ENHANCING IMPACT FROM STUDENTS TO COMMUNITIES

An Outcome-Based Evaluation of the Oregon School Library Information System (OSLIS)

Prepared by
Dawn King & Matthew "Buzzy" Nielsen
University of Michigan School of Information
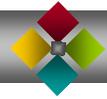April 17, 2007

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I. EXECUTIVE SUMMARY

The Oregon State Library (OSL), partnering with many affiliated organizations, manages the Oregon School Library Information System (OSLIS) portal. OSLIS is funded using Library Services and Technology Act monies. The portal is intended to close the information gap among Oregon school districts, some of which are rich in resources and others that are more isolated with fewer resources available.

Since the Fall 2005, OSL has been aggressively training individuals in school districts to act as trainers within their own schools, facilitating learning about the use and benefits of OSLIS. Now, with improvements planned for the interface, OSL has asked us to complete an outcome-based evaluation of OSLIS and the training in order to demonstrate how well the program is working.

We first conducted background research about the portal as well as the training. Once context was established, we conducted ten interviews with a wide variety of people who had attended OSLIS training. From these interviews, we culled outcomes that described the positive changes that are occurring across school districts because of OSLIS and the training that has helped to support its use.

The outcomes are arranged in relationship to those that are affected by the use of OSLIS: students, educators, schools, and communities. Each group benefits in unique ways from the opportunity that OSLIS affords for exposure to newer and bigger data bases, lesson planning modules, citation aids, and school project ideas. The resulting information is retrieved within suitable reading levels, is authoritative, and is screened for age appropriateness.

Outcomes we uncovered for students included broadened search horizons, improved information literacy, improved research skills, and greater self-reliance. Outcomes for educators included increased collaboration, improved lesson planning and curriculum, more efficient use of time, and achievement of personal and professional goals. We found that for schools, OSLIS became a key and authoritative source of information and allowed them to use money more efficiently. Interestingly, communities were also positively affected by OSLIS, as evidenced by outcomes such as more equal access to information across communities, increased access to information from anywhere at any time, and increased communication about OSLIS among users.

Most importantly, we found that the OSLIS training specifically had several positive outcomes, the most important one being an increased awareness that OSLIS is available and how to use it. Training also increased navigation skills and confidence, provided resources for the individuals that participated, and gave them skills to train others.

Based on our findings, we conclude by recommending that OSL expand training of teachers and in specific content areas, reach out administrators about OSLIS, separate database training from OSLIS training, allow for exchanges of ideas on using OSLIS during trainings, and creating separate trainings for those with varying technical skills.

II. INTRODUCTION

With vital information resources increasingly moving online, a critical problem in K-12 education risks being exacerbated: the information access gap. Even before the internet became widely utilized, poor urban and rural school districts lagged behind wealthier suburban districts in terms of library materials and certified library staff members. This problem is particularly acute in Oregon, where a large portion of the state lives in isolated, rural communities. Indeed, in the Oregon State Library's (OSL) most recent report on the Oregon Quality Education Model for school libraries, Sorensen (2006) notes that from 1980 to 2004, the number of library media specialists in Oregon has decreased from 818 to 433 (p. 3).

While internet access increases as school resources dwindle, librarians and educators in Oregon and other states struggle to find ways of helping students traverse a quickly-changing information landscape. This evaluation analyzes one innovative and effective response to this struggle: the Oregon School Library Information System (OSLIS).

III. WHAT IS OSLIS?

OSLIS <http://www.oslis.org> was created to help all students, whether rural, urban, or suburban, to become more discerning consumers of information. It helps close the information gap among schools, even as school librarians disappear. Indeed, as one OSL staff member stated, "This is a way to address losses of librarians in a doable way. We can't provide school librarians for everyone, and this is a way of easing the gap."

OSLIS seeks to ease the gap by providing access to authoritative magazine databases together with curriculum for K-12 educators on information literacy. It is used by educators, students, administrators, and parents. At no cost to them, these individuals can access full-text periodicals, *The Oregonian*, and information literacy curriculum designed for specific age groups. Here is just a sample of what schools can access via OSLIS:

- Magazine databases provided by EBSCO, including subject-specific databases on business, medicine, education, and news.
- Full-text of *The Oregonian*, Oregon's largest newspaper, provided by NewsBank.
- Citation makers for MLA and APA citation formats, allowing students to fill in blanks and generate bibliographies.
- 24/7 access to chat reference with librarians using Oregon's L-Net service.
- Curriculum and guides on research, evaluating information, note taking, search strategies, and information literacy.
- Access to state and national education standards for information literacy.
- Lexiles, a scale that connects a student's reading ability with appropriate texts (OSLIS, 2006).

The portal is managed by OSL and is funded using Library Services and Technology Act (LSTA) and Oregon Department of Education (ODE) monies. Given the broad impact and accessibility of the portal, OSLIS has many partners and affiliated boards:

- iSchool at the University of Washington
- LSTA Advisory Council of OSL
- Oregon Department of Education (ODE)
- Oregon Education Media Association (OEMA)
- Oregon State Library (OSL)
- OSLIS Committee
- State Library Board of Trustees

These partners realize that merely providing such access and resources is insufficient without also supplying training. One OSL staff member summed up the problem well:

> *"We can hook every school up to EBSCO, but you just can't underestimate the impact of face-to-face training, especially the rapport building when dealing with this generation of librarians and teachers. They're uncomfortable with new resources, electronic immigrants."*

Thus, when OSLIS debuted a new interface in the fall of 2005, OSL initiated an aggressive training campaign to promote awareness about the site. These trainings were conducted by Patty Sorensen, School Library Consultant at OSL. Initially, Sorensen focused on training teachers, library media specialists, and school boards at conferences, workshops, and in individual school districts. The sessions were generally at service points such as Educational Service Districts (ESDs), which serve up to three counties.

Now, trainings target smaller groups and more rural and isolated school districts. Sessions vary in the length and number of participants. While many sessions are in-person, some are also conducted via videoconference. The trainer aims to "train the trainer," enabling participants to introduce the portal to teachers and children at their districts and communities.

IV. WHY OUTCOME-BASED EVALUATION?

With so many resources being invested the portal, including federal LSTA funds, pressure is being placed on OSL to demonstrate that programs such as OSLIS work. OSLIS requires money, time, capital, staff, and other resources. We will refer to these resources as *inputs*. Please refer to Figure 1 for a list of inputs into OSLIS. For this report, we distinguish between "implicit" and "explicit" inputs. Explicit inputs are those that are readily apparent to users of the site: the databases, content, etc. Implicit inputs are basic, behind-the-scenes resources required for the site to operate: staff time, money, server space, etc. We will use this distinction when discussing our findings.

