Final Report: Interactive Technology Literacy Curriculum Online (ITLC Online)

by

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IDEAs that Work
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Executive Summary

Interactive Technology Literacy Curriculum Online (ITLC Online) was a Steppingstones of Technology Innovation for Students with Disabilities Phase 1 (Development) project awarded to the Center for Best Practices in Early Childhood (the Center) at Western Illinois University (WIU). ITLC Online's goal was to improve services for young children with disabilities by offering access to effective family and professional development materials focused on emergent literacy via a web-based system organized in an easy-to-use format. ITLC Online's website is available at <http://www.wiu.edu/users/itlc/>.

Teachers and other early childhood professionals, faculty, preservice personnel, family members, and care givers across the nation can use ITLC Online workshops for staff development activities, as part of coursework at undergraduate and graduate levels, or as a means to gain personal knowledge. ITLC procedures and materials have the potential to positively impact literacy skills of many more young children with disabilities than can be reached when adults are trained using traditional face-to-face strategies.

ITLC Online was based on *ideas that work*—four projects that provided the *knowledge and skills base* that informed the website's content and approach. Content was organized into six online workshops: *Literacy Foundations, Literacy Environments, Children's Software, Technology Integration, Authoring Software,* and *Literacy Assessment*. Other features include (1) a database containing 2,040 children's books, categorized according to common classroom themes with information on availability of special formats, such as big books or books on tape. Database fields include author, illustrator, book title, publication date, publisher, publisher location, subject descriptors, and others. Book listings in each category are available in PDF format for printing or downloading; (2) 238 links to resources for materials, products, and information. ITLC Online's Resources contains eight sections including a *Glossary*, *Articles and Books*, *Children's Books*, *Family Info*, *Literacy News*, *Organizations*, *Technology News*,

and *Software and Equipment*; and (3) 71 PDF files including articles, curriculum activities, resource information and instructional materials contained in the six workshops.

Six Advisory Panel members evaluated the ITLC Online website. All strongly agreed that ITLC workshop content reflects developmentally appropriate practice; all strongly agreed that materials on the website are current; and all either agreed or strongly agreed that the content addresses the topic thoroughly. All agreed that the website design was good and that the site was easy to navigate and use.

ITLC Online contributes both to knowledge and practices beneficial to the fields of early childhood and of converging technologies. Workshop content addresses emergent literacy, a topic of growing importance in early childhood. As opposed to on-site, face-to-face training, with its accompanying time constraints and travel expenses, the ITLC Online website not only represents a more cost-effective model of distance education, addressing a nationwide audience, but also addresses varying needs of divergent users.

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Overview

Interactive Technology Literacy Curriculum Online (ITLC Online) was a Steppingstones of Technology Innovation for Students with Disabilities Phase 1 project developed by the Center for Best Practices in Early Childhood (the Center) at Western Illinois University (WIU). ITLC Online's goal was to improve services for young children with disabilities by offering access to effective family and professional development materials focused on emergent literacy via a web-based system organized in an easy-to-use format. ITLC Online's website is available at <http://www.wiu.edu/users/itlc/>.

ITLC Online was based on *ideas that work*—the positive results of two emergent literacy research studies and two research-based early childhood technology-related literacy projects conducted at the Center. These four projects provided the *knowledge and skills base* that informed the website's content and approach. Content was organized into six online workshops: *Literacy Foundations, Literacy Environments, Children's Software, Technology Integration, Authoring Software,* and *Literacy Assessment*. Content included classroom management techniques targeting methods to integrate literacy activities during group time and free choice. Critical management factors included placement of the technology center, facilitating children's management of the computer center, and supporting groups of computer users to promote children's communication and social skills, including turn taking. Recommended software enhanced both literacy and the classroom curriculum and was used to support literacy activities in the reading center, as well as other areas of the classroom, and at home.

ITLC Online was based on the following assumptions: (1) Since early literacy forms the groundwork for attaining adult literacy, opportunities to develop literacy skills are as important for young children *with* disabilities as for those *without* disabilities; (2) Appropriate use of technology

contributes to positive outcomes for children with disabilities; and (3) Web-based training is a feasible method of delivering ITLC training to a broad national audience. ITLC procedures and materials have the potential to positively impact literacy skills of many more young children with disabilities than can be reached when adults are trained using traditional face-to-face strategies. Teachers and other early childhood professionals, faculty, preservice personnel, family members, and care givers across the nation can use ITLC Online workshops for staff development activities, as part of coursework at undergraduate and graduate levels, or as a means to gain personal knowledge.

Theoretical Framework

Foundations of ITLC Online

ITLC Online's *knowledge and skill base* content and procedures are research-based and stem from positive results of a 3-year mixed methods research study (Hutinger, 1999; Hutinger et al., 1998), a demonstration project and an outreach project based on that research (Hutinger, Bell, Johanson, & McGruder, 2002; Hutinger, Robinson, Schneider, & Johanson, 2002), and a 3-year Phase 3 Steppingstones of Technology Research on Implementation project (Hutinger, Bell, Daytner, & Johanson, 2005). Results from these projects indicate effectiveness of the ITLC model.

A 3-year study[1], during which the Interactive Technology Literacy Curriculum (ITLC) was developed and researched, was conducted in four types of classrooms classified according to the presence or absence of the ITLC and the teachers' technology experience, ranging from experienced computer users to novice users to non-computer users. Sixteen half-day classes, eight classrooms, eight teachers, and 255 children with disabilities from diverse cultures and socioeconomic groups, including those living in poverty, were studied. Teachers from four classrooms without technology participated as a comparison group. Both quantitative and qualitative data were collected. Results demonstrated that children with disabilities at the ITLC sites made significant gains in emergent literacy behaviors and in positive social interactions. Children recognized their own names and

[1] The Early Childhood Emergent Literacy Technology Research Study, PR # H180G40078

names of others and identified environmental print in software programs, pretended to 'read' stories, asked questions, made comments, and carried on conversations—skills that mark the beginnings of later success with written language (Hutinger et al., 1998).

The study's procedures, materials, and evaluation tools were successfully used in a model demonstration project[2] and an outreach project[3], which yielded similar results for 2,553 children on whom data were collected (Hutinger, Bell et al., 2002; Hutinger, Robinson et al., 2002).

A second 3-year study[4] also examined the effectiveness of ITLC procedures and projects. The ITLC model was replicated in 17 classrooms. Over the 3 years, 18 replication teachers served 438 3- and 4-year old children with disabilities or at risk. Sites new to the literacy model, as well as sites that participated in the original research or as demonstration or outreach sites, were studied. The project's goals were to replicate and validate the original research findings in a range of typical rural and urban educational settings and to study implementation and maintenance of the project as demonstrated by replication sites.

Three comparison sites were added in Year 3. Teachers in comparison sites received no training or technical assistance. Data sources included observation and measures related to children, teachers, the classroom environment, and families. Both quantitative and qualitative data were collected.

Results related to children demonstrated technology *did* provide access to literacy activities that benefited young children, whether they had disabilities or were at risk. Across the 3-year period, children in treatment groups made gains in aspects of both literacy and technology use, as shown in both quantitative and qualitative data. In Year 3, across treatment groups, children's literacy gains and technology skills were greater than those of children in the comparison group. Children in treatment groups predicted sequences and outcomes in software and storybooks. Emerging literacy

[2] The Early Childhood Interactive Technology Literacy Curriculum Project, PR # H024B50064
[3] LitTECH Interactive Outreach, PR #H024D70020
[4] Disseminating and Replicating an Effective Emerging Literacy Technology Curriculum (ELiTeC), PR #H327A000036

skills were demonstrated as children identified environmental print, used invented spelling, printed letters and words, described characters, articulated key concepts, and retold stories. Findings also indicated that children demonstrated improved social interactions and problem solving skills (Hutinger et al., 2005).

Review of the Literature

Emergent literacy. An emergent literacy approach stresses that written and oral language develop concurrently and interrelatedly from birth and that children learn to read and write by being immersed in meaningful language experiences. Literacy research by the National Early Literacy Panel (Strickland & Shanahan, 2004) identified the following characteristics linked to future literacy success: oral language development, phonological and phonemic awareness, alphabetic knowledge, print knowledge, and invented spelling. Literacy research indicates that development of these skills best occurs during authentic reading and writing activities when children have opportunities to observe and interact with others who write and read, as opposed to rote learning of letters and words (Casey, 1997; Clay, 1975; Ehri et al., 2001; Gambrell, 1999; Jalongo, 2004; Morrow, 1997; Neuman, Copple, & Bredekamp, 2000; Peterson, Taylor, & Hansen, 2002; Schickedanz, 1999; Snow, Burns, & Griffin, 1998; Stahl, 1998; Sulzby, 1990). Experiences with storybook reading, discussions about books, listening comprehension, and writing are crucial in early literacy development (Bus, van Ijzendoorn, & Pellegrini, 1995).

Focusing attention on emerging literacy skills when children are 3- and 4-years old or younger is effective practice (Reynolds & Temple, 2005). Literacy concepts emerge early in life and are rooted in everyday experiences (Casey, 1997; Clay, 1991; McGee & Lomax, 1990; Neuman & Roskos, 1997; Peterson et al., 2002; Yaden, Rowe, & MacGillivray, 2000). Children learn concepts of print as they experience print, icons, and logos in their daily environment, and often recognize concepts of print prior to having any formal instruction (Clay, 1991; Neuman & Roskos 1997; Yaden et al., 2000). Among the concepts of print are understanding that letters are different from

words and that letters are used to make words, that spoken words can be represented in print form, that there are spaces between words, that print carries meaning, that there is one-to-one correspondence between written and spoken words, and that words are read from left to right and from top to bottom on the page (Adams, 1990; Barclay, 1994; Clay, 1991).

Literacy concepts are also directly related to phonological awareness and alphabetic principle. Phonological awareness, an understanding of the sounds of language (Invernizzi, 2003; Wolfe & Nevills, 2004), arises from the ability to reflect on language independent of meaning and to manipulate sounds. Phonological awareness encompasses skills such as rhyming, recognizing initial sounds in words, onset-rime awareness, alliteration, segmenting words into sounds, and blending sounds into words (Adams, 1990; Invernizzi, 2003; Wolfe & Nevills, 2004). A strong foundation in phonological awareness positively affects development of phonemic awareness (the ability to hear individual sounds in spoken words) and phonics in later years (Shanahan, 2005). Consequently, children with strong phonological awareness skills tend to be better readers (Adams, 1990; Neuman, 2002; Snow et al., 1998).

