only professionals who diagnose students with learning disabilities and making decisions on follow-up treatments. Assessment software for use in diagnosing a student with learning disabilities has not yet been made available on the market (L. Nelson, personal communication, October 8, 2004).

If a teacher believes that potential reading problems are not too severe, then the teacher is typically the primary person to provide reading interventions. For instance, elementary teachers, including bilingual and special education teachers, employ various reading assessment tools to monitor student reading skills and use their results for making instructional decisions in reading (Arthaud, et al., 2000; Baker & Smith, 2001; Campbell, 2001; Rueda & Garcia, 1994 & 2003). Denton (1999) reported that many states provided school districts with intervention programs or supplements for helping students with low reading skills, such as Arkansas' intensive reading programs during the school year and summer schools and Mississippi's Reading Instructional Intervention Supplements.

Can software programs assess and improve reading skills?

It appears that computer technology is making dramatic shifts in reading practices across the U.S. Conventional schools are adopting software programs, such as Autoskill Reading Program, Accelerated Reader 5.0, SuccessMaker, Success-Maker Comprehensive Courseware, and Reading Mastery to name a few, to help students progress in reading skills. School districts nationwide report reading progress and positive influence on schools' reading environment using reading software in regular language arts courses and extra curricular reading activities with transient learners (Baker & Smith, 2001; "Texas Middle School," 1995), students with low reading levels, the ESL, the gifted, the learning disabled (Pittner & Coit, 2000; "Texas Middle School," 1995), students in remedial or supplemental programs (Baker & Smith, 2001; Byrd, 2001; Pittner & Coit, 2000), students in an intensive reading program or students with severe reading problems (Sibenaller, 2001). Pittner and Coit (2000) suggested that if decided to purchase reading software, educators should seek for advices from professional community and research results supporting the software, and should preview the software to seek its appropriateness for their students and subject areas.

Proposed Framework

A framework for monitoring and assessing reading skills in online learning environments is depicted in Figure 1. The framework posits three interrelated steps that should be planned as an integral part of online teaching and learning.
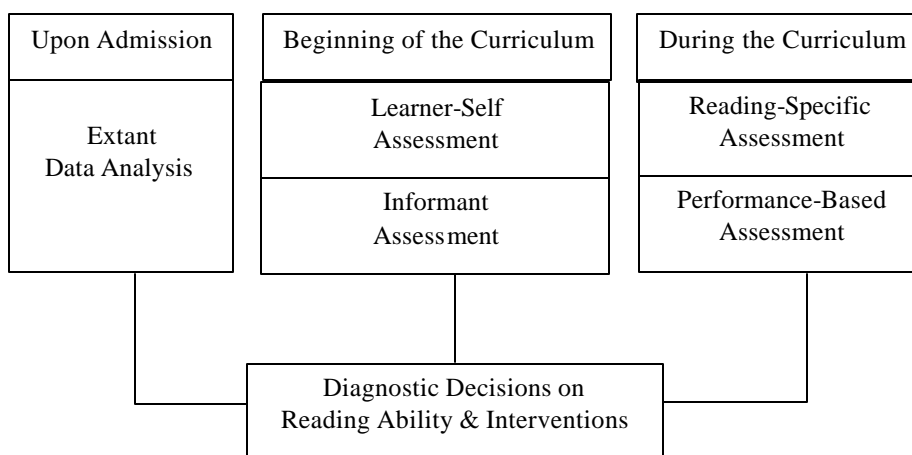
Figure 1. Proposed Reading Assessment Framework for Virtual Schools

Table 2 depicts specific reading assessment that online educators may use during each phase of the proposed framework. The proposed assessments have been found to be useful to monitor and assess student reading skills and progress by published studies (e.g., Arthaud, et al., 2000; Baker & Smith, 2001; Byrd, 2001; Campbell, 2001; Denton, 1999; Merchant, 2003; Pittner & Coit, 2000; Rueda & Garcia, 1994 & 2003; Sibenaller, 2001; "Texas Middle School," 1995).