Figure 1: OSLIS inputs

Implicit inputs	_Explicit inputs_
• LSTA monies	• EBSCOhost databases
• ODE monies	• NewsBank database
• OSL staff time	• L-Net
• Volunteer time (governing boards)	• Lexiles
• Partner time (ODE, OEMA, etc.)	• OSLIS content
• Web design work	• Citation maker
• Server space	• OSL staff time
	• OSLIS training
	• Educator time and expertise

Figure 2: OSLIS indicators

- Website hits
- Citations generated through citation maker
- Classes taught with OSLIS curriculum
- Teachers/schools/ librarians using OSLIS
- Accesses to EBSCOhost or NewsBank databases
- Student reports using OSLIS resources

Lawmakers want agencies to demonstrate that the inputs for the program, particularly implicit inputs such as money and staff time, are well utilized. They demand evaluation. As the Institute of Museum and Library Studies (IMLS) (2007), the federal providers of LSTA monies, charges, "[libraries] must measure and report our progress" in helping our communities. Generally, agencies use quantitative indicators to measure this progress. Quantitative indicators can, if measured over time, prove behavioral change as a result of a program. Please refer to Figure 2 for a list of potential quantitative indicators for OSLIS. Such indicators measure how students, educators, and schools act differently as a result of having OSLIS and therefore represent important factors by which to evaluate the program. Indeed, as a state government devoted to accountability, Oregon uses the average daily hits to OSLIS to assess OSL's impact (Oregon State Library, 2007, p. 16).

However, evaluations based solely on quantitative indicators often fail to paint a complete picture. While they are crucial signs that a program changes behavior, such indicators have two major flaws. First, they fail to capture _why_ a program benefits (or hinders) participants; indicators merely measures changes that merely indicate benefits rather than being benefits in themselves. Second, indicators often overlook other positive contributions of the program that managers did not anticipate.

Indicators are an essential part of a larger program evaluation. But another important factor is outcomes. Outcomes identify changes resulting from a program and present them in the program participants' own words. They explain how the participants feel the program benefited or failed to benefit them. Unlike indicators, outcomes often require qualitative rather than quantitative research methods. These qualitative measures allow researchers to more directly ascertain user perspectives which can be used to bolster quantitative indicators showing distinct behavioral changes.

IV. PROJECT DESCRIPTION

We approached OSL to perform an outcome-based evaluation of OSLIS. This evaluation was conducted as part of a University of Michigan School of Information course called Outcome-Based Evaluation of Programs and Services. Throughout the evaluation, we used Durrance and Fisher's (2005) *How libraries and librarians help* model of measuring outcomes in a library setting.

OSL expressed interest not only in learning how schools are using OSLIS, but also in how OSLIS training participants have changed how they use OSLIS and how that training could be improved. Based on these interests, we approached this evaluation with four chief questions:

- *What outcomes does OSLIS impart?*
  This broad question aims at what impact OSLIS is making, whether positive or negative, on schools that access it. We deliberately kept this question broad so as to remain open to the myriad of potential outcomes OSLIS could impart, even beyond its stated goals to increase information literacy and close the information gap.

- *How are schools changed as a result of OSLIS?*
  One way of measuring impact is by looking at what schools do differently as a result of having OSLIS. We therefore tried to spot key changes.

- *What outcomes did participants experience as a result of the training?*
  As with our first question, we kept this broad to capture the range of possible outcomes.

- *What changes would participants recommend for the training?*
  While outcome data is useful, we and OSL also hoped that this evaluation would inform how to improve trainings. We thus solicited recommendations regarding the training from participants.

To answer these questions, we conducted ten separate interviews with nine different individuals. These individuals included two media specialists, four paraprofessional library staff members, one teacher, and two OSL staff members. While we are not revealing the specific names of the interviewees for confidentiality reasons, please refer to Figure 6 for a basic profile of them. The data in the figure do not include the two OSL staff members we interviewed. Please note that "school type" refers to the level and scope of people with whom the interviewee worked (e.g. "High" worked with high schools students, "District" with an entire school district, etc.).

Since OSL was interested in discovering the effectiveness of OSLIS training, our interviewees were exclusively individuals who had participated in training. We also made efforts to interview a wide variety of individuals. For details on our methodology, the interview questions we asked, how we chose interview participants, and the documents we analyzed, please refer to Appendix A: Design.

Figure 3: Profile communities and schools of interviewees

Community data	_School data_
• **Locations in Oregon:** Northeast: 1 Northwest: 2 Southeast: 2 Southwest: 2 • **Average community size:** 8,561 • **Communities with <1,000 people:** 2	• **School types:** Elementary: 2 Middle/Junior: 1 High: 2 Districts: 1 Education Service Districts: 1 • **Average school size:** 286 • **Schools with <100 students:** 2 • **Libraries meeting QEM in 2005-06:** 1

V. FINDINGS

Our interviews revealed a wide range of outcomes spanning far beyond OSLIS's stated goals to improve information literacy and access across communities. Interviewees also expressed that OSLIS increased confidence and self-reliance, saved time and money, and became their key source of authoritative information.

We recognize that our sample size (N=10) and breadth detract from the ability to generalize. However, we feel these outcomes and the recommendations presented in section VI are both valid and valuable. To ensure validity and avoid bias, we included only outcomes expressed by three or more interviewees, with greater weight given to non-OSL staff members. In addition, the value of these outcomes and recommendations is enhanced when paired with more quantitative indicators like those in Figure 2: OSLIS indicators.

In analyzing the interview transcripts and OSLIS documentation, we found several patterns of outcomes. For details on how we identified these patterns, please refer to Appendix B: Data collection/analysis. We found that the outcomes revealed by interviewees fell into five broad groups. The first four outcome groups represent those accruing to specific people or entities: students, educators, schools, and communities. We also identified a fifth set of outcomes that originated specifically from OSL's training program.

These outcomes are graphically represented in Figure 4. Each box represents outcomes received by one of the groups or entities we identified. We placed students at the top of the diamond because, as a program targeted toward K-12 schools, OSLIS's ultimate objective is to benefit children. Educators and schools come next, with educators being broadly defined as anybody working to teach students (e.g. teachers, librarians, paraprofessional staff members, administrators, etc.). Finally, although most of the outcomes are ultimately experienced by these people and school systems, the benefits reach out into the larger community.
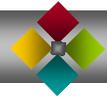
Figure 4: Graphical Representation of OSLIS Outcomes