Alphabetic principle refers to *cognitive insights into the systematic relationships between printed letters and spoken sounds* (Reutzel, 1992, p. 20). Developing phonological awareness and knowledge of alphabetic principle are important, not as stand alone practices, but when as part of authentic uses of reading and writing (Ehri et al., 2001; Peterson et al., 2002; Snow et al., 1998; Stahl, 1998). Preschool children learn much about letter-to-sound correspondence from listening to books, being exposed to various types of print, playing rhyming games, and participating in writing activities.

Through art and early writing experiences, young children develop the ability to make marks and produce symbols, foundation skills for later literacy development such as writing to communicate (Barclay, 1990; Dyson, 1986, 1990; Jalongo, 1992). Barclay (1990) identifies seven stages of children's writing development as Scribbling, Mock Handwriting, Mock Letters,

Conventional Letters, Invented Spelling, Approximated (Phonetic) Spellings, and Conventional Spellings. Like adults, children write differently at different times, sometimes making marks with painstaking care and at other times scribbling just to get a mark on paper (Hutinger et al., 1998). At all stages, children need daily opportunities to see words and letters being written (Barclay et al., 1996).

Young children begin to acquire building blocks for learning to read when their environment is language rich and they are given opportunities to hear and use language constantly ("Good Start," 2002). Unfortunately, when children have disabilities that make their world different from that of their peers who are not disabled, literacy experiences are unlikely to be part of either their home environment (Marvin, 1994) or their early intervention plan (Erickson & Koppenhaver, 1995; Koppenhaver & Erickson, 1998). Their teachers are often unaware of emergent literacy research (Erickson & Koppenhaver, 1995; Koppenhaver & Erickson, 1998) and stories are seldom read to them (Marvin, 1994). Children with significant speech impairments lag behind their peers in literacy development because they often have fewer opportunities to learn how to construct meaning from stories (Light & Kent-Walsh, 2003). Many children with oral language delays and impairments have significant literacy problems before they reach first grade (Scarborough & Dobrich, 1990). Even when teachers of children with disabilities know about appropriate early literacy practices, they may question using such practices with the children they teach (Neuman & Roskos, 1998; Patzer & Pettegrew, 1996).

Some suggest that children with mild to moderate disabilities develop literacy in ways similar to those of children without disabilities (Brazee & Haynes, 1989; Cutler & Stone, 1988; Erickson & Koppenhaver, 1995; Erickson, Koppenhaver, Yoder, & Nance, 1997; Goodman, 1982; Katims, 1991; Pierce & Porter, 1996). Typically, however, these children do not have similar literacy learning opportunities. As a result, they fall behind in kindergarten and primary grades and tend to stay behind classmates without disabilities (Clay, 1979; "Good Start," 2002; Strickland, 1990).

Koppenhaver and Erickson (1998) identify three literacy issues that affect children with a wide range of disabilities: (1) difficulties in learning to read; (2) instructional approaches that address the study of words in isolation and rely on workbook activities; and (3) teachers, related service providers, and administrators who believe that children with disabilities have reading needs that differ from other students' needs or that they must be taught separately from their peers without disabilities.

Benefits of technology for children. Literature and practice underscore important benefits of integrating technology into the preschool curriculum (Castellani & Jeffs, 2001; Gordon & Brown, 1996; Haugland, 2000, 2002; Wright & Shade, 1994). Adding appropriate technology tool applications to an array of children's educational experiences enhances access, learning, attention, communication, and social skills (Casey, 1997; Hutinger et al., 1998; Pressman, 1999) and may help children learn in new ways. Intervening with computers and other technologies, including adaptive peripheral devices or specialized software, produces positive changes in young children (Derer, Polsgrove & Reith, 1996; Hutinger & Johanson, 2000; Hutinger, Johanson, & Stoneburner, 1996).

Evidence clearly points to the effectiveness of computers as access technology for young children with disabilities (Behrmann & Lahm, 1994; Brett, 1997; Clements, Nastasi, & Swaminathan, 1993; Godt, Hutinger, Robinson, & Schneider, 1999; Hutinger, 1996; Hutinger & Clark, 2000; Hutinger & Johanson, 1998; Hutinger & Johanson, 2000; Parette & Murdick, 1998; Speigel-McGill, Zippiroli, & Mistrett, 1989). Computers and adaptive devices help children with disabilities participate in activities of daily life and do many of the same things children without disabilities do—draw pictures, play games, and communicate. Young children with a wide range of disabilities not only can use technology, but many of them also use it easily and effectively, and retain elements of software use over a period of time (Hutinger, Clark & Johanson, 2001; Hutinger & Johanson, 2000; Hutinger, Johanson & Rippey, 2000; Hutinger, 1996; Hutinger & Bell, 1997; Perry, Ward, & Hutinger, 1987).

Research and practical experience suggest that children with disabilities who have experiences with computers and other technologies are more likely to experience educational success than those without such access. Assistive technology equalizes learning opportunities for children with mild to severe disabilities. However, only when appropriate process tools and learning environments are developed, and adults are trained to implement them, will children with disabilities reap the benefits of the potential that technology offers to expand life experiences and provide equity in opportunity to achieve the outcomes expected of *all* children.

Advantages of web-based training for adult learners. Web-based instruction meets the needs of busy 21st century learners by allowing them anytime access to learning materials without being constrained by geographic location or confined to a set hour for participation (Butler, 2003; Mariani, 2001). Adult learning is enhanced because web technology offers increased flexibility, provides access to expertise, facilitates discussion among learners who cannot meet face-to-face, reduces feelings of isolation often experienced by nontraditional learners, increases learner autonomy, and supports and promotes collaborative and constructivist learning (Burge, 1994; Cahoon, 1998; Eastmond, 1998; Field, 1997; Horton, 2000). Horton (2000) points out that web-based training "*does not change how humans learn but it does change how we teach them*" (p.6) and adds that training via the web makes producing learning experiences for people at a distance "*easier and less expensive*."

Research on the effects of technology for adult learning points to the importance of using a variety of multimedia tools and the web (Driscoll & Alexander, 1998; Graebner, 1998; Hyerle, 1996; Palloff & Pratt, 2001; Rosen, 1999; Rudestam & Schoenholtz-Read, 2002). When a training/learning website is instructionally well designed, guided practice for new solutions and independent skills practice are possible. Moreover, if a web site serves as a community of users, with built-in communication among other learners and trainers, the site enhances collaboration and information exchange.

Teachers' abilities to implement an innovation do not emerge in full bloom as soon as new knowledge and skills are acquired (Berman & McLaughlin, 1978; Hord & Hall, 2001; Morrow, Casey & Haworth, 2003). Teachers need adequate time, training, and understanding of how the change will impact children (Banicky & Foss, 1999; Hord, Rutherford, Hulint-Austing, & Hall, 1987; Howland & Maer, 1999). Web-based instruction allows content to be revisited whenever teachers feel the need for continued support as they begin to implement strategies they are learning.

U.S. Department of Education
Grant Performance Report (ED 524B)
Project Status Chart

OMB No. 1890-0004
Exp. 10-31-2007

PR/Award #:
H327A030048

SECTION A – Performance Objectives Information and Related Performance Measures Data (See Instructions. Use as many pages as necessary.)

1. Project Objective [ ] Check if this is a status update for the previous budget period.
1.0 Accomplish ITLC Online start-up and management activities.

1.a. Performance Measure	**Measure Type**	**Quantitative Data**					
Record-keeping system with WIU Grant Accounting Office was established.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
			/			/	

1.b. Performance Measure	**Measure Type**	**Quantitative Data**					
Contact with OSEP program officer was maintained.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
			/			/	

1.c. Performance Measure	**Measure Type**	**Quantitative Data**					
Advisory Panel members agreed to participate in Project.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
Target: Twelve Advisory Panel members agree to participate in the project.		12	/		12	/	

1.d. Performance Measure	Measure Type	Quantitative Data					
Staff meetings were conducted to review progress.	PROJ	Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
			/			/	

1.e. Performance Measure	Measure Type	Quantitative Data					
Flyers were distributed to advertise availability of ITLC Online workshops. **Target:** At least 200 flyers about ITLC Online workshops are distributed.	PROJ	Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
		200	/		450	/	

1.f. Performance Measure	Measure Type	Quantitative Data					
Information on the ITLC Online workshops was posted on national listserv and websites.	PROJ	Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
			/			/	

Explanation of Progress (Include Data and Data Collection Information)

Data Collection: Data reported in this section was collected through staff meeting notes, budget records, and dissemination activity reports.

1a. Record-keeping system with WIU Grant Accounting Office was established.

The project budget was maintained both at the Center and at the Grants Accounting Office, and records were reconciled on a monthly basis. The Grants Accounting Office sent monthly reports of expenditures and commitments, while the project's personnel kept track of weekly expenditures on a spreadsheet so balances were available at any time for the project's Director to examine.

1b. Contact with OSEP program officer was maintained.

ITLC Online Director established contact with the OSEP program officer at the beginning of the grant and continued contact as needed throughout the funding period.

1c. Advisory Panel members agreed to participate in Project.

ITLC Online met its target of 12 Advisory Panel members agreeing to participate in the project. Members included three parents of children with disabilities, WIU's former Chair of Curriculum and Instruction who is a nationally recognized expert in early literacy and Editor for the Illinois Reading Council Journal, two faculty members in WIU's College of Education and Human Services, the director of the Literacy Access Online Project at George Mason University, one Head Start Coordinator and teacher, one daycare director and teacher, and three nationally-recognized experts in the field of early childhood and assistive technology. All members agreed to provide feedback and assist in planning and developing the website.

1d. Staff meetings were conducted to review progress.

Project administrators established a schedule for staff meetings. At these meetings, staff reviewed progress toward objectives; discussed problems that arose or staff members' concerns; attempted to arrive at solutions to the problems; and planned future activities. Progress toward meeting targets was reviewed periodically.