Table 2. *Proposed Reading Assessment Strategies for Virtual Schools**

Upon admission
<u>Extant Data Analysis</u>
  - State-mandated standardized tests (Grades K-12)
  - District-mandated or School-mandated tests (Grades K-12)
  - IEPs (Individual Education Plan) or permanent records (Grades K-12)

Beginning of the curriculum
<u>Learner-Self Assessment</u>
  - Student interview (Grades K-12)
  - Publisher-provided tests (Grades K-12)
  - CBTs (Computer-Based Test) (Grades K-12)
  - Teacher-crafted attitude surveys (Grades K-12)
  - State/School-district/School developed or recommended tests (Grades K-12)

<u>Informant Assessment</u>
  - Parent interview (All grades)
  - Teacher interview (All grades)

During the curriculum
<u>Reading-Specific Assessment</u>
  - CBTs (Grades PreK-12)
  - Short answers or essays (Grades 1-12)
  - Writing products or journals (Grades K-12)
  - Teacher-crafted CRTs (Criterion-Reference Test) (Grades K-12)
  - Modified forms of publisher-provided tests (Grades K-12)
  - Parallel forms of State/School-district/School tests (Grades K-12)

<u>Performance-Based Assessment</u>
  - Short answers or essays (Grades 1-12)
  - Writing products (Grades K-12)
  - Teacher-crafted CRTs (Grades K-12)
  - Email discourse texts (Grades 1-12)
  - Virtual chat archives (Grades 1-12)
  - Discussion board posting texts (Grades 1-12)

* indicates the table depicts recommended assessment instruments for online educators to identify a student's potential reading problems across the curriculum. Student grades labeled consist of students ranging from regular to bilingual to special education students.

Extant Data Analysis

Extant data analysis consists of reviewing existing data related to a student's reading abilities. Extant data analysis should be carried out upon admission by staff or online teachers. Materials for use in extant data analysis include state-mandated standardized test results, district-mandated or school-mandated test results, IEPs (Individual Education Plan) or permanent records. These materials can be useful for assessing reading abilities of students ranging from kindergarten through grade 12. Individual student's test results and records may be entered into a database so that such extant data may be accessible to online teachers across the curriculum. Teachers may then use the extant data to facilitate student learning. Of course, such databases must be designed to protect students' right to privacy.

Standardized tests have been found to be most frequently used by special education teachers in conventional schools and play an important role in evaluating reading progress of students placed in special education and bilingual education programs (Arthaud, et al., 2000; Rueda & Garcia, 1994). Although formal assessments (aka., standardized tests) were not recommended for assessing individual student's reading progress or for making instructional decisions (Arthaud, et al., 2000), formal assessments can be useful for online teachers to identify potential reading problems..

IEPs and permanent records were found to be the most useful for assessing students' reading abilities by special education teachers in conventional schools (Arthaud, et al., 2000). As all students have their permanent records and special education students have their IEPs in general, it makes sense that those materials can be useful for online teachers to determine a student's potential reading problems and to make follow-up decisions prior to the beginning of their courses.

Learner-Self and Informant Assessments

Learner-self assessments ask student to assess their own reading abilities. Informant assessments ask someone who knows the student to rate the student's reading abilities. Learner-self and informant assessments need to be done at the beginning of a curriculum by online teachers. As Guterman (2002, p. 284) noted, "One could not understand the children's level of development, and therefore learning, without considering their actual development level and their potential development." Successful educational practices for literacy growth of especially low-achieving minority students take into account sociocultural aspects, student individual experiences and potentials (Rueda & Garcia, 1994). The learner-self assessment is a way to get in individual student's inner worlds, whereas the informant assessment to the student's outer worlds that is also important to know the student's contextual circumstances.

Strategies or materials for use in learner-self assessments include student interview, publisher-provided tests, CBTs (Computer-Based Test), teacher-crafted attitude surveys, or state/school-district/school developed or recommended tests. Such strategies and materials can be useful for assessing students ranging from kindergarten through grade 12. Student interviews can be carried out via email exchange, postal mailing, or telephone. It is recommended that such assessments include open-ended questions. The usefulness of email exchange is backed by Merchant's (2003) study whose participants were students ranging 7 through 10 in ages in writing projects in the U.K. The remaining assessment tools have been found to be most frequently used and useful for assessing student reading skills by practicing teachers in conventional schools (Arthaud, et al., 2000; Byrd, 2001; Campbell, 2001; Pittner & Coit, 2000; Rueda & Garcia, 1994 & 2003; Sibenaller, 2001; "Texas Middle School," 1995).