Credit goes to Jamie Nielsen for inspiration on the graphic design.
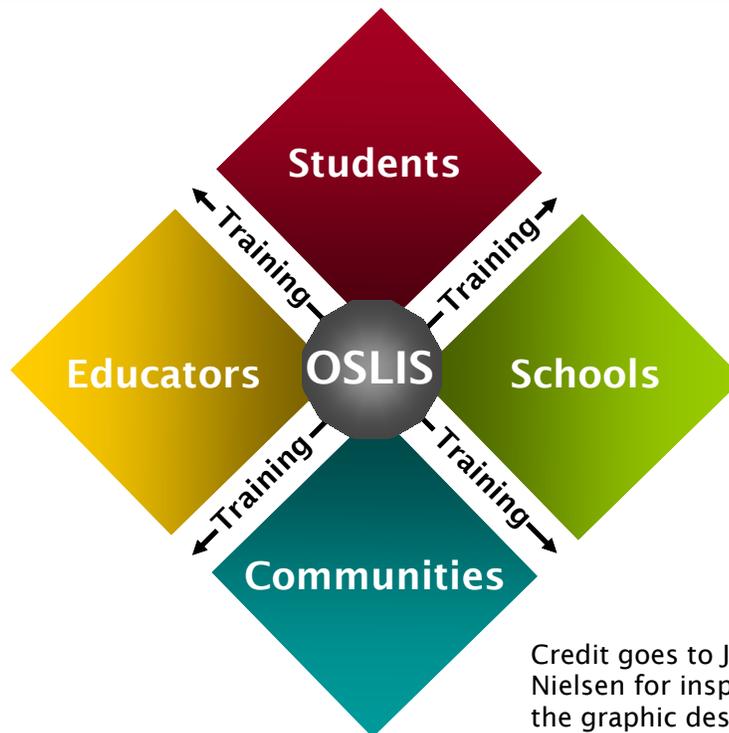
OSLIS training outcomes serve to enhance the outcomes experienced by students, educators, schools, and communities. Hence we depicted training as branching outward between each of these areas. The outcomes participants expressed as resulting from training helped them better utilize OSLIS to meet their goals and improve the learning experience. Training outcomes thus serve an instrumental purpose in facilitating other OSLIS outcomes.

What follows is a more detailed discussion of each outcome group, with supporting anecdotes and quotations gleaned from interview transcripts. The full list of outcomes is found in Figure 5. Supporting quotations are presented in tables which include the outcome group, quotation text, and our conjectures on explicit inputs (see Figure 1) that make those outcomes possible.

Figure 5: OSLIS Outcomes

Students

St-1: Broadened Search Horizons
St-2: Improved Information Literacy
St-3: Improved Research Skills
St-4: Greater Self-Reliance

Educators

E-1: Increased Collaboration
E-2: Improved Lessons and Curriculum
E-3: More Efficient Use of Time
E-4: Achievement of Personal and Professional Goals

Schools

Sc-1: Becomes Key Source of Authoritative Information
Sc-2: More Efficient use of Money

Communities:

C-1: More Equal Information Access Across Communities
C-2: Increased Access to Information, Anywhere, Anytime
C-3: Increased Communication About OSLIS with Different Users and Communities

Training:

T-1: Increased Awareness About OSLIS
T-2: Increased Ability to Navigate OSLIS
T-3: Personal Connection with the Trainer
T-4: Improved Learning Through Dynamic, Hands-on Activities
T-5: Increased Confidence
T-6: Trainer Serving as a Resource for Trainees
T-7: Increased Training of Others

A. Students

While OSLIS was originally designed to encourage educators to collaborate, its clear end purpose was to help *students* learn and improve their access to information. Our interviews revealed four patterns of outcomes for students, all of which relate to their ability to, knowledge of, and confidence in locating information.

The group of outcomes related to students includes those experienced by K-12 students as expressed by educators and OSL staff members.

St-1. OSLIS broadens students' search horizons

Educators reported that students were exposed to a number of different subjects and search methods by using OSLIS. They researched new topics and used search methods, such as online chat with librarians, that went beyond merely searching Google.

Supporting quotations for these outcomes are presented in Figure 6. They were taken from three separate interviews with three paraprofessional library staff members.

Figure 6	Quotation	Inputs/Activities
Student Outcome 1: Broadened Search Horizons	*"We also have libraries on call that you can get to through OSLIS. The kids can chat with a librarian that's on duty who will direct them to the appropriate site. The kids love that."*	L-net
	"They just finished doing a rainforest study and it was just amazing the different stuff I found for them. The kids are excited about it."	EBSCOhost databases
	"Maybe a kid will write the history of engines and then his project will be making an engine run in a car. We had one kid who did a whole cooking session, created a meal. This is a really broad-based database. We've had them do nursing, dental assistant, education, teaching."	EBSCOhost databases
	"Last month, they had to have controversial topics for biology on water conservation. They needed to find information on water use in the Klamath River Basin, evolution vs. creationism. Those are examples in the last couple of weeks."	EBSCOhost databases
	"This has really opened it up for what students can access. I guess it's improved our research tools."	EBSCOhost databases, NewsBank

St-2. OSLIS improves students' information literacy

Educators are teaching students effective methods for how to cite their work, think critically about sources, and how to find safe, appropriate, authoritative information.

Supporting quotations for these outcomes are presented in Figure 7. They were taken from four separate interviews with a paraprofessional library staff member, a media specialist, a teacher, and an OSL staff member.
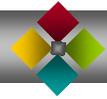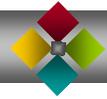
Figure 7	Quotation	Inputs/Activities
Student Outcome 2: Improved Information Literacy	*"Whenever I can, I tell the students there are other places to search than Google. They think that's the only site to go to."*	EBSCOhost databases, NewsBank, educator time and expertise
	"I know that it's there and I know how to show the kids how to use it and get more reliable information for the kids that is actually information that they can use, that's not a dot com site."	EBSCOhost databases, NewsBank, educator time and expertise
	"I really like the links that they have on internet safety. We've decided that it's important to teach kids about internet safety."	OSLIS information literacy content
	"We were doing some things about taking notes and plagiarism. It helps them understand that. It helps them understand what's okay to copy and what's not. Most of it's not. I think that's a huge one. Teaching them to cite their sources at an early age."	OSLIS note taking content, OSLIS information literacy content
	"The citation part is pretty cool. . . . it will give them the full format of how to cite."	citation maker
	"Kids researching skills are lacking big time because it's so easy to use Google. They are not spending time to check the validity of the sources, and it makes plagiarism too easy."	EBSCOhost databases, NewsBank
	"It's taking all the lessons and resources you need to teach kids about information literacy and it's training on how to use magazine databases."	OSLIS information literacy content, EBSCOhost databases, NewsBank
	"Train the trainers are using it to encourage their staff and students to use authoritative references and not just Google search."	OSLIS training, OSL staff time and expertise, EBSCOhost databases, NewsBank

St-3. OSLIS improves students' research skills

Students are learning how to refine their search strategies and narrow their topics in order to find the best and most useful information about a variety of subjects.

Supporting quotations for these outcomes are presented in Figure 8. They were taken from three separate interviews with two paraprofessional library staff members and a teacher.

Figure 8	Quotation	Inputs/Activities
Student Outcome 3: Improved Research Skills	*"The kids get a little frustrated in searches because they don't know how to narrow them down, but they learn that in the process. This works really well. We can find tons of stuff and it works really well."*	EBSCOhost databases, educator time and expertise
	"They also use a lot of it is for reports or for speeches. They use the student resource part or they go on the other parts like EBSCO, view encyclopedias, maps or whatever they might need for a report or speeches."	OSLIS research content, EBSCOhost databases
	"To be able to define their searches better so they are not spinning their wheels as much. And I can define my searches as well, can find this or that magazine or some specifically technical or educational journal."	EBSCOhost databases, OSLIS research skills content
	"Fourth grade they're still trying to synthesize information in the first place, learn how to summarize data to begin with but we're starting in that direction at this grade."	EBSCOhost databases, teacher time and expertise
	"I know it is quick and easy to use with students and really helps them narrow their searches."	EBSCOhost databases, OSLIS research skills content
	"If they are still having trouble I go through more, most of the time they find what they need there, sometimes we have to narrow the topic down to find it. That's part of the training."	teacher time and expertise

St-4. OSLIS helps students become self-reliant

Students are learning to research, use online databases, and cite sources on their own. This helps create more self-sufficient searchers who will be able to conduct research independently.

