Information Literacy Teams: Bridging the Fluency Divide

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Introduction

"The quality and quantity of information needed to function effectively in society and the workplace continues to increase. Individuals...must be able to master rapidly changing information technology and possess the information literacy skills to act independently in this information rich environment[1]."

Information Literacy and the Fluency Divide

According to futurists, in the next decades, the amount of information will be doubling every eleven minutes. Yet, there is a growing concern that we are going toward *aliteracy*. This term is not associated with the inability to read, but the unwillingness to read. A recent study in Spain reported that over 90% of the students surveyed said they only read when it was necessary. Aliteracy could lead to the problem of "fluency divide," the division between the people who passively consume information and those who possess the motivation and skills to locate, select, organize, and apply information[9]. Without providing training in Information Literacy (IL) we will have a fluency divide as incapacitating for underprivileged groups as the digital divide. Worse, students can default into the passive side of the divide if librarians and faculty do not renovate curriculum to address IL objectives and assess the outcomes of their efforts.

Since the 1950's, academic librarians have been integrating library or bibliographic instruction (now known as Information Literacy) into the undergraduate curriculum[2]. IL made its debut as the rapid development in information technology created an information society. As we are all reminded daily, one of the biggest challenges today is the tremendous growth of information, now regarded as a valuable commodity affected by the knowledge-based economy: "The knowledge based economy is characterized by the need for continuous learning of both codified information and the competencies to use this information. . . . the skills and competencies relating to the selection and efficient use of information become more crucial"[3].

To be successful in this world of exploding information we must be knowledgeable on how to find information, manage, and critique it. In this paper we define IL as the capability of a person to recognize the "different levels, types and formats of information and their appropriate uses; the ability to place information in a context. An awareness of information access issues (copyright, privacy, globalization, currency of information, etc.) are key to information literacy"[4].

IL is a necessary, basic competency required for all people to compete and succeed in the university and at work[5]. Lori Roth states that information literacy is fast becoming one of

students' most essential skills. Academic subjects cannot be covered completely in the classroom; content changes rapidly. IL is necessary for students to become effective participants in society. Although IL has its roots primarily in bibliographic instruction, students facing the economic world of the 21st century need to know more than where the reference section is: they need to know about electronic information sources, know the uses of Boolean logic, and be able to analyze, synthesize and think critically. Students also need to understand the issues of free speech, censorship, access, and privacy, the ethical issues surrounding the dissemination, accessibility, and use of information[6].

Academic libraries have a long tradition of providing library instruction for their patrons. As early as the 1930s, Edith Coulter said that libraries should help students be self-reliant in the library by teaching them how to find information[7]. Self-sufficiency continues to be an important goal of library instruction because IL is fluid; as technology changes, expertise in reading, writing, critical thinking, visual literacy, mathematics, computers, and research play a role in being information literate.

Recently, Abram and Luther[8] described today's students as NextGens (people born between 1982 and 2002), who do not see any difference in credibility or entertainment value between print and media formats. NextGens enjoy the exploration, navigation and discovery they are able to do on information appliances such as desktops, mobile telephones and PDA's[8]. They prefer and are accustomed to "Googling it" and like the convenience of the mouse-click, readable search engine, even though it yields articles, blogs, discussion threads, web sites, and/or encyclopedia items without discrimination. NextGens are nomadic and expect information to be available to them 24/7. They like to multitask. Growing up playing video games, to them content and technology are inseparable[8]. How do we bridge the literacy of one generation with the emerging, technology-embedded literacies of the future? A small group of faculty and librarians have been meeting regularly at our college to consider this question.

The IL Group: Collaborative Curricular Renovation

The IL Group at Kansas State University-Salina College of Technology and Aviation is a group of four: two librarians and two faculty (English and Chemistry). The Director of Libraries, Beverlee Kissick, and English professor Judy Collins met after the American Association of Higher Education conference on assessment (June 2003) where Collins had attended a presentation by Evergreen State College on information literacy. The presenters at the conference shared their planning matrix of instructional activities involving IL, and conveyed their commitment to enlarging the role of IL in the "life of the curriculum"[10].

Kissick and Alysia Starkey at Kansas State University-Salina had launched an online tutorial of library services the previous year, and they wanted to make contact with faculty to learn more about the role of the tutorials in student learning. With Jung Oh, professor of chemistry, the four became a group with the goal of exploring how IL instruction could be adopted into cooperative faculty's existing curriculum. Because assessment programs were currently being planned university-wide, the IL Group was also investigating ways to assess information literacies across curriculum.