Strategies for use in informant assessments include parent or teacher interview. These interviews can be useful for gathering information about reading abilities of students in all grades. The interviews can be carried out via email exchange, postal mailing, or telephone. Usefulness of the informant interviews for student reading assessments has been identified by special education and bilingual education teachers in the literature (Arthaud, et al., 2000; Rueda & Garcia, 1994 & 2003). For example, a bilingual education teacher reported using student journals for communicating with parents and succeeding teachers about the students' reading progress (Rueda & Garcia, 2003). Therefore, the informant assessment as well as the learner-self assessment can be useful for online teachers to identify potential reading problems and to make follow-up decisions at the beginning of a course.

Reading-Specific and Performance-Based Assessments

Reading-specific assessment stands for assessment administered by trained teachers, reading specialists and school psychologists that focus specifically on assessing students' reading ability. Performance-based assessments represent instruments employed by teachers to measure learners' achievement of learning outcomes in areas other than reading (e.g., regular course assignments and exams).

Materials for reading-specific assessments include CBTs, short answers, essays, writing products, journals, teacher-crafted CRTs (Criterion-Reference Test), modified forms of publisher-provided tests, or parallel forms of State/School-district/School tests. The CBTs can be useful for assessing students in grades PreK-12. Reading instruction and assessment software have been in the market, aiming for Prekindergarten to grade 12 to adult learners, and they have been found to be useful for teachers to obtain immediate feedback on student progress and to make immediate follow-up decisions (Baker & Smith, 2001; Byrd, 2001; Pittner & Coit, 2000; Sibenaller, 2001; "Texas Middle School," 1995). Short answers or essays can be useful for assessing students in grades 1-12. Because they are part of time-limited assessments in general, short answers or essays may not be useful for assessing PreK students in reading.

Materials for performance-based assessments include short answers, essays, writing products, teacher-crafted CRTs, email discourse texts, virtual chat archives, or discussion board posting texts. Short answers or essays can be useful for assessing students in grades 1-12, but may not for PreK students because they are part of time-limited assessments in general. Writing products or teacher-crafted CRTs can be useful for assessing students in grades K-12. Teacher-crafted CRTs may include an alternative that says "I can't understand what this question is asking for" in every quiz item to monitor student comprehension skills on a subject and to provide interventions thereafter. The remained assessment materials can be useful for assessing students in grades 1-12, but may not for PreK students because they require more sophisticated skills in Internet tools and delivery platforms. Usefulness of

and student age aptness for email exchange is backed by Merchant's (2003) study as mentioned earlier. The virtual chat and discussion board as well as email exchange can be applicable for use in performance-based assessments if online courses are housed in a course management application that has such features.

Summary

The proposed reading assessment framework, including extant data analysis, learner-self and informant assessments, and reading-specific and performance-based assessments, should be planned as an integral part of online teaching and learning. The proposed framework is designed to help students maximize their potentials to learn online and to help teachers best serve their students in learning online.

Teachers should become voracious consumers of extant data to determine if students have potential reading problems prior to their courses being started. Conducting learner-self and informant assessments, teachers should understand students' inner and outer worlds to facilitate their learning at the beginning of a course. Yet, variance in students' and informants' competencies in communication tools should be taken into account for the assessments. Teachers should become consumers and generators of authentic reading assessment tools and strategies to facilitate student learning during the course. Furthermore, as Byrd (2001) and Sibenaller (2001) suggest, if reading software is selected, teachers should make sure it is appropriate for their students in their given learning environment and the teachers themselves should facilitate student learning.

"Successful teachers obtain information about their students from high-quality assessments" (Nitko, 2004, p. 3). The proposed framework utilizes empirical-supported reading assessments employed by conventional schools to identify potential reading problems. However, the effectiveness and efficiency of employing such methods and assessments online are still questionable. Further study is need to determine if conventional reading assessment methods are applicable online and if the proposed framework is suitable for guiding the implementation of such reading assessments to enhance online learning.

References

Arthaud, T. J., Vasa, S. F., & Steckelberg, A. L. (2000). Reading assessment and instructional practices in special education. *Diagnostique: Professional Bulletin of the Council for Educational Diagnostic Services*, 25(3), 205-227.

Baker, S., & Smith, S. (2001). Linking school assessments to research-based practices in beginning readings: Improving programs and outcomes for students with and without disabilities. *Teacher Education and Special Education*, 24(4), 315-332.