Supporting quotations for these outcomes are presented in Figure 9. They were taken from three separate interviews with three paraprofessional staff members.

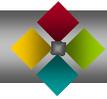| Figure 9	Quotation	Inputs/Activities
Student Outcome 4: Greater Self-Reliance	*"They can cite their sources. It's clear, it's straightforward, it's what they need."*	citation maker
	"I try to get the students to use it themselves, but for the younger kids I generally help them. They will watch me bring up the information; they tell me what they want printed."	EBSCOhost databases, educator time and expertise
	"I came back from training and showed them how to make their own folders with their own passwords, how to put stuff in it, how to do the different researches."	EBSCOhost databases, educator time and expertise, OSLIS training
	"I run them through how to use it, the citation maker. All they have to do is fill in the blanks, which is ideal for the kids. As you get your source you just go over here, copy and paste, and you've got it done. They see how easy it is."	citation maker, EBSCOhost databases, educator time and expertise
	"Then once they learn how to navigate they go on and find some more using the tutorials."	OSLIS content

B. Educators

One of the primary goals of OSLIS was to provide an avenue for educators to collaboratively use information to improve the quality of their work with and for students. However, our interviews showed that collaboration was not the only positive outcome of OSLIS and the training for educators. Time and again, we heard stories that showed how OSLIS also improved lesson plans and curriculum by providing new and credible information, saved time by getting accurate results and providing abstracts, and helped educators meet their own personal and professional goals through the databases available in OSLIS.

The group of outcomes related to educators includes those experienced by K-12 staff members, including teachers, media specialists, paraprofessional staff members and administrators.

E-1. OSLIS encourages collaboration

OSLIS helps library staff members work with teachers to develop more interesting and creative lesson plans. OSLIS provides information from many databases, at specific reading abilities, and in appropriate lesson modules. Tech-savvy students help teachers learn to navigate as well.

Supporting quotations for these outcomes are presented in Figure 10. They were taken from three separate interviews with a media specialist, a paraprofessional library staff member, and an OSL staff member.

Figure 10	Quotation	Inputs/Activities
Educator Outcome 1: Increased Collaboration	*"Some of the students help [the teachers] navigate."*	OSLIS content, educator time and expertise
	"I collaborate with teachers."	educator time and expertise
	"Librarians are using it for a resource of lessons to help the teachers teach."	OSLIS content, educator time and expertise

E-2. OSLIS helps educators improve lessons and curriculum

Teachers have access to a rich diversity of information, teaching aids, sample quizzes, lesson modules and much more. This information is being used in their lesson plans and in expansion of curriculum. One of our interviewees regularly uses OSLIS to help teachers and librarians in rural Oregon to develop more effective lessons.

Supporting quotations for these outcomes are presented in Figure 11. They were taken from six separate interviews with two media specialists, three paraprofessional library staff members, and an OSL staff member.

Figure 11	Quotation	Inputs/Activities
Educator Outcome 2: Improved Lessons and Curriculum	*"I think there's a lot of valuable stuff there for the teachers with the standards and the curriculum. There's so much valuable stuff there. I think they'd use it a lot."*	OSLIS content, Lexiles
	"That's why I'd love the teachers to get into it to see how much there is available for them.	OSLIS content, EBSCOhost databases
	"OSLIS does such a wonderful job of providing teacher resources."	OSLIS content
	"OSLIS is a wonderful professional development resource for teachers."	OSLIS content, EBSCOhost databases
	"It is specifically for teachers and libraries to access information literacy curricula and guides."	OSLIS content, Lexiles

Educator Outcome 2: Improved Lessons and Curriculum (Cont.)	*"Our Spanish teacher uses parts of it. There's parts of it she can use, Spanish language journals. They sometimes do some research there. She can print off things and the kids try to read them."*	EBSCOhost databases
	"I can look within their reading level so the information they are getting is not way over the top and they aren't getting frustrated with what they are getting."	Lexiles
	"I'm a new school librarian, and I incorporated it into my curriculum."	OSLIS content
	"Plug in what I can do on the site to what I'm doing in my teaching. Making the connection between what's in the site and my teaching goals with individual classes or teachers."	OSLIS content, EBSCOhost databases

E-3. OSLIS saves educators time

It became clear, after talking to users, that OSLIS allows educators and students to access credible and appropriate information more quickly. This extra time allows the educator to focus on other critical tasks, such as designing lessons.

Supporting quotations for these outcomes are presented in Figure 12. They were taken from three separate interviews with two paraprofessional library staff members and a teacher.

Figure 12	Quotation	Inputs/Activities
Educator Outcome 3: More Efficient Use of Time	*"I can look really quick at the abstract to see if I need that article, can refine it and go faster and help the student be a little more productive with their time."*	EBSCOhost databases, educator time and expertise
	"It's easier to locate appropriate books for students, based on their levels, easier to target."	Lexiles
	"The other thing that's nice about it is I know I don't have to be concerned about the appropriateness of the things that come up. It's filtered and kid friendly."	EBSCOhost databases, Lexiles
	"This I know is quick and easy to use with students and really helps them narrow their searches."	EBSCOhost databases

E-4. OSLIS helps educators achieve personal and professional goals

Though OSLIS was instituted to even the playing field for students across school districts, a more far-reaching outcome is that educators are using it to meet their own personal and professional information needs and goals. This outcome was an unanticipated but welcome pattern.

Supporting quotations for these outcomes are presented in Figure 13. They were taken from three separate interviews with two paraprofessional library staff members and a teacher.

Figure 13	Quotation	Inputs/Activities
Educator Outcome 4: Achievement of Personal and Professional Goals	*"I'm an online student myself. I go to school full time myself as well as work. I am getting a BA for schools and teaching. Child development. Some articles and different articles that I'm not able to purchase all of them myself. I research for different projects for English."*	EBSCOhost databases
	"I have some younger teachers tell me they use it for their own continuing education."	EBSCOhost databases
	"I think our ELL (English Language Learner) Specialist uses it with the kids as well … also using it herself for information."	EBSCOhost databases

C. Schools

Though we expected outcomes from OSLIS training for students and educators, we were pleased to see that there were also outcomes that positively affected schools generally. Aside from the important outcome of saving the schools money, it is clear that OSLIS has become a primary source of research information and that it is being used across school systems, grade levels, and content areas.

The group of outcomes related to schools includes those experienced by K-12 schools, school districts, and ESDs.

Sc-1. OSLIS becomes a key source of authoritative information for schools.

It became apparent as we talked to people that OSLIS has become a primary, if not *the* primary source of information in the school systems. Educators check OSLIS before other sources are researched and steer students there because it provides authoritative information.