We adopted three near-term goals, the focus of this report:
- Identify cooperative faculty willing to collaborate on Inservice visits tailored to the needs of specific courses taught.
- develop and pilot course assignments that integrate Inservice librarian visits with course content.
- meet regularly to discuss, evaluate, revise, and reimplement our collaborative project.

Review of Literature

Information literacy is defined as the capability of a person to recognize the "different levels, types and formats of information and their appropriate uses. The ability to place information in a context and an awareness of information access issues (copyright, privacy, globalization, currency of information, etc.) are key to information literacy"[4].   Information literacy is also an instructional and intellectual movement[11], similar to cross-curricular writing programs that emerged in the late 1960s with the writing-process movement; that is, instruction in IL is now viewed as part of an institutional, collaborative, cross-curricular process, rather than a discrete visit by librarians to classrooms, or a course isolated from the rest of the curriculum.

One-time demonstrations of information-retrieval skills out of context, do not "coincide with students' need for information, are sometimes not valued by the students, and do not prepare them for the challenges of research, problem-solving and continuous learning[12]. The process of seeking, evaluating, and using information is emphasized in more current models of IL instruction, where information becomes part of the overall learning process or knowledge management[12].

Yet, students are not becoming information literate; cannot find and evaluate the information required for problem-solving and decision making in the workplace and society generally: "Evidence is rapidly mounting that students cannot select appropriate sources of information, do not understand the structure or purpose of different sources of information, and cannot critically evaluate the information they retrieve"[13]. The *Journal of Chemical Engineering Progress*' survey of chemical engineers reveals that more than half of survey respondents are not able to find and use appropriate information[13].

In engineering and other sciences, students may depend on textbooks for most of their undergraduate learning, and many do not develop retrieval skills until their senior year or graduate school[13]. Very little research has shown the attitudes of engineering faculty regarding bibliographic instruction (BI), but general guidelines have emerged in the last decade demonstrating that context-sensitive IL instruction is critical.

Studies also reveal that faculty are a primary influence on students' attitudes toward IL, and their perception of it as integral to their curricula. Faculty attitudes toward IL instruction vary; many science and engineering faculty have been found to be "more indifferent to the role of the library in undergraduate education than their colleagues in the social sciences and humanities"[13]. Nonetheless, across curriculum, most faculty favor a shared approach to teaching information-related skills.

The timing and tailoring of library instruction is crucial,[13] and an adaptable pedagogical approach is often required, which is only possible through direct liaison with departments and individual faculty on an interpersonal level. Faculty often need hands-on training as well, to upgrade their own information-seeking behaviors. IL would also ideally result in self-directed inquiry, or self-sufficient searchers, where assistance from a professional librarian is not required.

At the same time, librarians face innovative new roles in the evolving information age, as our IL Group demonstrates. Though they have served to educate students and faculty in the past, new emphasis emerges on librarians' responsibilities to
- prepare to become effective teachers in IL programs,
- support librarians, faculty, and administrators in assuming leadership roles in the development and implementation of IL programs
- develop new relationships in the educational community to foster IL curriculum development[14].

The goals of instruction in IL have been clearly described by The Task Force on Information Literacy for Science and Technology, which drew on several member accrediting agencies to correlate disciplinary ways of knowing to the American Library Association's IL learning outcomes:

> Standard One: Identifying the need for information
> Standard Two: Procuring the information
> Standard Three: Evaluating the information, revising search strategy, obtaining more
>   information
> Standard Four: Using the Information
> Standard Five: Lifelong learning
> http://sciencelibrarian.tripod.com/ILTaskForce/SYNOPSIS

For each of the standards, the task force has developed observable assessment measures, assisting librarians and faculty in the task of developing appropriate, context-specific curriculum.

Finally, beyond the academy, human resource workers have identified ten key knowledge skills necessary for the knowledge managers of the future[15]. These skills are strongly related to IL competencies. For example, the use of information for advocacy, (as shown in the table below), is related because advocacy entails a generalized, overarching set of IL skills, not specific to any discipline or program of academic instruction:

Knowledge Manager Skills	Information Literacy
Time Management Skills	Use time and energy effectively to acquire knowledge
*Mastery of Learning	Absorb key knowledge quickly; learners learn how they learn
*Skills of Advocacy and Inquiry	Present knowledge and gather information from others for the benefit of identified groups
*Informal Networking Skills	Build influence and gain access to people with knowledge, potential mentors
*Resource investigation skills	
*Effective IT Skills	For recording and disseminating information
*Skills of Cooperative Problem- Solving	Teamwork
Open Dialogue Skills	
Flexibility	Willing to take educated risks

*Ability to Review Risk	Review risks, opportunities and successes. Learn from failures