1e. Information advertising availability of ITLC Online workshops is distributed in written form.

ITLC Online exceeded its target for dissemination of written information about the online workshops. Staff distributed over 450 flyers to participants at national, regional, and state conferences, exceeding its targeted goal of 200 flyers. Participants received flyers at the National Association for the Education of Young Children's annual conference in Anaheim, California, in 2004 and in Washington, DC, in 2005. The Center had a display at the OSEP National Early Childhood Conference in 2005 and distributed ITLC Online information to state administrators, educators, and families. Staff also gave flyers to participants at the Midwest Association for the Education of Young Children conferences in Kansas City, Kansas, in 2004 and in Minneapolis,

Minnesota, in 2005. Individuals at the Illinois Education and Technology Conference in Springfield, Illinois, in November 2004 and 2005 who were interested in the online workshop received the ITLC Online flyers at the Center for Best Practices in Early Childhood's exhibit. Staff also created a colorful magnet that contained the ITLC Online URL and announced the availability of the online workshops. The magnets were professionally printed. Eighty-five magnets were distributed at the conferences mentioned above.

A short article about ITLC Online website appeared in the Spring 2005 issue of the STARNET newsletter, *Reaching for the Stars*. STARNET is funded by the Illinois State Board of Education and housed at the Center office. The newsletter was distributed to 7000 early childhood professionals and families throughout Illinois. An additional 150 newsletters were provided to participants at STARNET workshops. The newsletter was also accessible online at the Center's website.

As a result of dissemination of written information about ITLC Online, educators and families have opportunities to become aware of the online workshops as a resource for technology literacy activities and strategies to help young children gain early literacy skills.

1f. Information on the ITLC Online workshops was posted on national listserv and websites.

In March 2005, information about ITLC Online was posted on NAEYC's Technology and Young Children Forum listserv, ECETECH-L. Within 48 hours of the message posting, ITLC Online Director received 28 e-mails from 15 states indicating interest in participating in the online workshops. Requests for further information were received from Project Kite Coordinator at Pacer Center, a state-level literacy specialist in Florida, as well as Head Start administrators and Childcare Directors across the country. Thirteen sites agreed to participate in field testing and the research phase of ITLC Online if it received further funding.

ITLC Online website is linked to at least two national websites. The Center for Best Practices in Early Childhood has a link to ITLC Online on its Projects page,

http://www.wiu.edu/users/mimacp/wiu/projects.php. Visitors to the Center website can gain easy access to the ITLC Online workshops.

ITLC Online workshops are linked in three areas of NAEYC's Tech and Young Children Forum's website. In the Technology with Children section, ITLC's *Literacy Environment Workshop* is linked under Technology Environment. ITLC Online's *Children's Software Workshop* is a link under Selecting Software for Young Children. ITLC's *Technology Integration Workshop* is linked to Technology Integration Examples section. With NAEYC's membership of over 100,000 educators and family members, linking to the website insures that ITLC Online is available to a large audience interested in technology and literacy. Further postings to listservs and links to early childhood, special education, literacy, and assistive technology websites were planned if ITLC Online received continued funding.

U.S. Department of Education
Grant Performance Report (ED 524B)
Project Status Chart

OMB No. 1890-0004
Exp. 10-31-2007

PR/Award #:
H327A030048

SECTION A – Performance Objectives Information and Related Performance Measures Data (See Instructions. Use as many pages as necessary.)

2. Project Objective [ ] Check if this is a status update for the previous budget period.

2.0 Select and organize content for the ITLC Online website.

2.a. Performance Measure	**Measure Type**	**Quantitative Data**					
Content is organized into six workshops.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
Target: Content for six literacy technology workshops is organized in web-based format.		6	/		6	/	

2.b. Performance Measure	**Measure Type**	**Quantitative Data**					
A categorized listing of children's books is included in the website content.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
Target: At least 500 books are categorized and listed on ITLC Online website.		500 books	/		2,040 books	/	

2.c. Performance Measure	**Measure Type**	**Quantitative Data**					
Links to outside resources for further information on early literacy materials, adaptations, and products are included on the website.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
Target: At least 50 links to outside resources are included on the website.		50	/		238	/	

2.d. Performance Measure	**Measure Type**	**Quantitative Data**					
A variety of PDF files containing articles and curriculum activities are included in the online workshops.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
Target: At least 40 files are available in PDF format in the workshops.		40	/		71	/	

2.e. Performance Measure	**Measure Type**	**Quantitative Data**					
Content is current and reflects developmentally appropriate literacy practice.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
Target: All six Advisory Panel members agree that content is current and appropriate.		6	/		6	/	

Explanation of Progress (Include Data and Data Collection Information)

Data Collection: Data reported in this section was collected through staff notes, actual content noted on ITLC Online website, and summary of *Evaluation of ITLC Online Workshop Content*.

2a. Content is organized into six workshops.

ITLC Online met its targeted goal of developing six online workshops related to literacy. Each workshop's introductory page includes Purpose, Topics in the Workshop, Objectives, Key Terms, and Topics for Further Discussion. Key terms can be viewed as a separate web page, a Portable Document Format (PDF) file, or a print friendly page. A description of the contents of each workshop follows. Sample workshop pages are included in the Appendix.

Literacy Foundations Workshop contains an overview of emergent literacy with links to position statements by the National Association for the Education of Young Children and the International Reading Association. A link is included to The National Reading Council's 1998 Report, *Preventing Reading Difficulties in Young Children*, a landmark document in the field of emergent literacy, which

summarizes research and recommendations. Links to other national panels and reports, including the Center's literacy research reports, can also be found in this workshop.

Besides providing an overview of literacy, the *Literacy Foundations Workshop* includes the topics of Oral Language Development, Emergent Reading, and Emergent Writing. Each section contains PDF files of information or activities from Project ELIPSS: Emergent Literacy Instructional Program Support System, a Center project which produced a set of training materials for Head Start educators. Sample activities are included in the Appendix.

Literacy Environments Workshop includes a discussion of three environments, classroom, home, and technology environment, along with management strategies and adaptations. The Overview section features a discussion of labeling in the classroom and the use of print and digital photos to organize the environment. Workshop content also includes ideas for furnishings and materials for classroom centers, including reading, writing, art, science and dramatic play. Tips for encouraging literacy through the design of the home environment are also included. A separate section is included on setting up the technology environment, based on the Center's checklist, *Your Preschool Classroom Computer Center: How Does It Measure Up?* Adaptations for literacy materials, such as page turners or fluffers and book holders, are also included in the workshop.

Children's Software Workshop focuses on software design, evaluation, levels of interactivity, literacy software examples, and modifications. A *PowerPoint* slideshow based on the Center's *Software Levels of Interactivity* depicts some of the options found in children's software. Due to WIU server restrictions, staff converted the slideshow to a *QuickTime* video. The video shows features and examples of software at five levels of interactivity. The workshop also contains ideas for using interactive software programs as tools for promoting early literacy and links to a variety of programs and companies.

Technology Integration Workshop contains an overview of using technology for literacy, ideas for off-computer activities, and adaptations for devices and software. The workshop includes a variety of interactive technology activities in three categories, *Related to Real-Life Experiences*, *Repetitive and*

Predictable Stories, and *With Rhyme or Rhythm*. The workshop also provides suggested literacy activities for use with portable communication devices, switches, and a touch screen along with links to software programs and companies.

Authoring Software Workshop features information on authoring software, unique features, and examples from four applications, *HyperStudio*, *BuildAbility*, *IntelliPics Studio*, and *eZedia.* The workshop contains PDF files of sample curriculum activities for each application. The workshop also has links to further information and authoring software distributors.

Literacy Assessment Workshop contains an overview of practices and principles that support literacy assessment; strategies for using technology as a documentation tool; assessment measures; and literacy data. The workshop focuses on five types of documentation and includes examples in PDF format. The *Individual Literacy Assessment*, an instrument developed by the Center's literacy research and model demonstration projects, can be downloaded and printed. Workshop content also includes family and teacher measures, along with summaries of literacy data from four Center projects and links to final reports.

2b. A categorized listing of children's books is included in the website content.

ITLC Online exceeded its targeted goal of listing 500 books on the website. Staff created a database, using FileMaker Pro, that contains 2,040 children's books categorized according to common classroom themes with information on availability of special formats, such as big books or books on tape. The fields in the database include author, illustrator, book title, publication date, publisher, publisher location, subject descriptors, suggested age range, languages in which the book has been published, fiction or nonfiction, language skills the book may help develop, and other media formats, such as audio recording, VHS, DVD, computer software, Big Book, or e-book. The listing includes both the original copyright date and the latest date of publication. Staff created 75 different categories including Alphabet Books, Animals, Books for Infants & Toddlers, Counting Books, Disability Awareness, Fables/Folklore, Multicultural, Predictable Books, Transportation, Weather, and Wordless

Books. The categories were based on common topics studied in early childhood classrooms. Book listings in each category are available in PDF format for printing or downloading.

2c. Links to outside resources for further information on early literacy materials, adaptations, and products are included on the website.

ITLC Online exceeded its target for number of resource links included on the website. Staff planned to include at least 50 outside links and ended up with 238 links to resources for materials, products, and information. ITLC Online's Resources contains eight sections including a *Glossary*, *Articles and Books*, an extensive database of *Children's Books*, *Family Info*, *Literacy News*, *Organizations*, *Technology News*, and *Software and Equipment*. The *Glossary* can be accessed at any time from the Resources section or from its separate section on each workshop page. *Articles and Books* is a reference listing from resources related to workshop content. The other sections, with the exception of *Children's Books*, contain links to websites for further information or products.

2d. A variety of PDF files containing articles and curriculum activities are included in the online workshops.

ITLC Online exceeded its target of including 50 PDF files on the website. Seventy-one PDF files including articles, curriculum activities, resource information and instructional materials are contained in the six online workshops. Users can download the set of files from the first page of each workshop. Curriculum activities taken from the Center's evidence-based literacy curriculum, *eMERGing Literacy and Technology: Working Together*, are contained in PDF format in the *Technology Integration Workshop* and *Authoring Software Workshop*.