Supporting quotations for these outcomes are presented in Figure 14. They were taken from four separate interviews with a media specialist, two paraprofessional library staff members, and a teacher.
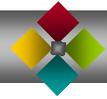
Figure 14	Quotation	Inputs/Activities
School Outcome 1: Becomes Key Source of Authoritative Information	*"I ask them, 'Have you checked on OSLIS?'"*	OSLIS content
	"I always give the OSLIS information, but now it's simplified things because it's such one-stop shopping. I go there first. It helps because I'm not giving them tons of sites. I tell them 'Let's start with OSLIS and go from there.'"	OSLIS content, EBSCOhost databases
	"It is a focus now when I talk about what is available. It's always the first thing I talk about. First I tell people about OSLIS, where to go to get information. It's at the front of my training rather than one of many sites."	OSLIS content
	"They are using it as a portal. It's on their websites now. It's the main place they put kids into, they don't send kids all over the place. Staff knows it's the first place to go when looking for information."	EBSCOhost databases
	"The superintendent of [organization], whose wife is a teacher, wanted information on certain resources and he came to [his wife] for help. He knew that OSLIS was there and he knew it was the place to start his search."	EBSCOhost databases
	"I recommend it to the kids. Our junior class is required to do career development. The first half of the year is career development. The second half is writing a huge paper on the senior project. We use OSLIS as a main resource site for getting material we don't have access to."	EBSCOhost databases
	"The English department uses it when they're going to do speeches, 10th grade, the one in 9th grade, and over in 11th grade. They definitely recommend it for their students to use. They have the website and how to navigate it for their class. We keep on the wall the instructions on how to navigate OSLIS."	EBSCOhost databases
	"If I have a student who says I can't find something, what do I do? We sit down and say 'go to this website' we go through some steps on how to navigate."	EBSCOhost databases, educator time and expertise
	"My students, they go to the library every week and they have access and they use it up there at least once a week."	EBSCOhost databases

Sc-2. OSLIS saves schools money

Using OSLIS has saved schools money that is being put to use in other ways. This outcome was particularly reported and appreciated by interviewees in smaller, more remote districts.

Supporting quotations for these outcomes are presented in Figure 15. They were taken from four separate interviews with a media specialist, two paraprofessional library staff members, and an OSL staff member.

Figure 15	Quotation	Inputs/Activities
School Outcome 2: More Efficient Use of Money	*"As budgets dwindle, this has allowed us to not carry as many magazines and not keep as much in stock. We're down to the magazines kids read for fun."*	EBSCOhost databases
	"For our library and our budget, I was able to cut down on the amount of periodicals that I have to order because there are so many on OSLIS. I was able to buy more books for the library."	EBSCOhost databases
	"We use OSLIS as a main resource site for getting material we don't have access to. Because you can't keep magazines like that in the library anymore. In fact, nobody even knows how to use Reader's Guide *anymore."*	EBSCOhost databases
	"I think it's fabulous that it's free access for Oregon schools. I value the site and think it's a great site and hope it will continue."	EBSCOhost databases, NewsBank
	"The State Library resources are much richer than any that the schools could afford to buy on their own previously."	EBSCOhost databases, NewsBank

D. Communities

In addition to students, educators, and schools, communities have gained outcomes from OSLIS as well. Most importantly, OSLIS is closing the gap between communities that had access to many databases and those that did not, between communities that had multiple resources nearby and those that were more isolated. The training provided the awareness that OSLIS was available, and that it was available anytime, anywhere, not just in schools and not just for students.

The group of outcomes related to communities includes those that were not limited to individuals or schools. Instead, they branched out to parents, public libraries, and the rest of the community.
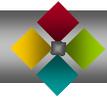
C-1. OSLIS closes the information gap among communities.

Students and educators now are playing on a level playing field. All students and educators, in every school, regardless of the school system size or location, can access current, authoritative, interesting information as well as creative lesson plans.

Supporting quotations for these outcomes are presented in Figure 16. They were taken from three separate interviews with two paraprofessional library staff members and an OSL staff member.

Figure 16	Quotation	Inputs/Activities
Community Outcome 1: More Equal Information Access Across Communities	*"This is a way to address losses of librarians in a doable way. We can't provide school librarians for everyone, and this is a way of easing the gap."*	OSLIS content, EBSCOhost databases, NewsBank, OSLIS training
	"We use OSLIS as a main resource site for getting material we don't have access to. Because you can't keep magazines like that in the library anymore. In fact, nobody even knows how to use Reader's Guide *anymore."*	EBSCOhost databases
	"This has really opened it up for what students can access. I guess it's improved our research tools."	EBSCOhost databases
	"A big plus for us is because we are so removed from everything, we have a public library, but there is so much more we can view from OSLIS to look at it ahead of time, if we didn't have it. It would be so much harder to do the research for reports and speeches and projects. We appreciate that they have it!"	EBSCOhost databases
	"Right now the biology department is doing a research project to find material that we don't carry specifically, but there are still many places that they can use on OSLIS."	EBSCOhost databases

C-2. OSLIS increases communities' access to information anytime, anywhere

It is apparent that OSLIS is not only used in school during school hours. Educators, students, and parents are using it from any number of places at all times of the day and night. One interviewee noted that she gets at least one request per week from parents who wish to use OSLIS with their children at home.

Supporting quotations for these outcomes are presented in Figure 17. They were taken from three separate interviews with two paraprofessional library staff members and a media specialist.

Figure 17	Quotation	Inputs/Activities
Community Outcome 2: Increased Access to Information, Anywhere, Anytime	*"I think they use it at home somewhat. We've sent a letter home with all of the information. We sent the little bookmark home to them, kind of explaining to them about it being this big research database."*	EBSCOhost databases, educator time and expertise
	"There are still many places that they can use on OSLIS, because they can use it from home, the public library can be used to access it. We have two computer labs in here as well where they can use it. In some of the classrooms the teachers will let them, the business department will let them, the tech department obviously will let them use a computer as well."	EBSCOhost databases, school resources, community resources
	"The public library can use it, parents can use it, students can use it as well. Now this is something that outreaches beyond just the schoolroom. It can be used at home because of the internet. That is something that has been very helpful."	EBSCOhost databases, community resources
	"I'm telling parents about the site and how they can research at home. Kids are using it at home. I teach them how to get to our school website and how to find the link."	EBSCOhost databases
	"My own daughter, at [name of school], uses it at home for her projects."	EBSCOhost databases

C-3. OSLIS users spread the word to other communities and users

Many people we contacted were willing and even excited to talk to discuss OSLIS, their use of it, and what they gained from the training. They are talking about it with others regularly as well, which helps spread OSLIS further throughout and beyond Oregon

Supporting quotations for these outcomes are presented in Figure 18. They were taken from five separate interviews with two paraprofessional library staff members, two media specialists, and an OSL staff member.