* (these entail IL skills)

Table 1: Information Literacy from Employers' Perspective: Knowledge Skills of the Future

The University of Virginia project[17] on the integration of chemical information into undergraduate chemistry curriculum as part of the institution's IL program is one example of changes in pedagogy with the realization of IL competence needed in today's undergraduates. The University of Oklahoma proposed a model[18] to incorporate IL into upper-level undergraduate science courses and an instrument for measuring IL. By recognizing similarities that exist between science-teaching standards (the National Science Education Standards) and information standards (American Association of School Librarians' Information Power Standards) and sharing common interest in student learning, librarians and science teachers can form meaningful partnerships[19]. In developing collaborative relationships to create learning community, the nature of interactions among the librarians, faculty members and the students become crucial[20].

Because librarians have identified the need for IL instruction and have begun to explore with faculty effective pedagogical means for collaborating on instruction, our IL Group spent the spring of 2004 in a variety of activities aimed at developing IL instruction here at KSU-S. The challenge is invigorated by the nature of our curriculum: we are a small college of technology and aviation where humanities and social sciences play support roles in the curriculum.

Methods

Planning

After meeting several times, the IL Group identified areas of shared concern to foster IL curriculum development. Though our goals are far-reaching and wide-spread, we have identified small projects for immediate implementation.

Near-term goals:
- Identify cooperative faculty willing to collaborate on Inservice visits tailored to the needs of specific courses taught.
- Develop and pilot course assignments that integrate Inservice visits with course content.
- Meet regularly to discuss, evaluate, revise, and reimplement our collaborative projects.

Mid-range goals:
- Develop a plan for assessing IL across curriculum.
- Identify where IL instruction is currently taking place in major programs and options at the College of Technology and Aviation (COTA) (Engineering Technologies, Aviation Professional Pilots Program, Airframe and Powerplant Maintenance, and Technology Management).
- Develop means to evaluate the effect of the Inservice visits/faculty-library collaboration.

Long-term goals:
- Identify barriers to this work, either in the opinions of faculty, administration, or library staff.

- Recruit specific faculty teaching key, capstone courses for the purpose of planning assessment measures in coordination with college-wide assessment plans:
    - Engineering: First year seminar
    - Engineering: Senior project
    - Construction Technology (Associates) research of equipment, products
    - Technology Management Project class

The remainder of this report describes the IL Group's efforts on their near-term goals. These occurred over a range of small projects throughout 2003-2004.

Surveys of Library Use and Faculty Involvement with IL Instruction

Library Use
In the past, to assess the library's contribution to curriculum a survey of students and faculty was administered (Appendix A). The results of that survey were comprehensively reviewed, *showing that the library database use has increased by **24.3%** in the last two years,* although enrollment has remained constant.

Faculty Instruction of IL
The IL Group administered a survey of faculty who are teaching information literacies by adapting the American Library Association Learning Outcomes to a series of questions (Appendix B). Questions for example, asked faculty if they:

1. Assign some form of library or information-retrieval project at least once a semester
2. Assign students specific information-gathering tasks
3. Have students determine the extent of information needed
4. Access the needed information effectively and efficiently
5. Evaluate information and its sources critically
6. Use information effectively to accomplish a specific discipline related goal
7. Understand the economic, legal, and social issues surrounding the use of information
8. Access and using information ethically and legally

The survey was offered to 42 faculty; 17 responded. Of the 17, four identified themselves as interested in offering us more information about what they are doing in their classrooms or learning more about our group's goals. [As a result of the survey, two addition faculty were identified (1 Mechanical Engineering Technology, 1 Aviation Professional Pilot) who will collaborate with librarians next academic year.]

Cooperative Faculty/Collaborative Inservices in 2003-2004

Discipline	Course	Faculty
Engineering Technology	Mechanical Detailing First Year	Masuud Hassan
Science (Chemistry)	General Chemistry (UGE)	Jung Oh
English	Technical Writing	Judy Collins

UGE refers Kansas State University undergraduate general education courses. UGE

courses are to incorporate an active learning environment, an experiential context for whatever is studied, and an opportunity for students to connect ideas (http://www.k-state.edu/catl/uge/).

Developing Online Tutorials

Research has shown that faculty and students prefer the use of online materials when available[16]. To satisfy this preference, the library developed a series of online tutorial modules. The modules provide faculty and students with library assistance anytime, anywhere and allows them to learn skills at their own pace. K-State Online (http://Online.ksu.edu), an Internet based course delivery program, was selected as the means for tutorial delivery. The platform was selected over traditional web delivery because of its ability to track student usage and monitor their progress through the use of quizzes placed at the end of each module. To date, five modules incorporating fifteen lessons have been developed focusing on general library services, navigating the library's website, searching the card catalog, library database usage, topic selection, evaluating web sites, and differences in primary and secondary resources.

