



Feature Article

S.O.S. for Information Literacy: New Developments

By Marilyn P. Arnone & Ruth V. Small

Introduction

Educators cannot find enough lesson plans or motivating instructional techniques in the general education databases that specifically address information literacy (IL) skills in the context of classroom assignments and research projects. The innovative, Web-based *S.O.S. for Information Literacy* project accomplishes that and much more by linking curriculum-integrated lesson plans and teaching ideas to related real-world multimedia examples of excellence in teaching, especially focusing on collaborative efforts between classroom teachers and library media specialists (LMS). Since the first article on S.O.S. was featured in the [Fall 2001 issue of ERIC/IT Update](#) (when S.O.S. was just a prototype), there have been a number of major developments. This article introduces the reader to those developments and outlines plans for the future.

A National Leadership Grant Provides Opportunity for Full Development

In September of 2002, the project was awarded a National Leadership Grant, by the [Institute of Museum and Library Services](#) (IMLS), to fully develop this dynamic Web-based multimedia resource designed to promote excellence in teaching information literacy skills to children in grades 1 through 8. At the time of this update, this 3-year project, coordinated through Syracuse University's Center for Digital Literacy, is approaching the end of its first year with full implementation projected for Year 3.

From Front-End Analysis to Outcome Based Evaluation (OBE)

The front-end research was designed to gather information and guidance for selection of appropriate content and desired functionality of the prototype. This research included (1) a survey of college educators and leaders in the field, (2) an online questionnaire, focus groups, and telephone interviews with practitioners, and (3) and technical evaluation with programmers and consultants.

During the development cycle, the project team has developed an Outcome Based Evaluation (OBE) plan for the project's ongoing evaluation. An OBE plan helps developers stay true to the real goals of the project by looking at outcomes in terms of the benefits to the participants of the S.O.S. project instead of focusing too much on its technical goals, which might otherwise easily occur. Those technical milestones are, in actuality, simply "activities" or tasks needed to provide benefits to the users of S.O.S. Simply stated, the project's goals are to improve IL skills instruction, increase confidence in teaching skills, and encourage collaboration between library media specialists and classroom teachers so that they are better equipped to train and motivate learners to acquire and use IL skills.

There is currently no information system available to this targeted audience that accomplishes the goals of *S.O.S. for Information Literacy*. The creation of a state-of-the-art multimedia database of lesson plans and real-life examples of excellent teaching provides the means for attaining those goals. Learn more about outcome-based evaluation by visiting the [IMLS Web site](#) and doing a site search using the term *OBE*.

The Pioneers Are Integral to the S.O.S. User-based Development Approach

While the results of the front-end analysis have guided the initial development of the project, *S.O.S.* continues to take a user-based development approach as it completes each new functionality. For that reason, a group of individuals currently numbering close to 100 has been invited to participate in the development process. (We are ultimately seeking a total of 200 pioneers.) We call them *pioneers* because they truly are helping to build this resource from the ground up. These individuals have either attended workshops, seminars, or completed the training modules online. (Information on becoming a pioneer is

available at the end of this article.)

The pioneers understand that this is a work-in-progress and agree to tolerate the occasional development glitches and challenges and to provide ongoing feedback to the development team. They also contribute quality lesson plans that are evaluated by trained evaluation teams (see Quality Control section).

The pioneers also recognize the importance of motivation to a good lesson plan. When lessons fall flat despite careful planning, the problem is often lack of effective motivational strategies. A successful lesson incorporates appropriate, up-to-date, and accurate content in a way that motivates students. Therefore, when lesson plans for S.O.S. are evaluated, the reviewers expect to see motivational elements included.

In an effort to develop model materials and build the database, for the next year only pioneers will be submitting lesson plans and materials and utilizing the search and other features of the resource. Once S.O.S. has a sufficient number of quality IL lesson plans and materials in its database (with a target date of December, 2004) and has satisfied its development objectives, the database will be fully implemented and made freely accessible nationwide through Syracuse University's Center for Digital Literacy's Web site.

Search Component Features *Information Power* Standards

Search variables include grade level, subject area, author, submission date, and keywords. What is most exciting is that users can search by broad information skills and sub-skills and/or by the nine national standards for information literacy and related indicators established by the American Association of School Librarians (AASL) and the Association for Educational Communications and Technology (AECT) in their publication *Information Power: Building Partnerships for Learning* (1998). A critical goal of this project is to make a significant contribution toward achieving the goals described in *Information Power* by helping educators design and deliver high-quality information literacy skills instruction to their students. In addition, like the [Gateway to Educational Materials \(G E M\)](#), S.O.S. allows users to search the database by top-level MCREL national content standards.

Submissions Template includes Media Support Interface

Online submission software was developed to enable pioneers to input their lesson plans and quickly and easily tag them with appropriate information skills, information literacy standards and/or national content standards. In conjunction with this development, a media support interface was developed to enable contributors to upload and tag their digital photos or other materials that help to support their lesson plan and ideas! Materials can include images, text handouts, PowerPoint presentations, spreadsheets, video and audio clips, and PDF documents. Twenty-five pioneers beta-tested the submission software this summer and found it to be intuitive and fun to use. The pioneers also contributed a number of suggestions for improvement that have already been implemented. That is the value of having a select group of participants involved with the project throughout the building process!