2e. Content is current and reflects developmentally appropriate literacy practice.

All six Advisory Panel members who completed the *Evaluation of ITLC Workshop Content* form strongly agreed that the workshop content reflects developmentally appropriate practice, meeting one of ITLC Online's targets. One member noted that one of the strengths related to best practices is the *links to NAEYC position statements*.

All six members strongly agreed that materials on the website are current. Four of the six strongly agreed and two agreed that the workshop content addresses the topic thoroughly. Comments include: *Each workshop contains lots of value and useful information*; *Links to the many related reports and documents are great*; *Links to current reading research is a strength*; and *All of the workshops are rich sources of information about the topic*.

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3. Project Objective [ ] Check if this is a status update for the previous budget period.
3.0 Design and develop the ITLC Online website.

3.a. Performance Measure	**Measure Type**	**Quantitative Data**					
Website design has elements of high quality.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
Target: At least 5 of 6 Advisory Panel members agree that the website design is high quality.		5	/		6	/	

3.b. Performance Measure	**Measure Type**	**Quantitative Data**					
Website meets W3C accessibility guidelines.	PRGM	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
			/			/	

Explanation of Progress (Include Data and Data Collection Information)

Data Collection: Data reported in this section was collected through staff notes, actual features noted on website, and summary of items related to design and navigation on *Evaluation of ITLC Online Workshop Content*.

3a. Website design has elements of high quality.

ITLC Online exceeded it targeted goal of 5 of 6 Advisory Panel members agreeing that the website design is high quality. When asked to evaluate the website design, navigation, and ease of use, all six members agreed that the design was good and that the site was easy to navigate and use. Comments included: *Beautiful home page! I also like the use of quotes (i.e., Einstein on the FAQ* (Frequently Asked

Questions) *page is nice and short.)*; *Graphics are very nice!*; and *Excellent work*. One member commented that the *website was easy to use and understand*. Another member wrote that one of the strengths was *Topics for Further Discussion* (on the introductory page of each workshop) *are excellent for use with preservice and in-service teachers*. A description of the website's appearance and features follows.

Appearance. The ITLC Online website opens with a colorful splash page containing a collage of photographs of young children engaged in literacy and technology activities. The right side bar menu contains links to About ITLC, Contact Info, ITLC FAQ , Workshops, Resources, Using ITLC, and Site Map. Each workshop contains a top navigation bar for easy access to other parts of the website. A right menu bar also appears on each workshop page. Content of the menu bar, such as Main Topics and Sub-Topics, coordinates with the specific workshop, and therefore changes according to the workshop.

ITLC Online staff designed the website to be an information-intensive, attractive, comprehensive website with an intuitive user interface and navigation system. The site uses high contrast graphics for easy viewing. Through the use of externally imported style sheets, variable width pages, and minimalist design, the average total page weight is kept low, which means the content of the site is fast loading even on slower dial-up systems.

Staff selected digital photographs to be used on the website from a large database of graphics from the Center's model demonstration literacy project. Center staff took most of the photographs during site visits to area preschool classrooms over a 5-year period. Before the graphics appeared on the website, parents gave permission for use of photos or video. ITLC Online Webmaster avoided graphics showing a full view of children's faces. The website contains a variety of graphics of children engaged in literacy activities both on and off the computer.

Website features. ITLC Online has several user-friendly features built into the website. One feature is a *Glossary* that is accessible from any page at the site. Words that are defined in the

Glossary are highlighted in the text of the workshop. By clicking on the highlighted word, the user goes directly to the definition. In addition, each workshop's introductory page has a list of words defined in the workshop. This feature provides guidance to users who are unfamiliar with some early childhood, technology, and assistive technology terminology used on the website.

Another feature is a full set of downloadable PDF files at the beginning of each workshop. The user can view or print the file after it is downloaded to his/her computer. By providing the full set, ITLC Online makes it convenient and less time-consuming for users to review workshop content.

ITLC Online added two features, *Site Search* and *Registration*, located on the right menu bar, during the web design phase. Problems in securing these features prevented ITLC Online Programmer from making them fully functional before funding ended. At this time they serve as place holders at the website until funding for further web development is available.

3b. Website meets W3C accessibility guidelines.

ITLC Online is designed to comply with section 508 guidelines for web accessibility. The following features contribute to the site's accessibility:

- Images - A text equivalent for every non-text element is provided (e.g., via "ALT- Tag "). A long description "d link" for every image was planned for the next phase.
- Navigation - An anchor placed on each page permits users to skip repetitive navigation links. Header tags were used. All links are clearly labeled, underlined, and use descriptive titles. Breadcrumbs provide clues as to where users are in the site.
- Text - All text is in high contrast colors relative to the background color. Fonts are sans-serif using relative sizing. Headings are used for easy tabbed browsing. A text-only version of all pages was planned for the next phase.
- Design - All content uses external style sheets. All elements that are displayed with color are also displayed without color. The site validates as 4.01 transitional according to the

W3C recommendations. Extra white space was created around all non-text elements to provide a cleaner appearance and better visibility for typical users.

- Forms - Labels are adjacent to input fields, not in separate cells of a table, when possible. All input elements were coded with explicit label tags. Forms are in high contrast text in relative sized tables that adjust and wrap smoothly according to browser window size.

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4. Project Objective [ ] Check if this is a status update for the previous budget period.
4.0 Evaluate the ITLC Online website's content and usability.

4.a. Performance Measure	**Measure Type**	**Quantitative Data**					
Website evaluation criteria are established.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
			/			/	

4.b. Performance Measure	**Measure Type**	**Quantitative Data**					
Advisory Panel provides feedback on website content, design, and ease of use. **Target:** Six Advisory Panel members evaluate website and provide written feedback.	PROJ	**Target**			**Actual Performance Data**		
		Raw Number	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
		6	/		6	/	

Explanation of Progress (Include Data and Data Collection Information)

Data Collection: Data reported in this section was collected through staff notes and summary of *Evaluation of ITLC Online Workshop Content*.

4a. Website evaluation criteria are established.

ITLC Online staff developed a website content evaluation measure during Year 1. The instrument consisted of 10 items, 8 of which were statements to be rated using a four-point scale, ranging from Strongly Agree to Strongly Disagree. Items included *Workshop content addresses the topic thoroughly*; *The content reflects developmentally appropriate practice*; *Information is presented objectively*; *Materials are current*; *Terminology is current*; *Information is organized effectively*; and

Resource links are relevant. Two other items included suggestions for improving the workshops and comments on the website design, navigation, and ease of use. Staff sent the form via e-mail to Advisory Panel members after workshops were uploaded and ready for review.

4b. Advisory Panel provides feedback on website design and content.

ITLC Online met its target of obtaining feedback on website content and design from six Advisory Panel members. Although twelve members agreed to participate in ITLC Online when the project was funded, only six members were available to provide feedback during Year 2 when the website was ready for evaluation. ITLC Online staff maintained contact with the six members and obtained their feedback through the *Evaluation of ITLC Online Workshop Content* form. Advisory Panel evaluation and comments on website content is summarized in 2.e. on page 20, while website design evaluation is found in 3.a. on page 25.

Advisory Panel's suggestions for improvement included adding more pictures, video footage, and animation. One member thought that the resource links were good, but we needed *more information on how to navigate through the workshops, since users could get lost in outside links.* One faculty member suggested more interactivity in the workshops. *Since a variety of users will be participating in the workshops, using visual and audio will address the different learning modalities.* Another member suggested adding case studies to the workshops to *incorporate problem-based learning* for university students. ITLC Online staff made several revisions to the website based on Advisory Panel feedback; however, staff were not able to add case studies and some elements of interactivity due to time constraints and lack of continued funding.

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Project Objective [ ] Check if this is a status update for the previous budget period.

OSEP Program Performance Measure #1: Project is of high relevance.

Performance Measure	Measure Type	Quantitative Data					
ITLC Online contributes to knowledge and practices in early childhood and technology fields.	PRGM	Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
			/			/	

ITLC Online contributes both to knowledge and practices beneficial to the fields of early childhood and that of converging technologies. The workshop content addresses emergent literacy, a topic of growing importance in early childhood and education fields and of increasing demand in meeting training needs. As opposed to on-site, face-to-face training, with its accompanying time constraints and travel expenses, the ITLC Online website not only represents a more cost-effective model of distance education, addressing a nationwide audience, but also addresses the varying needs of divergent users. The workshops provide asynchronous training so participants can use the workshops at their convenience.

The *Knowledge Base* upon which ITLC Online is built is another contribution to knowledge and practice. Website content is current with links updated as needed. The website and its workshops address the technology skills included in learning standards for children *and* for teachers. Extending the Center's emphasis to online workshops contributes to practice related to technology training and staff

development needs of early childhood teachers, special needs teachers, related staff, administrators, families, and others who work in schools and agencies across the nation.

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[ ] Check if this is a status update for the previous budget period.

Program Performance Measure #2: Project is of high quality.

Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
ITLC Online uses high quality methods and materials.	PRGM		/			/	

ITLC Online uses high quality methods and materials. The website is based on training content from the Center for Best Practices in Early Childhood's tested and effective emergent literacy and technology projects. The content of the six online workshops was developed in congruence with appropriate early childhood philosophy and curriculum according to national standards related to developmental appropriateness, emergent literacy, and curriculum integration promoted by the National Association for the Education of Young Children, the Council for Exceptional Children's Division of Early Childhood, International Reading Association, and the National Board for Professional Teaching Standards. The guidelines developed by these organizations form the criteria by which teacher education programs are accredited by the National Council for Accreditation of Teacher Education.

During Phase 1 funding, ITLC Online communicated appropriately with target audiences to insure the website was used by policy makers, administrators, teachers, families, and others to improve literacy results for children with disabilities. The website is designed to meet the emergent literacy and technology training needs of the targeted audience. ITLC Online content and design elements were

reviewed by recognized experts in the field along with educators and families from a variety of sites, resulting in a high-quality product which promotes development of knowledge and skills in emergent literacy and technology.

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[ ] Check if this is a status update for the previous budget period.

Program Performance Measure #3: Project produces findings, products, and/or services that contribute to improving results for children with disabilities.

Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
ITLC Online produces a website that contributes to improving results for children with disabilities.	PRGM		/			/	

Since ITLC Online's purpose as a Phase 1 project was the development of the literacy online workshops for educators and families, data on how the website effected literacy results for young children was not collected. Phase 2 funding was needed to study how the workshops were used and the resulting effects on children over a two or three-year period. With the change in Steppingstones focus, ITLC Online, as a professional development product, was not eligible for Phase 2 funding.

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[ ] Check if this is a status update for the previous budget period.

Program Performance Measure #4: Project develops and validates technologies that incorporate evidence-based materials and services.

Performance Measure	Measure Type	Quantitative Data					
ITLC Online develops and validates web-based technology that incorporates evidence-based materials and services.	PRGM	Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
			/			/	

ITLC Online uses technology both as a vehicle for training and as content for the six online workshops. Content addresses the use of technology and assistive technology to help young children with disabilities develop literacy skills. The website is based on training content from the Center for Best Practices in Early Childhood's emergent literacy and technology projects. The workshops include activities from the Center's evidence-based technology literacy curriculum, *eMERGing Literacy and Technology: Working Together*. Center staff tested the curriculum with 3,246 children with disabilities from diverse cultures and socioeconomic groups through four literacy projects. Results demonstrated that children made significant gains in emergent literacy behaviors and in positive social interactions. The evidence-based materials and teaching strategies are the foundation of ITLC Online workshops.

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[ ] Check if this is a status update for the previous budget period.

Program Performance Measure #5: Project makes technologies that incorporate evidence-based practices available for widespread use.

Performance Measure	Measure Type	Quantitative Data					
ITLC Online provides workshops in online format, accessible to any educator or family.	PRGM	Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
			/			/	

ITLC Online workshops are free and open to the public. Anyone with Internet access at home, at work, at school, or at the public library can access and use the website. The site meets accessibility guidelines as explained on pages 27-28.

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SECTION B – Budget Information (See Instructions. Use as many pages as necessary.)

There were no significant changes to the ITLC budget that resulted from modification of project activities. Approved project activities and objectives were not impacted by budget changes.

SECTION C – Additional Information (See Instructions. Use as many pages as necessary.)

1. *Utilizing your evaluation results, draw conclusions about the success of the project and its impact. Describe any unanticipated outcomes or benefits from your project and any barriers that you may have encountered.*

ITLC Online successfully developed a training website to respond to the literacy needs of young children with disabilities and their families. Results of the Advisory Panel's evaluation indicate that ITLC Online provides a literacy and technology website that is easy for families and educators to access and use, and that contains information supporting developmentally appropriate practices. Workshop content focusing on designing a literacy environment, using children's software, integrating technology into the curriculum, customizing literacy activities, and assessing literacy skills provide a framework for helping all young children learn.

One unanticipated outcome from the project was the timeliness of the online workshops in meeting individual state's needs for literacy training. State-level administrators for early childhood programs and childcare centers in Illinois, Florida, and Minnesota expressed interest in having their staff use the workshops to meet early literacy education needs. One administrator from Florida's state department of education specifically asked about copying materials off the website for their literacy workshops. Since the online workshops are still available to the public, we expect that ITLC Online materials continue to be used by educators throughout the country.

The only barrier ITLC Online encountered was the time constraints of the 2-year project. Website and online workshop content development is a time-intensive endeavor. Staff wanted to develop a quality product, and, therefore, took more time than anticipated in formatting text and graphics for web-based delivery, finding links to outside resources, compiling a large database of children's books, designing the website, and making the product accessible. Although all of the work was completed and the product was evaluated by the Advisory Panel, sufficient time did not remain for field testing the website with educators and families.

2. *What would you recommend as advice to other educators that are interested in your project? How did your original ideas change as a result of conducting the project?*

ITLC Online has recommendations for educators interested in using the online workshops and for those interested in developing their own online materials. For those wanting to use the workshops, we recommend first exploring the many features of the website. Those who are unfamiliar with technology terms may find the glossary helpful. Faculty wanting to integrate content into coursework may find the list of related discussion topics at the beginning of each workshop useful. Educators should review the curriculum activities which are evidence-based and may be appropriate for young children in their classrooms. Families may find the ideas for promoting literacy in the home, as well as the links to organizations and companies, helpful. Individuals interested in the website will find that the workshops are not designed as a college course with time limits on content review. The workshops are intended to be

reviewed and used often by those looking for information and strategies to integrate technology into literacy materials and activities.

For educators who want to develop their own online workshops, ITLC Online staff recommend considering the time commitment that is involved in web development. Formatting materials for online workshops and designing a website is a time-consuming endeavor that involves diversely talented staff. Those responsible for providing training to educators should review a variety of websites to determine if their needs could be met through existing online materials. Projects, such as ITLC Online, have readily available online materials designed to meet a variety of literacy training needs.

As ITLC Online staff conducted the project, they developed new features to make the website easy for educators and families to use. Original plans for the website changed slightly as staff and Advisory Panel members suggested more user-friendly features. Examples include having the glossary terms highlighted as they appeared throughout workshop content, having terms listed and downloadable from the workshop introduction page, and being able to download all PDF files at the beginning of each workshop.

3. *If applicable, describe your plans for continuing the project (sustainability; capacity building) and/or disseminating the project results.*

ITLC Online was ineligible to compete for Phase 2 funding due to a change in Steppingstones focus that disallowed technology-based approaches intended for use by professionals or parents. However, Center staff continue to maintain the website. The online workshops are available at no cost to early childhood educators and families and serve as a valuable resource in early literacy and technology. Staff promote use of the workshops during networking sessions at national, regional, and state conferences. ITLC Online Director and Coordinator continue to receive positive comments verbally and through e-mail messages from site visitors, indicating appreciation and need for the online workshops. The Center will continue to pursue funding to maintain, expand,

and research effects of ITLC Online workshop participation on educators, families, faculty and students.

4. Report on any statutory reporting requirements for this grant program.

See pages 31 - 37.

References

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print.* Cambridge, MA: MIT Press.

Banicky, L., & Foss, H. (1999). The challenges of accountability. Newark, DE: Delaware Education Research and Development Center. College of Human Services, Education, and Public Policy, University of Delaware.

Barclay, K. (1990). From scribbling to 'real' writing: What parents and teachers should know. In N. Cecil (Ed.), *Literacy in the 90s* (pp. 1-7). Dubuque, IA: Kendal-Hunt.

Barclay, K. (1994, October). *Emergent Literacy Concepts*. Paper presented at the meeting of Western Illinois Association for the Education of Young Children.

Barclay, K., Hutinger, P., Johanson, J., Bosworth, J., Hamlin, S., Richmond, S., Schoon, S., & Settles, S. (1996). *Emergent literacy program and support services.* Macomb, IL: Macomb Projects, Western Illinois University.

Behrmann, M., & Lahm, E. (1994). Computer applications in early childhood special education. In J. L. Wright & D. D. Shade, (Eds.), *Young children: Active learners in a technological age* (pp. 105 - 120). Washington, DC: National Association for the Education of Young Children.

Berman, P., & McLaughlin, M. (1978). *Federal programs supporting educational change, volume VIII: Implementing and sustaining innovations.* Santa Monica, CA: Rand Corporation. (ERIC Reproduction Service No. ED 159-289)

Brazee, P., & Haynes, S. W. (1989). Special education and whole language: From an evaluator's viewpoint. In K. Goodman & Y. Goodman (Eds.), *Whole language evaluation* (pp. 249-260). Portsmouth, NH: Heinemann.

Brett, A. (1997). Assistive and adaptive technology supporting competence and independence in young children with disabilities. *Dimensions of Early Childhood, 25* (3), 14-15, 18-20.

Burge, E. J., (1994). *Electronic highway or weaving loom? Thinking about conferencing technologies for learning*. (ERIC Document Reproduction Service No. ED 377 814)

Bus, A. G., van IJzendoorm, M. H., & Pellegrini, A. D. (1995). Join book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research, 65*, 1-21.

Butler, D. (2003). Introduction to distance learning: What is it? Why I should be interested? Where may I find courses? How much does it cost? Retrieved April 7, 2004, from http://distancelearn.about.com/libraby/weekly/aa120202b.htm

Cahoon, B. (1998). Teaching and learning Internet skills. In B. Cahoon (Ed.*), Adult learning and the Internet: Vol. 78. New directions for adult and continuing education* (pp. 33-41). San Francisco: Jossey-Bass.

Casey, J. (1997). *Early literacy: The empowerment of technology*. Englewood, CO: Teacher Ideas Press.

Castellani, J., & Jeffs, T. (2001). Emerging reading and writing strategies using technology. *Teaching Exceptional Children, 33*(5), 60-67.

Clay, M. M. (1975). *What did I write?* Portsmouth, NH: Heinemann.

Clay, M. M. (1979). *The early detection of reading difficulties.* Auckland, New Zealand: Heinemann Educational Books.

Clay, M. M. (1991). *Becoming literate: The construction of inner control*. Auckland, New Zealand: Heinemann Educational Books.

Clements, D. H., Nastasi, B. K., & Swaminathan, S. (1993). Young children and computers: Crossroads and directions from research. *Young Children, 48* (2), 56-64.

Cutler, C., & Stone, E. (1988). A whole language approach: Teaching reading and writing to behaviorally disordered children. *Teaching: Behaviorally Disordered Youth, 4,* 31-39.

Derer, K., Polsgrove, L., & Rieth, H. (1996). A survey of assistive technology applications in schools and recommendations for practice. *Journal of Special Education Technology, 13*(2), 62-80.

Driscoll, M. & Alexander, L. (1998). *Web-based training: using technology to design adult learning experiences.* San Francisco, Jossey-Bas/Pfeiffer.

Dyson, A. (1986). Transitions and tensions: Interrelationships between the drawing, talking, and dictating of young children. *Research in Teaching of English, 20*, 379-409.

Dyson, A. (1990). Symbol makers, symbol weavers: How children link play, pictures, and print. *Young Children, 45*, 50-57.

Eastmond, D. V. (1998). Adult learners and Internet-Based distance education. In B. Cahoon (Ed.), *Adult learning and the Internet: Vol. 78. New directions for adult and continuing education* (pp. 5-13). San Francisco: Jossey-Bass.