Planning of Inservice Materials and Classroom Visits

Technical Writing
Assumptions exist that all information is reliable and valid. Information consumers do not generally question the authority of print materials, media outlets, or any other information resource. The advent of the Internet and the World Wide Web has brought the need for quality evaluation of information to an all time high. The World Wide Web is a tremendous information resource, but one that needs to be used responsibly and with caution. The Web is in essence an open forum in which anyone can post anything without the risk of quality control. A request was made by the Technical Writing instructor for the librarians to train students on methods of evaluating Web resources. A PowerPoint was developed and presented to students that emphasized a four step method of web evaluation: credibility, accuracy, reasonableness, and support. The PowerPoint provided instructions on how to evaluate for the listed criteria as well as showing examples of good and bad web sites for each.

Chemistry
The librarians held several one on one meetings with the chemistry instructor to narrow down the specific research needs of chemistry students. It was concluded that two separate library in-services would be conducted to assist in research oriented lab assignments. Interactive PowerPoints were developed that addressed the needs for each assignment. The first in-service dealt with library databases, topic selection and how not to get stuck in what the librarians termed as the "research box". To get students to move beyond the exact research question given for the assignment, librarians showed students how to use critical thinking skills to brainstorm the topic and find avenues in which the topic related to areas of personal interest. The in-service provided guidance regarding how to effectively input the topic selected into library databases to maximize research results. Techniques included the use of Boolean operators, wildcards, and truncation.

The second library in-service shifted the focus to the World Wide Web and how it can effectively be used for chemistry research. A brief introduction to the Internet, the World Wide

Web, web domains, and search engines was given as informational background.   In addition, a real time comparison of the results produced by several search engines on a single topic was shown. This allowed students to see that not all search engines index the same material and that searching more than one engine is often beneficial. Students were introduced to the invisible web and its ability to locate several subject specific databases that could not be found on the visible web. The PowerPoint closed with a warning of the dangers of information validity and a brief look at the steps involved in evaluating information on the World Wide Web.

Mechanical Engineering Technology
The IL skills required of mechanical engineering technology students is unique due to the applied nature of the degree. Librarians met with first-year mechanical engineering students to introduce them to the types of information resources they would be utilizing throughout their degree program. A large majority of research in engineering occurs through the use of handbooks and Internet resources. Librarians prepared handouts that provided annotated bibliographies of several of the engineering handbooks available in the library. Students were also given a handout that walked them step-by-step through a search on the online library catalog. A subject directory of important engineering web sites as well as a comparison of search engines and their usefulness to engineering topics was also supplied.

The success of the library in-service with mechanical engineering students led to an additional in-service on the basics of patent searching. Librarians developed an interactive training session complete with a PowerPoint presentation and hands on learning exercises to satisfy this request. The presentation included a working definition for what a patent actually is as well as definitions of the four components of intellectual property (copyright, trademark, patent and trade secret), the three types of patents (utility, design and plant). Statutory requirements and ownership issues were also discussed. Hands on exercises were conducted via the United States Copyright and Trademark Office patent database (http://www.uspto.gov). Exercises were developed to incorporate keyword, advanced, and patent number searches in addition to the Manual of Classification and United States Patent Classification Index.

Results
Faculty Survey (Appendix B)
The IL Group composed an informal survey in the spring of 2004, asking eight questions based on ALA IL outcomes. Surveys were designed to be confidential, and clearance was obtained from Kansas State University IRB board.

Our informal survey of faculty was offered to 70 faculty members at the College of Technology and Aviation, Kansas State University-Salina. Results of particular interest are presented below:

Of 20 faculty who responded to the survey, 17 assign some form of information-retrieval in their courses (see appendix B for course list).

<u>*Librarians prefer to be involved in faculty IL instruction:*</u>
Questions 3,4,5, only 25 % of responding faculty arrange for librarians to assist with instruction in (3) accessing needed information effectively, (4) evaluating information and its sources critically. (5) only 10% arrange for librarians to give instruction for incorporating selected

information into one's knowledge base (although 55% report providing this instruction themselves). While faculty may believe they are saving librarian time and resources, the librarians prefer to be involved with faculty in these ILs, primarily to assure that faculty are current in *their* knowledge of available library resources.

Very few students are offered opportunities to determine the need for information (problem-based learning).
Question 2, only 30% of responding faculty (or 6 of 70 COTA faculty) have students determine the extent of information needed. (Some by developing guiding questions for research (Expository Writing and Technical Writing faculty). Yet, without achieving this ALA outcome, our students cannot solve problems or participate in problem-based learning activity.