Blachowicz, C. L. Z. (1999). Vocabulary in dynamic reading assessment: Two case studies [Electronic version]. *Journal of Reading Psychology*, 20, 213-236.

Byrd, M. (2001, September/October). Technology helps increase reading scores. *Media & Methods*, 38(1), 12-14. Retrieved September 25, 2004 from Academic Search Premier.

Campbell, M. B. (2001). Inquiry into reading assessment: Teachers' perceptions of effective practices. *Reading Horizons*, 42(1), 1-20. Retrieved September 25, 2004 from World Wide Web: http://wilsontxt.hwwilson.com/pdfhtml/00996/P167R/ZS4.htm

Chan, C., Kato, K., Davenport, E. C., & Guven, K. (2003). Analysis of subsequent educational decisions of high school dropouts and their life outcomes. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL. (ERIC Document Reproduction Service, No. ED478991).

Clark, T. (2001). Virtual schools: Trends and issues - A study of virtual schools in the United States. *DLRN/WestED TA Consulting*. Retrieved September 22, 2004 from World Wide Web: http://www.wested.org/online_pubs/virtualschools.pdf

Denton, D. R. (1999). Reading reform in the SREB states: Early assessment. *Southern Regional Education Board*, Atlanta, GA. (ERIC Document Reproduction Service, No. ED435089).

Easton, S. S. (2003). Clarifying the instructor's role in online distance learning [Electronic version]. *Communication Education*, 52(2), 87-105.

Guterman, E. (2002). Toward dynamic assessment of reading: Applying metacognitive awareness guidance to reading assessment tasks [Electronic version]. *Journal of Research in Reading*, 25(3), 283-298.

Merchant, G. (2003). E-mail me your thoughts: Digital communication and narrative writing. *Reading*, 37(3), 104-110.

NCES (National Center for Education Statistics). (2003). The Nation's report card: Reading highlights, 2002. Washington, DC. (ERIC Document Reproduction Service, No. ED471795).

NCES (National Center for Education Statistics). (2004). Overview: The Nation's report card. Washington, DC. Retrieved October, 7, 2004 from World Wide Web: http://nces.ed.gov/nationsreportcard/about/

NCREL (North Central Regional Educational Laboratory). (2002). Understanding the No Child Left Behind Act of 2001: A quick key to reading. Retrieved September 22, 2004, from World Wide Web: http://www.ncrel.org/litweb/pdfs/qkey1.pdf

Nitko, A. J. (2004). *Educational assessment of students* (4th ed.). Upper Saddle, NJ: Pearson Education.

Pittner, M., & Coit, D. (2000, September/October). Reading programs to improve skills. *Media & Methods*, 37(1), 42-44. Retrieved September 25, 2004 from Academic Search Premier.

Rueda, R., & Garcia, E. (1994). Research Report 9: Teachers' beliefs about reading assessment with Latino language minority students. *National Center for Research on Cultural Diversity and Second Language Learning*, Santa Cruz, CA. Retrieved September 22, 2004, from World Wide Web: http://www.ncela.gwu.edu/pubs/ncrcdsll/rr9/

Rueda, R., & Garcia, E. (2003). Assessing and assisting performance of diverse learners: A view of responsive teaching in action. In A. I. Willis, G. E. Garcia, R. Barrera, & V. J. Harris (Eds.), *Multicultural Issues in Literacy Research and Practice*. Mahwah, NJ: Lawrence Erlbaum Associates.

Sibenaller, K. (2001, March/April). Reading assessment tools & tangible improvement. *Media & Methods*, 37(5), 6-7. Retrieved September 25, 2004 from Academic Search Premier.

Texas middle school adopts software for reading assessment and instruction. (1995, April). *T.H.E. Journal*, 22(9), 69-70. Retrieved September 25, 2004 from Academic Search Premier.

Torgesen, J. K. (2004). Florida's Reading First assessment plan: An explanation and guide. *Florida Center For Reading Research*. Retrieved October 14, 2004, from World Wide Web: http://www.fcrr.org/assessment

Valleley, R. J., Evans, J. H., & Allen, K. D. (2002). Parent implementation of an oral reading intervention: A case study [Electronic version]. *Child & Family Behavior Therapy*, 24(4), 39-50.