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T., (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly, 36*(3), 250-287.

Erickson, K., & Koppenhaver, D. (1995). Developing a literacy program for children with severe disabilities. *The Reading Teacher, 48,* 676-684.

Erickson, K.A., Koppenhaver, D.A., Yoder, D.E., & Nance, J. (1997). Integrated communication and literacy instruction for a child with multiple disabilities. *Focus on Autism and Other Developmental Disabilities, 12* (3), 142-150.

Field, J. (1997). Passive or proactive? *Adults Learning, 8,* 160-161.

Gambrell, L. (1999). Creating classroom cultures that foster reading motivation. *Reading Teacher, 50*(1), 14-25.

Godt, P., Hutinger, P., Robinson, L., & Schneider, C. (1999). A simple strategy to encourage emergent literacy in young children with disabilities. *TEACHING Exceptional Children, 32*(2), 38-44.

Goodman, K. (1982). Revaluing readers and reading. *Topics in Learning and Learning Disabilities, 1*(4), 87-93.

Good start, grow smart: President Bush's plan to strengthen early learning. (2002). Retrieved January 7, 2003, from the World Wide Web: http://www.whitehouse.gov/infocus/early childhood/earlychildhood.pdf

Gordon, A., & Brown, K. (Eds.). (1996). *Beginning and beyond: Foundations in early childhood education* (4th ed.). Albany, NY: Delmar.

Graebner, C. (1998). *Enquiring into group learning on-line*. Paper presented at the 28th Annual SCUTREA Conference, Exeter, England, July 6-8, 1998. Retrieved December 18, 1998 from the World Wide Web: http://www.leeds.ac.uk/educol/documents/000000717.html

Haugland, S. W. (1992). The effect of computer software on preschool children's developmental gains. *Journal of Computing in Childhood Education. 3*(1), 15-30.

Haugland, S.W. (2000). *Computers and young children*. ERIC Digest. Retrieved November 7, 2002, from the World Wide Web: http://www.askeric.org/plweb-cgi/obtain.pl

Hord, S., & Hall, G. (2001). *Implementing change: Patterns, principles, and potholes,* Boston: Allyn & Bacon.

Hord, S., Rutherford, W., Huling-Austin, L., & Hall, G. (1987). *Taking charge of change*. Austin, TX: Southwest Educational Development Laboratory.

Horton, W. (2000). *Designing web-based training: How to teach anyone anything anywhere anytime*. New York: John Wiley & Sons.

Howland, J., & Mayer, C. (1999, October). Tools of innovation: Supporting change through online web solutions. Proceedings of WebNet 99 World Conference on the WWW and Internet. Honolulu, HI.

Hutinger, P. (1996). Computer application in programs for young children with disabilities: Recurring themes. *Focus on Autism and Other Developmental Disabilities, 11*(2), 105-114.

Hutinger, P. (1999). How interactive technology affects emergent literacy. *Children and Families, 18*(3), 82-83.

Hutinger, P., & Bell, C. (1997, February). *The effects of technology on emergent literacy in children with mild to moderate disabilities*. Presented at the Technology and Media Division of the Council for Exceptional Children 1997 Conference, San Jose, CA.

Hutinger, P., Bell, C., Beard, M., Bond, J., Johanson, J., & Terry, C. (1998). *Final report: The early childhood emergent literacy technology research study*. Macomb: Macomb Projects, Western Illinois University. (ERIC Document Reproduction Service No. ED 418545)

Hutinger, P., Bell, C., Daytner, G., & Johanson, J. (2005). *Disseminating and replicating an effective emerging literacy technology curriculum: A final report*. Macomb, IL: Center for Best Practices in Early Childhood, Western Illinois University. (ERIC Document Reproduction Service No. ED 489575)

Hutinger, P., Bell, C., Johanson, J., & McGruder, K. (2002). *Final report: LiTECH interactive outreach*. Macomb, IL: Center for Best Practices in Early Childhood, Western Illinois University. (ERIC Document Reproduction Service No. ED 469844)

Hutinger, P., & Clark, L. (2000). TEChPLACEs: An Internet community for young children, their teachers, and their families. *Teaching Exceptional Children, 32*(4), 56-63.

Hutinger, P., Clark, L., & Johanson, J. (2001). *Final report: Technology in early childhood-planning and learning about community environments*. Macomb, IL: Center for Best Practices in Early Childhood Education. (ERIC Document Reproduction Service No. ED 454680)

Hutinger, P., & Johanson, J. (1998). Software for young children. In S. Lesar Judge and P. H. Parette (Eds.), *Assistive technology for young children with disabilities: A guide to providing family-centered services*. Cambridge, MA: Brookline.

Hutinger, P., & Johanson, J. (2000). Implementing and maintaining an effective early childhood comprehensive technology system. *Topics in Early Childhood Special Education, 20*(3), 159-173.

Hutinger, P., Johanson, J., & Rippey, R. (2000). *Final report: Benefits of comprehensive technology system in an early childhood setting: Results of a three year study*. Macomb, IL: Center for Best Practices in Early Childhood Education, Western Illinois University. (ERIC Document Reproduction Service No. ED 444275)

Hutinger, P., Johanson, J., & Stoneburner, R. (1996). Assistive technology applications in educational programs of children with multiple disabilities: A case study report on the state of the practice. *Journal of Special Education Technology, 13*(1).

Hutinger, P., Robinson, L., Schneider, C., & Johanson, J. (2002). *The early childhood interactive technology literacy curriculum project: Final report*. Macomb, IL: Center for Best Practices in Early Childhood, Western Illinois University. (ERIC Document Reproduction Service No. ED 468324)

Hyerle, D. (1996). *Visual tools for constructing knowledge*. Alexandria, VA: Association for Supervision and Curriculum Development.

Invernizzi, M. (2003). Concepts, sounds, and the ABCs: A diet for a very young reader. In D. M.Barone, & L. M. Morrow (Eds.). *Literacy and young children: Research-Based practices* (pp. 140-156). New York: Guilford Press.

Jalongo, M. R. (1992). Drawing and writing: Composing process. In M. R. Jalongo (Ed.), *Early childhood language arts* (pp. 199-237). Boston: Allyn & Bacon.

Jalongo, M. R. (2004). *Young children and picture books*. Washington, DC: National Association for

the Education of Young Children.

Katims, D. S. (1991). Emergent literacy in early childhood special education: Curriculum and instruction. *Topics in Early Childhood Special Education, 11*(1), 69-84.

Koppenhaver, D. A., & Erickson, K. A. (1998, March). *Technologies to support reading comprehension in children with disabilities*. Paper presented at California State University Northridge 1998 Technology and Persons with Disabilities Conference, Los Angeles, CA.

Light, J., & Kent-Walsh, J. (2003). Fostering emergent literacy for children who require AAC. *ASHA Leader, 8*, 4-5: 28-29.

Mariani, M. (2001, Summer). Distance learning in postsecondary education: Learning whenever, wherever. *Occupational Outlook Quarterly, 45*(2), 2-10.

Marvin, C. (1994). Home literacy experiences of preschool children with single and multiple disabilities. *Topics in Early Childhood Special Education, 14*, 436-454.

McGee, L. M., & Lomax, R. G. (1990). On combining apples and oranges: A response to Stahl and Miller. *Review of Educational Research, 60*(1), 133-140.

Morrow, L. M. (1997). *Literacy development in the early years: Helping children read and write* (3rd ed.). Boston: Allyn and Bacon.

Morrow, L. M., Casey, H., & Haworth, C. (2003). Staff development for early literacy teachers, In D. M. Barone & L. M. Morrow (Eds.), *Literacy and young children: Research-Based practices* (pp.3-22). New York: The Guilford Press.

Muter, V., & Snowling, M. (1998). Concurrent and longitudinal predictors of reading: The role of metalinguistic and short-term memory skills. *Reading Research Quarterly, 33* (3), 320-337.

Neuman, S. (2002). *What research reveals: Foundations for reading instruction in preschool and primary education*. Washington, DC: U. S. Department of Education. Retrieved June 27, 2006, from http://www.acf.hhs.gov/programs/ccb/policy1/current/ACF118/wrr.pdf

Neuman, S., Copple, C., & Bredekamp, S. (2000). *Learning to read and write: Developmentally appropriate practices for young children*. Washington, DC: National Association for the Education of Young Children.

Neuman, S. & Roskos, K. (1997). Literacy knowledge in practice: Contexts of participation for young writers and readers. *Reading Research Quarterly, 32*(1), 10-32.

Palloff, R., & Pratt, K. (2001). *Lessons from the cyberspace classroom*. San Francisco: Jossey-Bass.

Parette, H. P., & Murdick, N. L. (1998). Assistive technology and IEPs for young children with disabilities. *Early Childhood Education Journal, 25* (3), 193-198.

Patzer, C. E., & Pettegrew, B. S. (1996). Finding a voice: Primary students with developmental disabilities express personal meanings through writing. *Teaching Exceptional Children 29*(2), 22-27.

Perry, L., Ward, E., & Hutinger, P. (1987). *Effects of ACTT microcomputer interventions on preschool handicapped children*. Macomb, IL: Macomb Projects, Western Illinois University.

Peterson, D. S., Taylor, B. M., & Hansen, R. (2002). Emergent literacy and oral language development. Retrieved January 13, 2003, from http://education.umn.edu/CI/MREA/EmergentLit.pdf

Pierce, P., & Porter, P. (1996). Helping persons with disabilities to become literate using assistive technology: Practice and policy suggestions. *Focus on Autism and Other Developmental Disabilities, 11*(3), 142-146, 162.

Pressman, H. (1999, November). *The impact of technology on learning in our schools: Where are we heading?* Paper presented at the meeting of AACTE's Creating the Future of Schools, Colleges, and Departments of Education in the Age of Technology: An Invitational Working Conference, Cupertino, CA.

Reutzel, D. R. (1992). Breaking the letter-a-week tradition: Conveying the alphabetic principle to

young children. *Childhood Education, 69*(1), 20-23.

Reynolds, A. J., & Temple, J. A. (2005). Priorities for a new century of early childhood programs. *Infants & Young Children, 18*(2), 104-118.