Over half of students are not asked to evaluate information in their assignments
Question 4, only 45% of responding faculty instruct students in evaluating information and its sources critically.

Most students are instructed in using information ethically and legally
Question 8, 75% of faculty are instructing students in avoiding plagiarism and practicing ethical uses of information.

Technical Writing Inservice Visits
The English faculty offered pre-inservice visits in 2002 asking students to research a question about a current problem or issue in their field. After students finished the exercise, she offered a survey asking whether students had used the Internet, the subscription library databases (deep Internet), or both. Only one student of 22 had used the deep Internet. The majority of students reported that they didn't know how to use the deep Internet (referred to as library databases).

The English faculty had (since 1996) asked students at a variety of institutions in two states to evaluate Internet information for a diversity of writing courses at the undergraduate level, using the CARS criteria (Credibility, Authorship, Reliability, and Support). Students at the College of Technology and Aviation (Kansas State University-Salina) were, like most students in her experience, quite naive about questions of authorship, domain, and publishing body, making it impossible for them to evaluate the quality of information retrieved in a typical Google search.

As a result of participating in the IL Group, English faculty developed a two-part assignment for 5% of the course grade in technical writing that asked students (a) to evaluate a web site provided by the instructor, and (b) to develop a five-source bibliography drawn from the deep Internet, answering a question posed by the instructor. The bibliography was required to be presented in APA format.

This two-part sequence, in addition to a major, research/writing project (50% of course grade), meets several ALA outcomes for Aviation, Engineering Technology, Computer Systems Technology, and Technology Management students. (See Appendix for a table keying the major technical writing assignment to ALA IL outcomes).

	Assignment: Evaluating a web site	Assignment: Composing a bibliography
IL skills required to complete the assignment	Use the criteria of CARS to assess the credibility of a given web site	Given a question (i.e. are contrails harmful to humans?), search the deep Internet to provide an answer or frame the debate.
ALA Outcomes:	Evaluate Information	Procure information, implement and revise search strategy.

Table 2: Technical Writing Assignments and Information Literacy

In addition to the two-part assignment sequence, a written report correlates with ALA objectives:

American Library Association Objective	**Technical Writing Assignment**
Determine the need for information	Students select a topic from a their major, identifying a problem or need in their field, or a decision needing to be made. Students identify and audience, rhetorical purpose, and define the need for information from that context.
Access needed information effectively and efficiently	Students begin research (with guidance) searching for answers to their readers' needs and identify appropriate discipline-specific databases
Evaluate critically the sources of information. system.	Research Planning. Students compose an annotated bibliography as they plan for writing their Technical Background Report.
Incorporate information into knowledge base and value Accessing and using information ethically, without plagiarism	Students learn appropriate citation conventions, study the Honor Pledge, Academic Honesty, and report on Internet plagiarism.

Table 3: Correlation of Technical Writing Major Assignment with ALA IL Objectives

After the library inservice visits and implementation of the two-part assignment sequence, the English faculty saw significant improvement in students' ability to assess authorship.

Criteria such as publishing body, accuracy, and reliability are more difficult for students to assess without discipline-specific guidance. For example, Aviation students consult the FAA site routinely to update themselves on the most recent advisories. Yet, as a publishing body, there are issues for which the FAA would not be the most unbiased source of information.

Chemistry Inservice Visits
Library Inservice visits help students understand and acquire IL skills and are arranged before asking students to research specific content based information. The first assignment in general chemistry course is a pre-lab assignment for open-ended, inquiry lab on "chromatography". Students are asked to search for information using either databases or the Internet to write a summary report and to describe their search path and time spent in addition to content summary.

The Second assignment is to get information on chemicals in everyday consumer products. Students are asked to investigate properties and functions of active ingredient chemicals using reliable informative sources. In addition to chemical name, formula, structure, and properties, major uses and applications, students are asked to evaluate benefits and precautions based on information from reliable organizations and peer reviewed scientific journals.

The third assignment is to research information about a chemical element in the periodic table. Students are asked to present a concise representation of an element in a 4 inch by 4 inch space and to convey information about the element in creative manner, using their choice of media (e.g. video clips, power point presentation, and etc.)

Outcomes of library Inservice visits are rewarding. A question related to Boolean operators was asked in a chemistry exam after the Inservice visit in Spring 2004; all except one student answered correctly. Even with limited data, students' own responses on their pre-lab assignment on "chromatography" are compared: students, with library In-service participation in Spring 2004, listed average 4.2 references and indicated 2.9 hrs time spent on the assignment. In comparison, students in Spring 2003 reported 3.2 references and Spring 2002 listed average 1.5 hrs.