Spotlight on Educators

Spotlight on Educators is a special area of the S.O.S. resource that is currently being developed to showcase the distinctive accomplishments of library media specialists and classroom teachers nationwide as they develop and share lesson plans and other materials to promote information literacy in students in grades K-8. Our early research demonstrated a strong interest in learning about tips, ideas, and real-life examples from other practitioners. Therefore, this area will include a "Featured Lesson Plan of the Month" in which S.O.S. shines the spotlight on an LMS or LMS/teacher team and may include an interview with the creator(s) providing additional information about their lesson plan and/or teaching philosophies. Sometimes, these features will include images and other times may even include an "in-action" video clip or "on-camera reflection" of the successful teaching episode. In the front-end research, the response to including video clips was enthusiastic and included comments such as: "It is always valuable to hear from colleagues. When I see the enthusiasm of the person in the video, it makes me more likely to try their strategy. The videos are a valuable part of S.O.S."

A column entitled "Motivational Strategies That Work!" will feature several motivational strategies that S.O.S. contributors have found effective. A "TIPS" column will include a range of issues related to both S.O.S. and teaching information literacy such as collaborative instructional planning and curriculum development, for example. This column will sometimes include video clips to support suggested tips. "News and Updates" will be a regular column and provide information to pioneers on upcoming or current events in the field as well as information on S.O.S. progress.

Quality Control: A Critical Component

Our front-end research indicated that practitioners want to feel confident that the database contains only materials of high quality. To that end, this resource utilizes a three-pronged approach to quality control including: (1) established criteria for excellence and a technical solution for putting together widely-dispersed teams of reviewers, (2) a top-notch advisory board, and (3) opportunities for virtual training. Each is briefly described below.

The criteria for acceptance were adapted from those developed for the Gateway to Educational Materials (G.E.M.) and include appropriateness, clarity, completeness, organization, and motivational quality. Each aspect of the lesson plan from its learning objectives to its specific procedures and even media support are evaluated individually based on the most appropriate criteria for that particular item. Teams of two evaluators review each lesson and form consensus.

This type of review has historically been difficult because of geographic distance; even back and forth electronic communication to form consensus can be time consuming. The project has resolved this challenge by developing a unique Web-based interface that allows teams of reviewers from any geographical location to review each lesson plan and form consensus on acceptance, plus provide valuable feedback to submitters if there are questions, need for clarification, or suggestions for improvement. Pioneers who have already been through this process have indicated that they are happy to receive the feedback and find that the interface makes it very easy to make minor adjustments on a previously submitted lesson.

Secondly, S.O.S. will also be looking toward its newly formed advisory board to help maintain quality control of this resource and help set policies and plans for the future. This board is made up of national leaders in the areas of information literacy and technology, K-12 practitioners, and pre-service graduate students in library and information science and in educational technology. The board brings a wonderful breadth and depth of knowledge and experience to the project.

Finally, the opportunity for training will be an important part of quality control. Pioneers first visit the training portion of the S.O.S. site. This virtual training provides them with background information, tutorials, and technical tips for such things as preparing images for uploading to the S.O.S. site, or how to utilize PowerPoint to provide more information on their topic to interested educators. For the very motivated pioneers with access to a digital camcorder, there is even a complete tutorial on pre-production and production of a movie for depicting their lesson in action! (Naturally, consideration to school or district policy on including children's faces in photos or videos must be made; photographing students from the back or slightly blurring faces using an imaging application often overcomes this obstacle.)

Quality control will continue to be a critical component of S.O.S. as it adds new features to the resource. Syracuse University's Center for Digital Literacy has partnered with Data Momentum of Ithaca, New York, in developing innovative technical solutions such as the evaluation component described above and overall programming for S.O.S.

Participation

S.O.S. for Information Literacy is a call for excellence in teaching IL skills. If you feel you have motivating ideas for teaching information literacy skills lessons and wish to share them with your colleagues, contact the [Center for Digital Literacy](#) about becoming an S.O.S. pioneer. Anyone interested in simply learning more about the project can visit the [training](#) site.

Conclusion

S.O.S. for Information Literacy promises to make a significant contribution to enhancing the teaching of information literacy skills to children. At no time in history has the ability to locate, organize, evaluate, manage and use information been more critical for today's learners. These skills lay the groundwork for success in every phase of a student's life both in and out of school.

With the structure of the online resource now in place, the next step is refining that structure and populating the database with quality materials that will benefit educators nationwide and beyond. In the near future, the S.O.S. team plans to extend the resource to include grades 9 through 12 and to create a similar resource for librarians at the college level utilizing the information literacy standards of the Association of College & Research Libraries (ACRL).

About the Authors

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