Rosen, D. (1999). *Adult literacy practitioners and the Internet: A progress report*. Retrieved November 26, 1999 from the World Wide Web: http://www2.ugbh.org/MBCWEIS/LTC/ALRI/internet.html

Rudestam, K. E., & Schoenholtz-Read, J. (Eds.). (2002). Handbook of online learning: Innovations in higher education and corporate training. Newbury, CA: Sage.

Scarborough, H., & Dobrich, W. (1990). Development of children with early language delay. *Journal of Speech and Hearing Research, 33,* 7-83.

Schickedanz, J. (1999). *Much more than the ABC's*. Washington, DC: National Association for the Education of Young Children.

Shanahan, T. (2005). *The National Reading Panel Report*. Naperville, IL: Learning Point Associates.

Snow, C. E., Burns, M. S., & Griffin, P. (1998*). Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

Speigel-McGill, P., Zippiroli, S. M., & Mistrett, S. G. (1989). Microcomputers as social facilitators in integrated preschools. *Journal of Early Intervention, 13* (3), 249-260.

Stahl, S. A. (1998). Saying the "p" word: Nine guidelines for exemplary phonics instruction. In R. L. Allington, (Ed.), *Teaching struggling readers* (pp. 208-216). Newark, DE: International Reading Association.

Strickland, D. S. (1990). Emergent literacy: How young children learn to read and write. *Educational Leadership, 47*(6), 18-23.

Strickland, D. S., & Shanahan, T. (2004). Laying the groundwork for literacy. *Educational Leadership, 61*, 74-77.

Sulzby, E. (1990). Assessment of emergent writing and children's language while writing. In

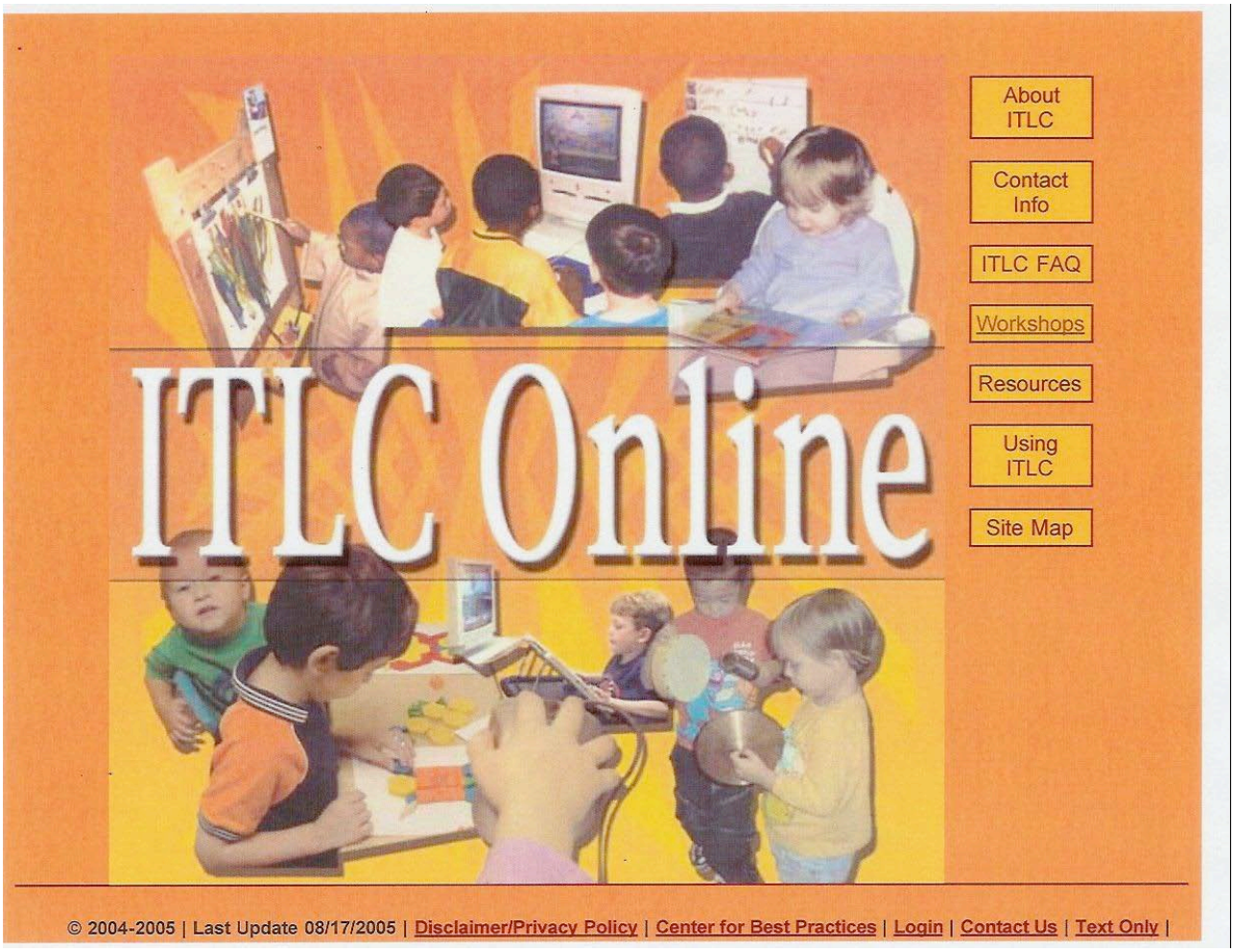
L. M. Morrow & J. K. Smith (Eds.), *Assessment for instruction in early literacy* (pp. 83-108). Englewood Cliffs, NJ: Prentice Hall.

Wolfe, P., & Nevills, P. (2004). *Building the reading brain, PreK-3*. Thousand Oaks, CA: Corwin Press.

Wright, J., & Shade, D. (Eds.). (1994*). Young children: Active learners in a technological age.* Washington, DC: NAEYC.

Yaden, D. B., Rowe, D.W., & MacGillivray, L. (2000). *A polyphony of perspectives*. Retrieved January 14, 2002, from http://www.ciera.org/library/reports/inquiry-1/1-005/1-005.pdf

Appendix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"Ignore the current barriers. They are destined to fail. Instead, develop a clear vision of how technology will really make a difference in areas like family literacy, lifetime skills, authentic assessment, and new roles for teachers."
-Alan November

Interactive Technology Literacy Activities

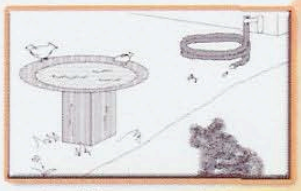
Two important components of technology literacy activities are the software and related off-computer materials. A variety of software is available with storybooks and rhyming features. Stories in software may relate to real-life experiences, contain repetitive phrases, or have rhyming as their focus.

Stories for Young Children

Related to Real-Life Experiences

Very young children benefit most from books and activities that are meaningful for them. Stories about everyday routines, such as eating, taking a bath, or getting ready for bed, will be enjoyable and familiar. Books and software in this category usually have simple pictures with no words or a short sentence on each page.

Amanda's Stories and the Baby Bear series are examples of simple stories about everyday events. Amanda's Stories is a wordless program. Each Baby Bear story is a 3-page story with simple sentences.



Indigo, out for a walk, from "Amanda's Stories"

View PDF View Stories Related to Real-Life Experiences PDF

Repetitive and Predictable Stories

Software that contains repeating lines or rhymes in a storybook format help young children remembers words and want to repeat them. Stories with repeating text or theme provide clues for children to use in predicting what is coming next. Many storybook programs have the option of rereading text on the screen. Children can then hear the words repeated as often as they like.

Examples of software containing repetition or ***predictable stories*** include Storytime Tales, Old MacDonald's Farm, and Circletime Tales. Storytime Tales has three stories: *Bobby, Bobby, What Did you Do?, about washing oneself; Molly's Dirty Duds*, about washing clothes, and Forgetful and Friends, about a bear making a cake.

Molly from "Storytime Tales"

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With Rhyme or Rhythm

Rhymes provide children with ways to play with words, an important step in

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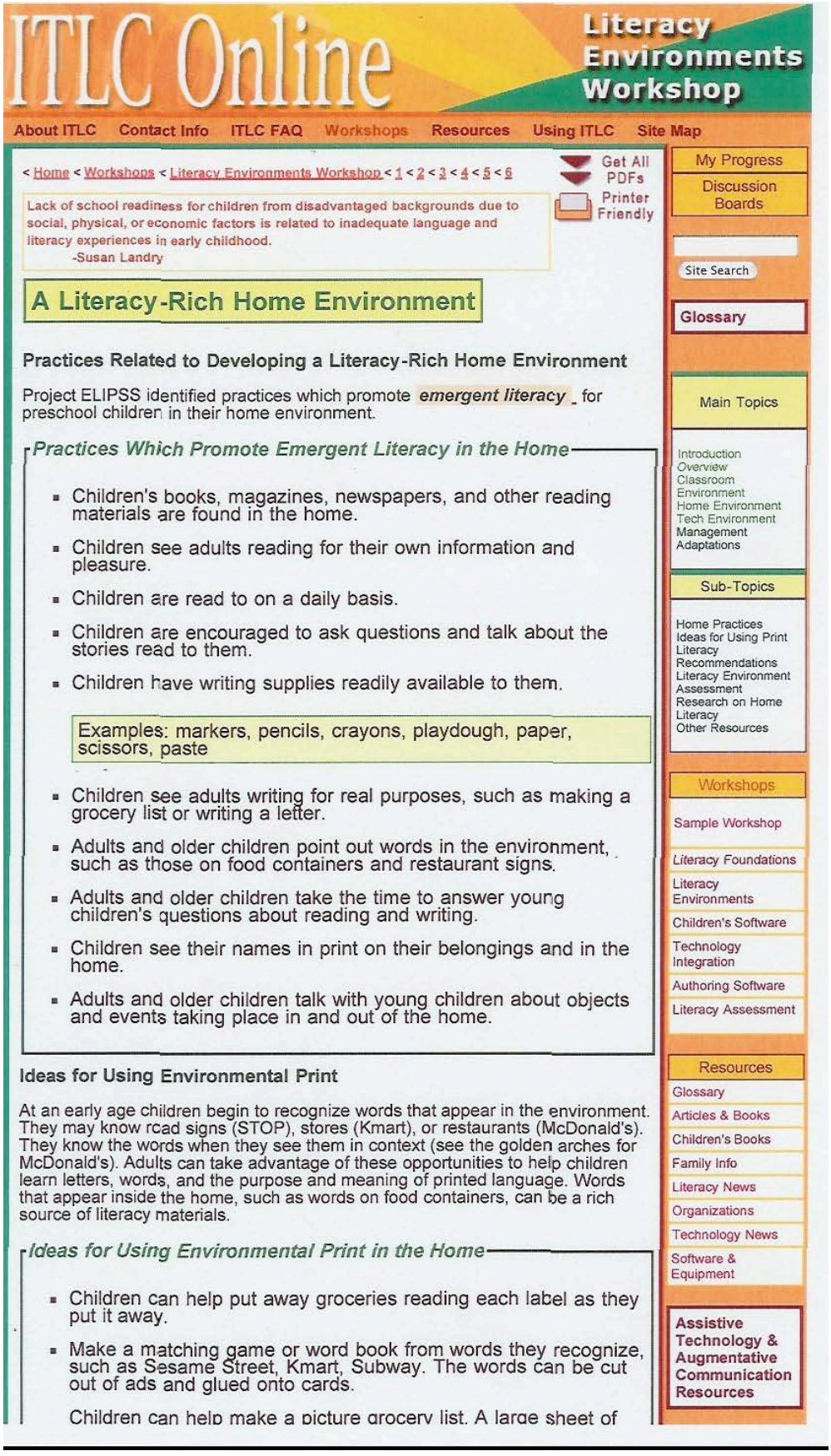