The chemistry faculty observed noticeable improvement in the quality of students' ability to assess and evaluate information with library Inservice visits. When students are asked at the end-of-semester survey, 44 % strongly agreed or agreed that "Library Inservice lectures on database and advanced Internet search were beneficial" and 27 % indicated neutral. With a statement, "Class periods designated for library lectures for IL were worthwhile', 45 % strongly agreed or agreed and 32 % indicated neutral. The chemistry faculty's conviction to be a collaborator with librarians in teaching IL skills in content based science course got stronger.

Mechanical Engineering Inservice Visits
An interview with Masuud Hassan revealed that his experience with tailored Inservice visits was positive. His first year students could not identify library resources relevant to their mechanical detailing projects, so Hassan had been providing them with the references. The library inservice seems to work with one visit, a 2 to 3 hour session in the library. Students write reports on what they did in the lab, citing and listing all sources used to help conduct the lab. Students were required to identify two or three resources with similar materials, and one class period was given for them to present this information to the large class.

This year, 2004, Alysia introduced the patent search process to mechanical engineering students in Hassan's course, and he believes it is important that they learn this early in the engineering program.

Discussion

The activities of the librarians described in this study are diverse, responding to the specific needs of divergent content areas (mechanical engineering, chemistry, expository writing). We learned that the quality of interaction among faculty and librarians is essential to the successful tailoring of IL instruction to course and curriculum needs. The librarians listened carefully to

faculty goals, developed materials and inservice plans, and then followed up with faculty to learn about how the instruction worked from students' perspectives.

On the other hand, faculty were willing to learn new applications of information to their curricula. These attitudes were key elements in achieving positive outcomes.

We found in the IL Group that a sense of learning community led us to the benefits of collaboration: all faculty have found the Inservice visits to be effective, and students have valued their experiences. We also learned that the quality of interactions among librarians and faculty are essential to enriching curriculum with IL instruction.

From the beginnings described in this paper, the IL Group's awareness has grown, regarding the potential fluency divide in the students we teach. With a clearer understanding of what it means to be a fluent user of information, our interactive collaboration has been very productive. As an ad hoc learning community of four, we are discovering the breadth and complexity of assessing IL at our institution.

We are also left with many questions for further investigation, such as, where will scientists and engineers develop the IL skills they will need on the job? What are the outcomes for faculty as well as students associated with IL? If this transformative movement proceeds, those who are involved in the process might consider, from the faculty perspective, how to document

- Curriculum transformation
- Development of new teaching methods
- Inclusion of new voices in curricular planning
- Development of new scholarship
- Enhancement of the classroom community
- Faculty incentives associated with IL: tenure, promotion, salary bonus, reduced teaching load, faculty development, travel funds, enhanced sense of interpersonal competence, facilitating a sense of community at the institution, identification of new research topics, facilitation competencies among faculty and students
- Increased interaction of faculty and librarians
- A collective, more integrated vision or goal for the classroom, departments, college

For example, faculty might begin to enrich their curriculum with a clear IL purpose and evidence of achieved outcome, i.e. a specific IL skill leading to a survey, and/or improved papers.
At the same time, a scholarship purpose can be integrated, such as evidence of achieved faculty outcome: an ASEE paper, other papers, publications, and presentations.

By embracing the teaching opportunities that IL provides, we can better prepare our graduates for the future, and in the process, assist librarians as they assume higher-profile roles in the teaching of information literacy. Effective faculty/librarian collaboration will bridge the developing fluency divide in our students, and prepare them to participate in the democratic processes and knowledge capabilities of the new economy.

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Appendix A

The only way that we know how we're doing is if you tell us! We value your input, and want to find out your opinions regarding the library, its resources, and the services we provide. You should be able to complete this survey in 5-10 minutes. You do not need to reveal your identity.

Please answer each question by marking in the box next to the choice which you feel best reflects your opinion.

Feel free to add any additional comments or observations in the space provided.