Figure 18	Quotation	Inputs/Activities
Community Outcome 3: Increased Communication About OSLIS With Different Users and Communities	*"There are not so many pockets of people that don't know about it now."*	educator time, OSL staff time
	"I'd love the teachers to get into it to see how much there is available for them."	educator time
	"I have a daughter that teaches in Idaho, and I showed her OSLIS and she said it would really help, but of course she can't get into it to use it in Idaho."	educator time
	"I tell them...you've got to go there."	educator time
	"The partnership with the Oregon Department of Education has allowed us to spread the word."	partner time
	"I recommend it to the kids."	educator time and expertise
	"We were one of the highest using schools in the state. Because we got everyone using it."	educator time
	"For example, I have a friend who teaches as a media specialist in [city], and she hardly ever uses the site and I wonder why? Why not use the site?"	educator time

E. Training

OSLIS training appeared to be a key factor in the successful implementation and continued use of the portal. It is obvious from our interviews that the awareness, at least among the participants interviewed, was high, and that more training would be welcomed.

The group of outcomes related to training includes those that, from our analysis, originate because of the OSLIS training program run by OSL. Of our interviewees, four participated in trainings where the trainer was present and three participated via videoconference.

T-1. OSLIS training increases awareness about the site

During our initial interviews we asked what the primary objective of the OSLIS training was, and we were told that most importantly the objective was to make sure people knew "that it's there," i.e., that OSLIS existed and where to find it. Based on the interviews we conducted, this objective is being met.

Supporting quotations for these outcomes are presented in Figure 19. They were taken from four separate interviews with two paraprofessional library staff members, a media specialist, and an OSL staff member.

| Figure 19	Quotation	Inputs/Activities
Training Outcome 1: Increased Awareness About OSLIS	*"Finding out what resources are available for teachers and librarians."* [Said in response to a question on the most valuable part of the training]	OSLIS training
	"Of primary importance is knowing the product exists. Awareness is so huge, of OSLIS and of the databases."	OSLIS training, OSLIS content, EBSCOhost databases
	"We always go just for refreshers because you forget things. I think there's lots more that this will do, and you always forget where things are at. Oh yeah, I remember that. We forgot about that little piece."	OSLIS training
	"I knew there was something out there but I didn't know what it was. Was this something we were going to be able to use? But after the training, realizing it's not just for high school students. The public library can use it, parents can use it, students can use it as well. Now this is something that outreaches beyond just the schoolroom. It can be used at home because of the internet, that is something that has been very helpful."	OSLIS training

T-2. OSLIS training increases ability to navigate the website

According to our interviews, the training enabled participants to better navigate the site. Participants felt better about their ability to guide people to beneficial resources using OSLIS once they had received training.

Supporting quotations for these outcomes are presented in Figure 20. They were taken from four separate interviews with two paraprofessional library staff members, a media specialist, and a teacher.

Figure 20	Quotation	Inputs/Activities
Training Outcome 2: Increased Ability to Navigate OSLIS	*I can search it better, the magazine resources and the citation availability."*	OSLIS training, EBSCOhost databases
	"Knowing where and what." [Said in response to a question on the most valuable part of the training]	OSLIS training, OSLIS content
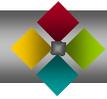
| Training Outcome 2: Increased Ability to Navigate OSLIS (Cont.) | *"They have the website and how to navigate it for their class. We keep on the wall the instructions on how to navigate OSLIS"* | OSLIS training, OSLIS content |
| | *"I can definitely guide students where they need to look."* | OSLIS training |
| | *"It's easier to locate appropriate books for students, based on their levels, easier to target, limiting your searches to appropriate reading levels."* | OSLIS training, Lexiles, EBSCOhost databases |

T-3. OSLIS training creates a personal connection between trainer and trainees

It was apparent during our interviews that the trainer was a big part of the success of the training. She supported the users, which they recognized as invaluable. Creating such a personal connection between the trainer and trainees can further enhance the learning process.

Supporting quotations for these outcomes are presented in Figure 21. They were taken from three separate interviews with a paraprofessional library staff member, a media specialist, and an OSL staff member.

Figure 21	Quotation	Inputs/Activities
Training Outcome 3: Personal Connection With Trainer	*"The hands-on going from site to site and [trainer] would back up and go over anything if we were kind of slow. We said wait a minute and have it explained to us again. Her knowledge is just amazing." [Said in response to a question on the most valuable part of the training]*	OSLIS training, OSL staff time
	"Kudos to [trainer]. It wouldn't have happened without her. She disseminates information in a way people can understand."	OSLIS training, OSL staff time
	"Having a person that actually trains school staff has made huge difference."	OSLIS training, OSL staff time
	"We can hook every school up to EBSCO, but you just can't underestimate the impact of face-to-face training, especially the rapport building when dealing with this generation librarians and teachers. They're uncomfortable with new technology, electronic immigrants"	OSLIS training, OSL staff time
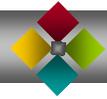
T-4. OSLIS training improves learning through dynamic, hands-on activities.

Many times, we heard that the most valuable aspect of the training was having time to sit and work in the site. During a typical educator's day, there is no opportunity to explore the site and learn new features. Having time to do this was appreciated and an effective learning tool.

Supporting quotations for these outcomes are presented in Figure 22. They were taken from four separate interviews with two paraprofessional library staff members, a media specialist, and a teacher.

Figure 22	Quotation	Inputs/Activities
Training Outcome 4: Improved Learning Through Dynamic, Hands-on Activities	*"The hands-on going from site to site and [trainer] would back up and go over anything if we were kind of slow. We said wait a minute and have it explained to us again. Her knowledge is just amazing." [Said in response to a question on the most valuable part of the training]*	OSLIS training, OSL staff time, educator time
	"We're sitting there at computers playing, which is way better than any other way."	OSLIS training, educator time
	"I'm a hands-on person. I need to get in and find out about things and explore. I just needed to familiarize myself with the site."	OSLIS training, educator time
	"The best part of the training was the part where they gave us the time to look around and play with it. I don't have time during the day to do that."	OSLIS training, educator time

T-5. OSLIS training increases participants' confidence

The training provided participants with increased confidence that seemed to extend beyond merely navigating the site. They became more self-assured in helping their students and teachers.

Supporting quotations for these outcomes are presented in Figure 23. They were taken from three separate interviews with a paraprofessional library staff member, a media specialist, and an OSL staff member.

Figure 23	Quotation	Inputs/Activities
Training Outcome 5: Increased Confidence	*"I'm more confident in showing them what to do. Before I was just blundering around, now that I know it's there and there's a way to bring it up that's much better."*	OSLIS training
	"I feel like I'm better equipped to actually use OSLIS. I can get around it instead of getting frustrated and closing it and moving to another site because I know how to get around to do the different searches."	OSLIS training
	"It lends itself well because it helps bring comfort in using electronic resources"	OSLIS training
	"Comfort is another key piece of what [trainer]'s doing. She's giving them a platform to build expertise on."	OSLIS training, OSL staff time

T-6. OSLIS trainers provide resources for trainee needs

Interviewees repeatedly told us how pleased they were with the responsiveness of OSL to any questions or needs they expressed. They felt confident that they are being heard, and that any issues will be resolved quickly and efficiently.

Supporting quotations for these outcomes are presented in Figure 24. They were taken from three separate interviews with two paraprofessional library staff members and a media specialist.