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Lack of school readiness for children from disadvantaged backgrounds due to social, physical, or economic factors is related to inadequate language and literacy experiences in early childhood.
-Susan Landry

A Literacy-Rich Home Environment

Practices Related to Developing a Literacy-Rich Home Environment

Project ELIPSS identified practices which promote *emergent literacy* for preschool children in their home environment.

Practices Which Promote Emergent Literacy in the Home

- Children's books, magazines, newspapers, and other reading materials are found in the home.
- Children see adults reading for their own information and pleasure.
- Children are read to on a daily basis.
- Children are encouraged to ask questions and talk about the stories read to them.
- Children have writing supplies readily available to them.

  Examples: markers, pencils, crayons, playdough, paper, scissors, paste

- Children see adults writing for real purposes, such as making a grocery list or writing a letter.
- Adults and older children point out words in the environment, such as those on food containers and restaurant signs.
- Adults and older children take the time to answer young children's questions about reading and writing.
- Children see their names in print on their belongings and in the home.
- Adults and older children talk with young children about objects and events taking place in and out of the home.

Ideas for Using Environmental Print

At an early age children begin to recognize words that appear in the environment. They may know read signs (STOP), stores (Kmart), or restaurants (McDonald's). They know the words when they see them in context (see the golden arches for McDonald's). Adults can take advantage of these opportunities to help children learn letters, words, and the purpose and meaning of printed language. Words that appear inside the home, such as words on food containers, can be a rich source of literacy materials.

Ideas for Using Environmental Print in the Home

- Children can help put away groceries reading each label as they put it away.
- Make a matching game or word book from words they recognize, such as Sesame Street, Kmart, Subway. The words can be cut out of ads and glued onto cards.

Children can help make a picture grocery list. A large sheet of

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Overview of Multimedia Authoring Software

What is Authoring Software?

Multimedia authoring software allows users to integrate a variety of options (e.g. animation, sound, text, video, graphics, and images) into a story or software program. The software is adaptable to the child and curriculum when implemented by the teacher or family.

Authoring software can be used in many ways. A common approach is to tell a story based on meaningful experiences of the child or children in the class. Children can share pictures of family members, add sound and sound effects to describe a photo with corresponding speech to match the text, and create their own stories. Children can author an animated story and send the corresponding hard copy (or a burned *CD* or *DVD*) of the story home to share with their family members.

The Center for Best Practices in Early Childhood has seen educators successfully integrate multimedia software into the classroom. *HyperStudio*, *BuildAbility*, IntelliPic Studio, and eZedia are a few multimedia authoring programs available to early childhood educators.

Classroom Products Using Authoring Software

Multimedia Authoring Software can be used in the classroom to integrate children's experiences into products which can be shared with families, teachers, and administrators, such as:

- Documenting growth of the individual child or classroom
- Providing current and easy to use products for teachers to allow them to reflect on their teaching
- Creating products to share with others their insights into children's growth (to examine the end product and the process)
- Inclusion of writing and art samples (when selected for a particular purpose) and accompanied by thoughtful written documentation explaining their significance

Some specific examples of projects which can be created using Authoring Software include:

- Classroom Books
- "All About Me" Books
- Presentations
- Interactive CD-ROMs
- Digital Photo Albums
- Observation Journals
- Portfolios
- Slide shows

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Choosing & Using Predictable Books

Predictable books contain repetitive phrases or verses, cumulative patterns, a familiar story line, or language with rhythm and rhyme. Since these books, or parts of them, are easily memorized, young children gain a sense of control and confidence in beginning reading. By following along as adults point to the words, children learn about letters, words, sentences, punctuation marks, and that words are read from left to right and from the top of the page to the bottom. Predictable books, such as the ones listed below, are often the first books young children learn to read. Included also are a variety of activities for using each book to enrich language and literacy.

Books With Repetitive Patterns:

The Big Fat Worm by Nancy Van Lann. Children will very quickly begin to read along with this delightful story as each animal, in turn, says: "I'm going to eat you up," "Oh, no you're not," "Oh, yes I am." Provide materials for children to make puppets–paper bags, cups, straws, construction paper, tape, crayons and markers–for use in retelling the story. Children can also make up gestures and movements to go with the story. For example, putting one hand on their hip, shaking their finger and nodding their heads when saying "Oh, no you're not."

We're Going On A Bear Hunt by Michael Rosen and Helen Oxenbury. In this version of a traditional tale, a young family goes on a bear hunt. Then chant "We're going on a bear hunt. We're going to catch a big one. What a beautiful day! We're not scared" is repeated throughout as the family travels through mud, a snowstorm, a river, and a cave. Ask children to suggest motions and sound effects to accompany each part of the book. For example, what can we do when we repeat "Oh, no, mud. Thick, oozy mud?" and how might the words "squelch, squirt" sound? Children will also enjoy going on their own bear hunt around the yard.

The Carrot Seed by Ruth Krauss. After a little boy plants a carrot seed, each person in his family says "It won't come up." At first it seems as if they are right, but, finally, the boy grows the biggest carrot ever! Children can easily ready along with the repetitive parts "It won't come up" and "Nothing happened." This is a great book to use in a plant unit. Follow by planting carrot or other vegetable seeds.

Books With Cumulative Patterns:

The Cake That Mack Ate by Rose Robart has a delightful surprise ending that will amuse children and adults! As each new ingredient is added to the birthday cake, all of the previous ingredients are repeated. Locate or make

pictures of each character and object in the book for children's use in retelling the story.

The Jacket I'll Wear In The Snow and *The Dress I'll Wear To The Party* by Shirley Neitzel. In each of these books a child gets dressed. As each new item of clothing is introduced, the entire sequence of clothing is repeated. *Children will enjoy acting out these stories as the words are repeated. Use* real articles of clothing, if possible.

Books With Familiar Sequences:

Jesse Bear, What Will You Wear? by Nancy Carlstrom. There are several books about the little bear named Jesse. In this one, Jesse is asked: "What will you wear in the morning? "What will you wear at noon?" and "What will you wear in the evening?" Children can make paper dolls, using a computer desktop publishing program like Art Center by Creative Wonders, or by cutting out pictures of children and clothing from catalogs. They can repeat the story, using the name they have given their paper doll and the articles of clothing they have cut out or drawn.

The Very Hungry Caterpillar by Eric Carle contains the familiar sequence of listing each day of the week: "On Monday, he ate…" Children can read along with these familiar parts using a hand puppet and cut–outs of each food used in the book. They can also make their own versions of the book, using their names and foods they like to eat.

Sample Books and Activities for
Emphasizing Speech Elements

Adapted from Project ELIPSS (1996)

Speech Element	Book	Book Pattern	Suggested Activities
Plural	Petrie, C. (1982). *Joshua James likes trucks.* Chicago: Children's Press.	A little boy likes all kinds of trucks. "Big trucks, little trucks, long trucks, short trucks…"	Invite children to tell about something they like. They may want to draw pictures or cut pictures from magazines or catalogs to make a picture book. Invite them to use their picture book to tell their story to others. Some children may want to dictate to fill in blanks such as "child's name likes ____."
Plural	Carle, E. (1969). *The very hungry caterpillar.* Cleveland: Collins World.	A very hungry caterpillar eats through: one apple, two pears, three plums…"	Invite children to draw pictures of more foods and punch holes in them. Then children can use the food pictures to tell and dictate new stories.
Possessive	Moss, S. (1995). *Peter's painting.* New York: Mondo Publishing.	A little boy paints beautiful pictures that "move." Peter's fish "swam." Peter's snake "slithered." Peter's star "twinkled."	Invite children to experiment with painting many colors of paint on large pieces of paper. Children could be helped to set up an art exhibit with signs for their paintings. Use possessives on their signs, ie. "Sam's painting ……"
Subject-Verb Agreement	Parker, N.W. (1992). *The dress I'll wear to the party.* New York: Greenwillow.	A cumulative story about a little girl who dresses up in her mother's clothing. "This is the dress …" "These are the shoes …" "This is …" "These are …."	Make cutouts of pictures of the objects used in the book. Invite children to repeat the story with you as they find the objects mentioned in the story.
Past Tense	Westcott, N. (1980). *I know an old lady who swallowed a fly.* Boston: Little, Brown.	This is a cumulative story about an old lady who swallowed a fly and a series of other animals to catch the fly. "She swallowed …"	Invite children to make an old lady puppet and draw pictures of the animals she eats. Then children can use the puppet and pictures to retell the story.