General Information

1. Are you?
   ❑ KSU Faculty/Staff ❑ KSU Student ❑ Reciprocal borrower (SAVTS, KWU, etc.) ❑ Community user

2. How often do you visit the KSU-Salina Library?
   ❑ 3 to 4 times a week or more   ❑ 1 to 3 times a month   ❑ Once a year
        ❑ Never
   ❑ About once a week or so   ❑ 1 or 2 times a semester   ❑ Other _____

3. How often do you use or look through our printed subscriptions to magazines, journals, and newspapers?
   ❑ Daily   ❑ Weekly   ❑ Monthly   ❑ Once or twice a semester   ❑ Never

4. How often do you use, look at, or check out our books, videos, DVDs or audiocassettes?
   ❑ Daily   ❑ Weekly   ❑ Monthly   ❑ Once or twice a semester   ❑ Never

5. Do you use the 30 library computer workstations for any of the following? (CHECK ALL THAT APPLY)

   ❑ Searching for items in a library catalog   ❑ Using other computer software
   ❑ Searching for magazine or newspaper articles   ❑ Checking e-mail
   ❑ Word processing   ❑ Playing computer games
   ❑ Surfing the Internet in general   ❑ Using the scanner(s)
   ❑ Searching the Internet for specific information   ❑ Laser/Color printing
   ❑ Working on class assignments   ❑ Other _____

6. Which of the following databases have you used in the past 6 months, either in the library or from another campus workstation?
   ❑ KSU-Salina library catalog   ❑ KSU Manhattan library resources   ❑ Kansas Library Catalog
   ❑ Other library catalogs   ❑ InfoTrac   ❑ OCLC FirstSearch
   ❑ Opposing Viewpoints   ❑ CQ Researcher   ❑ SIRS Discoverer

❑ Librarians Index to the Internet   ❑ NoodleTools   ❑ Other databases

7. Have you ever used interlibrary loan to borrow items if KSU-Salina Library didn't have what you needed?
    ❑ Yes   ❑ No
    If not, why?
    ❑ Couldn't find what I wanted   ❑ Didn't know how   ❑ Takes too long/couldn't wait
    ❑ Didn't want or need to   ❑ Other _____

8. How easy or difficult is it to use the KSU-Salina Library?
    ❑ Very easy   ❑ Fairly easy   ❑ Not easy   ❑ Somewhat difficult   ❑ Very difficult

9. How satisfied are you with our resources? (print, nonprint, computers, TV, DVD's, videos, etc.)
    ❑ Extremely satisfied   ❑ Very satisfied   ❑ Moderately satisfied   ❑ Somewhat satisfied   ❑ Not at all satisfied

10. Are the current library hours adequate to your needs?
      [When classes are in session: Monday-Thurs. 8 AM to 11:30 Midnight / Friday 8 AM to 5 PM / Saturday 1 to 4 PM / Sunday 6 to 9 PM]
    ❑ Yes, the hours of operation are fine
    ❑ No, I'd like to see the following additional or different hours _____

11. How helpful is the library staff, including student workers, in assisting you with your information needs?
    ❑ Extremely helpful   ❑ Very helpful   ❑ Moderately helpful   ❑ Somewhat helpful   ❑ Not at all helpful

12. Which of the following library activities have you done in the past 6 months? (CHECK ALL THAT APPLY)
    ❑ Checking out book(s)   ❑ Photocopying materials
    ❑ Using library Reserves   ❑ Attending a library orientation or in-service with
    ❑ Reading newspapers and magazines   a group (in the library or classroom)
    ❑ Using library materials in house without   ❑ Receiving one-on-one help from a library staff
    checking them out   person
    ❑ Working as a group in the library   ❑ Requesting a search on a particular topic
    ❑ Studying alone in the library   ❑ Requesting a bibliography on a specific topic
    ❑ Using the library computer workstations   ❑ Consulting about a library assignment
    ❑ Watching television   ❑ Recommending items for purchase by the library
    ❑ Enjoyed the "Rockin' Chair" and new   ❑ Other _____
    materials area

13. How often do you ask a member of the library staff for assistance?
    ❏ Every time I need help   ❏ Rarely; only once in a while
    ❏ Sometimes; I usually try to figure things out myself ❏ Never

14. How timely was the library staff in assisting you if you needed help?
    ❏ Helped me right away, every time   ❏ I had to wait only briefly before
being helped
    ❏ I had to wait a little while, but the service was good ❏ I began to get impatient before
being helped
    ❏ The wait was too long   ❏ Other _____

_____

15. How comfortable and welcoming do you find the atmosphere and environment in the
Library?
    ❏ Extremely comfortable/welcoming ❏ Very comfortable/welcoming ❏ Moderately
comfortable/welcoming ❏ Somewhat comfortable/welcoming ❏ Not at all
comfortable/welcoming

16. How respectful and aware is the library staff of cultural diversity?
    ❏ Extremely respectful ❏ Very respectful ❏ Moderately respectful ❏ Somewhat
respectful
    ❏ Not at all respectful

17. Overall, how satisfied are you with our services?
    ❏ Extremely satisfied ❏ Very satisfied ❏ Moderately satisfied ❏ Somewhat satisfied ❏
Not at all satisfied