Figure 24	Quotation	Inputs/Activities
Training Outcome 6: Trainer Serving as Resource for Trainees	*"She does an excellent job. She's such a valuable source of information. I was able to mail her a question when I got back and was able to get the answer right back."*	OSLIS training, OSL staff time
	"If I have a question, I'll email them and they'll get me the answers."	OSL staff time
	"She knows it's not just a one-day training. She sends out reminders and updates and reviews."	OSLIS training, OSL staff time
	"I really want to give credit to [trainer]. Before [trainer] started it was hit and miss and now there is a concerted effort with her listserv and training."	OSLIS training, OSL staff time

Training Outcome 6: Trainer Serving as Resource for Trainees (Cont.)	*"[Trainer] is persistent, even to the point of getting a reluctant school district trained."*	OSL staff time
	"We used to not have the . . . Masterfile Premier. We got to squawking at the State and lo and behold we did enough talking and it came up that we got it. That's really opened it up. It used to be only colleges had it."	OSL staff time, educator time and expertise
	"They send good emails. We couldn't be more happy."	OSL staff time

T-7. OSLIS training encourages participants to train others

Early in the training, the objective was that people who were trained would go out and train others within their schools. Some of that is happening now. We should note, however, that much of this training happens informally in one-on-one sessions.

Supporting quotations for these outcomes are presented in Figure 25. They were taken from four separate interviews with two paraprofessional library staff members, a media specialist, and an OSL staff member.

Figure 25	Quotation	Inputs/Activities
Training Outcome 7: Increased Training of others	*"Oh my gosh, I use it a lot for training."*	OSLIS content, educator time and expertise
	"It's really kind of an Each One Teach One model."	OSLIS training, OSL staff time
	"All of the staff, we go through and periodically just say OSLIS is there and remember it has all these cool things. They come 2-3 at a time. Snag two or three after school and get them all excited and off they go."	educator time and expertise
	"Train a little bit with my own teachers and some student teachers."	educator time and expertise

VI. RECOMMENDATIONS

Our interviews also yielded information that may help OSL proceed as they redesign OSLIS and OSLIS trainings. While we received a wealth of praise for OSL trainings and the trainer, we believe that these trainings can be made even more effective.

Unfortunately, despite variance in how people received training, we received little information on the effectiveness of videoconference versus face-to-face training. However, based on the enthusiasm of those who received face-to-face training, we conjecture that it was probably more effective.

As OSL staff communicated to us, trainings were originally targeted to library staff and were delivered through ESDs around the state. Today, OSL focuses more on rural and isolated districts, hoping to spread awareness about the valuable resources available at their fingertips. However, we and some of our interviewees believe that trainings should be further directed toward teaching staff. For instance, one paraprofessional staff member expressed that "if we could get some more training to show teachers how they could use it for their own use as well as for classroom training, that would be good." One way to encourage teacher participation in OSLIS trainings may be to offer Continuing Education credits, perhaps through Western Oregon University, if OSL does not already do so.

In particular, OSLIS possesses many subject-specific resources that would be useful to teachers at the secondary level. Even in our single interview with a science teacher, we found much passion for the science-specific resources available to him. During our interview, he found over 4,000 science fair materials in EBSCO of which he was previously unaware. While we realize that resources are too slim to target trainings in specific subject areas, further training of teachers would generate excitement just like this teacher expressed. Subject-specific tutorials on the OSLIS portal would further enhance these trainings and uses.

Training teachers is critical. However, one aspect of our interviews that struck us was the lack of perceived use by administrators. When we asked about administrative use, interviewees almost uniformly had no knowledge and expressed doubts that their administrators were using or even aware of OSLIS. While our sample size is certainly too small to generalize, administrators may not be conscious of OSLIS and what it has to offer. In addition to being a resource to which administrators can direct their teachers, EBSCO also includes access to ERIC and other worthwhile professional resources. In addition, if OSL can get administrative buy-in for OSLIS, there is a greater chance that OSLIS may spread further throughout schools and districts.

Interviewees often confused the OSLIS portal with the databases to which it grants access. Some individuals, for example, used OSLIS and EBSCO interchangeably. Many also expressed much more difficulty using EBSCO and NewsBank than using OSLIS. Specifically, one interviewee suggested that trainings on OSLIS and the databases be separated:

> "OSLIS training is held in conjunction with EBSCO training. It's hard to get it all covered. I would like to see it done in two parts, OSLIS first then how to use the databases. Some people are mixing it up and don't understand there are two separate entities; they think OSLIS is EBSCO and may not realize how much more OSLIS has to offer."

Separating database training from OSLIS training would have at least two benefits. First, as this interviewee states, an individual training on OSLIS itself would allow OSL to highlight several great features of the portal. Some of the information literacy

content and standards may get overshadowed by the excitement of all that the EBSCO databases have to offer. Second, an individual EBSCO and NewsBank training could focus more in depth on search strategies in the databases. Many interviewees expressed frustration with searching these databases:

> *"Refining searching and the different topics. Sometimes you'll type something in and you're not really sure which category to put it in because it overlaps and sometimes you don't find anything and maybe you need to refine it and do something different, maybe just a bit longer training, I'm not sure."*

> *"I need some more information on how . . . I'm finding the EBSCO search rather broad. It's a little broad. Helping the kids narrow their search. EBSCO and Searchasaurus."*

Interestingly, two training participants were intrigued by the potential for the trainings to be opportunities to share ideas. Often, trainings included media specialists and teachers of different subjects, with different ideas on how to integrate OSLIS into their curriculum. One OSLIS user stated her thoughts on how this fact could be used to enhance training:

> *"Adding an element or some time when media specialists could talk about how they've used the site. For instance, the child safety on the internet was added since we were first trained. Talking about some of the stuff on the site, how we've used it, when we've used it."*

Such time would enable trainees themselves an opportunity to highlight favorite parts and innovative uses of OSLIS and the databases.

Finally, as an OSL staff member noted, many of the current school librarians and teachers are electronic immigrants: they are not native users of technology. One paraprofessional observed this and suggested breaking trainings into different skill levels:

> *"Some people didn't know anything about navigation or anything on-line. That was frustrating, because I knew that stuff. We had some people that didn't have anything and didn't know what to do, so that was frustrating. People that had never used it should be trained separate from others that had."*

Given the vast number of individuals who have already been trained on OSLIS, we believe this suggestion is insightful. As staff members come and go from school districts, there is a need for both training of individuals new to OSLIS as well as those who need refreshers. It may also help, as this individual mentions, to have separate training for those with varied computer skills. For more information on this topic and other computer training issues, we recommend E. Weiss's (1997) *The accidental trainer*, the full citation of which is available in Appendix C: Bibliography.

VII. CONCLUSION

We were pleasantly surprised at the range of outcomes, many unanticipated, expressed by the individuals we interviewed. These outcomes demonstrate how far OSLIS reaches
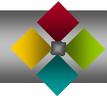
not only into the lives of students and educators, but also the school and community at large. Interviewees enthusiastically described how OSLIS has improved their schools and teaching. We believe that our evaluation hints at strong support for OSLIS and the values it reinforces.