Additional comments: _____

_____

_____

1. I assign some form of library or information-retrieval project at least once a semester

14   **87.5%**   **A** Yes in course(s)
2   **12.5%**   **B** No
Expos I, Expos II, & Tech Writing
✓ *MET 460, MET 121*
✓ *PPIL 415 Human Factors*
✓ *Web Searches*
✓ *General Psychology*
✓ *Technical Writing, Eng. 302*
✓ *Engl. 302, Engl. 450*
✓ *MET 117 Mechanical Detailing*
✓ *CMST 420, Adv. DB Systems*
✓ *PPIL 400, 440, 386*
✓ *Conv. Spanish*

If you answer yes, please answer questions 2-8. **Circle as many responses as apply to your teaching situation:**

2.   Do you:

14   **87.5%**   **A** Assign students specific information-gathering tasks
2   **12.5%**   **B** Have students determine the extent of information needed
0   **0.0%**   **C**   Other (short answer)

✓ *Develop guiding questions for research (Expos I, II, & Tech. Writing)*

3. Do you instruct students how to:
9   **56.3%**   **A** Access the needed information effectively and efficiently
4   **25.0%**   **B** Arrange for librarians to give this instruction
5   **31.3%**   **C** Other (short answer)

✓ *Tell them what databases to use or search from-instructions by online and/or library staff (PPIL 415 Human Factors)*
✓ *On their own (Conv. Spanish)*
✓ *Many students know how to effectively and efficiently navigate the Internet for information, but they do not necessarily know how to use non-electronic sources (Tech Writing, Eng. 302)*
✓ *No*
✓ *Recommend the research be done in the library with the assistance of the library staff (PPIL 400, 440, 386)*

4.   Do you instruct students how to:
6   **37.5%**   **A** Evaluate information and its sources critically
       ✓ *With Internet sources (Engl. 302, Engl. 450)*
4   **25.0%**   **B** Arrange for librarians to give this instruction
       ✓ ~~*Arrange for*~~ *librarians* ~~*to*~~ *give this instruction (PPIL 415 Human Factors)*
       ✓ *Would do more in future (Expos I, II, & Tech Writing)*
5   **31.3%**   **C** Evaluation isn't needed because I refer them to specific resources
2   **12.5%**   **D** Other (short answer)

✓ Not formally

5. Do you instruct students in how to:
9   **56.3%**   **A** Incorporate selected information into one's knowledge base

2	12.5%	**B**	Arrange for librarians to give this instruction
3	18.8%	**C**	Citation isn't necessary in my assignment
2	12.5%	**D**	Other (short answer)

✓ *They are expected to cite sources, if they don't know how, I show them*

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6. Do you instruct students in how to:

10	62.5%	**A**	Use information effectively to accomplish a specific discipline related goal
3	18.8%	**B**	Arrange for librarians to give this instruction
2	12.5%	**C**	"Goal" isn't necessary in my assignment, just complete the work
1	6.3%	**D**	Other (short answer)

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7. Do you instruct students in:

10	62.5%	**A**	Understanding the economic, legal, and social issues surrounding the use of information

✓ *This is discussed*

3	18.8%	**B**	Arrange for librarians/writing instructors/disciplinary specialists to do this
0	0.0%	**C**	These factors aren't relevant in my course assignments
2	12.5%	**D**	Other (short answer)
1	6.3%	**None**	

✓ *None of the above (Engl. 302, Engl 450)*
✓ *Information relative to the work place (Conv. Spanish)*

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8. Do you instruct students in:

12	75.0%	**A**	Accessing and using information ethically and legally

✓ *This is discussed*

1	6.3%	**B**	Arrange for librarians/writing instructors/Honor Council Peers/Others to do this
2	12.5%	**C**	These factors aren't relevant in my course assignments
0	0.0%	**D**	Other (short answer)

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9. Comments:

✓ *I expect that they are getting the basics from their writing courses. Maybe I should be putting more of an emplasis on it.*
✓ *I will get with library staff to see first hand what students receive from library staff on use of online and in library resources. (PPIL 415 Human Factors)*
✓ *Thanks for gathering this info! (Expos I, II, and Tech. Writing)*
✓ *Thanks for gathering information!*
✓ *I did not assign a library task this semester. The courses were application based.*
✓ *Very interesting survey. (Engl. 302, Engl. 450)*

(Optional) Volunteer request. Please let us know if we can talk to you one-on-one:
I would be willing to have a librarian and or faculty member visit with me for fifteen minutes, so I can explain more about what I do, and learn more about the role of librarians in the curriculum.