Based on the outcomes and support we found for OSLIS, we believe that OSLIS is an exceptional use of LSTA funds. In their Five-Year LSTA plan, the Oregon State Library (2003) delineated six broad goals for LSTA funding in Oregon. Several of the outcomes we uncovered map directly to these goals. In Figure 26, we have identified some of these links between the LSTA goals and the outcomes we reported.

But while we are pleased with the range and patterns of outcomes that appeared in our evaluation, this study is certainly insufficient. Outcome data such is this is best paired with more quantitative indicators, such as website hits, teachers/schools using OSLIS, and how usage statistics may change after training. We encourage OSL to pair our findings with data of their own to paint a fuller picture of how OSLIS is changing schools throughout Oregon.

Also, as we mentioned earlier, our findings are somewhat limited in that we failed to interview any administrators, private or charter school employees, or more than a single teacher. If future opportunities permit, we believe interviewing individuals from these groups would yield interesting perspectives on how OSLIS is being integrated into different learning environments.

In conclusion, we sincerely thank all of those who participated in this evaluation, particularly the educators and OSL staff who took time out of their busy schedules to answer our questions. We hope that our findings will prove valuable as OSL and its partners move forward in designing OSLIS 2.0. Listening to library staff and teachers from across the state, we were pleased by the outpouring of support for OSLIS. OSL has a strong base of excited users as it moves OSLIS forward to the future.

Figure 26: Outcomes Matching Oregon LSTA Five-Year Plan Goals

LSTA Goal 1

Expand services for learning and access to information and educational resources in a variety of formats, in all types of libraries, for individuals of all ages.

Outcomes meeting this goal: St-1 Broadened Search Horizons ; C-1 More Equal Information Access Across Communities ; C-2 Increased Access to Information Anytime, Anywhere

LSTA Goal 2

Develop library services that provide all users access to information through local, State, regional, national, and international electronic networks.

LSTA Goal 3

Provide electronic and other linkages among and between all types of libraries

Outcomes meeting this goal: E-1 Increased Collaboration ; C-3 Increased Communication About OSLIS with Different Users and Communities

LSTA Goal 4

Develop public and private partnerships with other agencies and community-based organizations.

LSTA Goal 5

Target library services to individuals of diverse geographic, cultural, and socioeconomic backgrounds, to individuals with disabilities, and to people with limited functional literacy or information skills.

Outcomes meeting this goal: St-1 Broadened Search Horizons ; St-2 Improved Information Literacy ; C-1 More Equal Information Access Across Communities

LSTA Goal 6

Target library and information services to persons having difficulty using a library and to underserved urban and rural communities, including children (from birth through age 17) from families with incomes below the poverty line.

Outcomes meeting this goal: St-1 Broadened Search Horizons ; St-2 Improved Information Literacy ; St-3 Improved Research Skills ; C-1 More Equal Information Access Across Communities; C-2 Increased Access to Information Anytime, Anywhere

APPENDIX A: DESIGN

To begin our analysis, we first wanted to understand the context within which OSLIS and the trainings operate. This process was facilitated by the fact that one of our team had interned at OSL the previous summer. However, we also exhaustively reviewed the OSLIS website as well as documentation pertaining to OSLIS. This included previous evaluations that had been conducted by Western Oregon University, the Oregon State LSTA 5-year Plan, OSLIS history and documentation, and the State Library Annual Performance Progress Report for fiscal year 2005-06.

Fortunately, OSLIS also included a video of one of the trainings that had been conducted via videoconference. We reviewed this video to better understand the topics being covered, teaching styles used, and emulate the experience of receiving the training ourselves.

After studying the context, we began to select potential interview participants from a list of previous trainees provided by OSL. We limited our sample to these individuals to ensure that we could collect data on training effectiveness for OSL. In selecting participants, we sought out a wide variety of individuals based on the following factors.

- *Location of training:* onsite, conferences, remotely, ESDs
- *Type of school/entity:* public, private, charter school, ESD
- *Level of school:* elementary, middle, high
- *Size/nature of school:* rural, urban, suburban
- *Geography:* northwest, east, south, central
- *Role:* media specialist/librarian, paraprofessional library staff members, teachers, ESD employees

Unfortunately, due to time constraints, we were not able to interview as wide a range of individuals as we had hoped. In particular, we did not interview anybody from private or charter schools, urban schools, or anybody who had received training at a professional conference. We recognize that our findings are not as generalizable because of these shortcomings.

We spent considerable time formulating and revising our list of interview questions. As we conducted interviews early in our research, we also slightly revised some of our questions. In writing these questions, we wanted to ensure that they were as open-ended as possible to better capture the range of potential outcomes generated by OSLIS and the training, whether we and OSL staff would have predicted them or not. For a list of our interview questions, please refer to Figure 27.
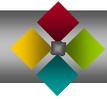
Figure 27: Interview questions

Background

1. Confirm name, workplace, and title
2. What do you do at [school/organization] name?
3. When and how did you participate in OSLIS training?

Trainee's use of OSLIS

4. How do you use OSLIS in your work?
5. How often do you use the OSLIS portal?
6. Can you give examples of how OSLIS has changed the way you do your job?

Others' use of OSLIS

7. How do your students use OSLIS? Can you please give some specific examples?
8. How do your teachers use OSLIS? Can you please give some specific examples?
9. How do your administrators use OSLIS? Can you please give some specific examples?
10. Have you seen people other than the groups mentioned using OSLIS? How do they use it?
11. Do you have any other stories that show how OSLIS is being used in your workplace?

Training

12. Have you trained others on OSLIS? If so, whom did you train and how do they now use OSLIS?
13. What can you do now that you've been trained on OSLIS that you couldn't do before?
14. What aspects of your OSLIS training did you find most useful? Why?
15. If you could take more OSLIS training, what would you want to be emphasized? What new things would you like to learn?
16. If you could change anything about the training you attended, what would it be? Why?
17. Do you have anything else you'd like us to know?
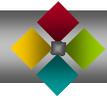
APPENDIX B: DATA COLLECTION/ANALYSIS

We initially interviewed the trainer for the OSLIS project to find out the basics about the program, what she included in the trainings, how they were presented, and who attended her programs. She provided a wealth of basic information about the program, the portal, and her training. She also gave us access to OSLIS and the databases themselves so that we could explore them on our own to familiarize ourselves with what they had to offer.

We next interviewed the trainer's manager to gain a basic understanding of OSL's objectives for OSLIS and the OSLIS training. It was here that we realized the major purpose of OSLIS was to "level the playing field" for all school districts, regardless of size or location.

From there we called potential interviewees to schedule appointments to discuss their use of OSLIS. Interviews were conducted by telephone and lasted between thirty and forty minutes each. They were conducted between January and April of 2007. Transcripts for the interviews were typed as the interview was being conducted. We used the preset list of questions (see Figure 27) but followed the lead of the interviewee into areas that they felt were important to discuss as well.

After the interviews, both partners reviewed and coded the data independently. We then compiled an Excel spreadsheet of the quotations and relevant outcomes. The team met to reconcile differences on the outcomes and to decide the best categorizations for each quotation. Ultimately, we both agreed on the chosen categorizations and believe they accurately represent the data.
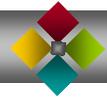
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