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# Examination of The Internet Public Library as Dynamic, Collaborative Teaching Laboratory



## Abstract

The Internet Public Library (IPL) ([www.ipl.org](http://www.ipl.org)) is a collaborative online learning environment, which involves LIS faculty, students and working librarians around the world. Over the past twelve years, the IPL has become more collaborative with the introduction of new technologies and cultural changes. The IPL team has varied participants: LIS faculty, IPL staff librarians, masters and doctoral students, working librarians, and technology specialists.

Through the IPL, library and information professionals are being prepared to meet the challenges and opportunities of the digital environment: the dynamic nature of information technology, changing social and cultural norms, and an abundance of freely available content are presented in the digital reference environment.

Dynamic, collaborative training takes place through extensive interactive materials and feedback provided to students by IPL staff, faculty and volunteers. In addition to the learning environment, the IPL also offers a test bed for research related to collaborative online learning environments.

## History

The IPL started in 1995 with Dr. Joseph Janes and a class of LIS students who were exploring ways for librarians to get involved with the Internet. Students build web-based collections and answer real patron reference questions with only freely available web resources. In January 2007, the technical infrastructure of the IPL transferred to Drexel University from the University of Michigan, where the IPL was founded. The IPL management team currently consists of faculty members at Drexel University, University of Michigan, and Florida State University. This cooperation is made possible through both cultural and technological advances that have provided mechanisms to integrate the collective talents and resources of these iSchools. The goal is to expand participation, resource sharing, research and financial support across a larger consortium of iSchools.

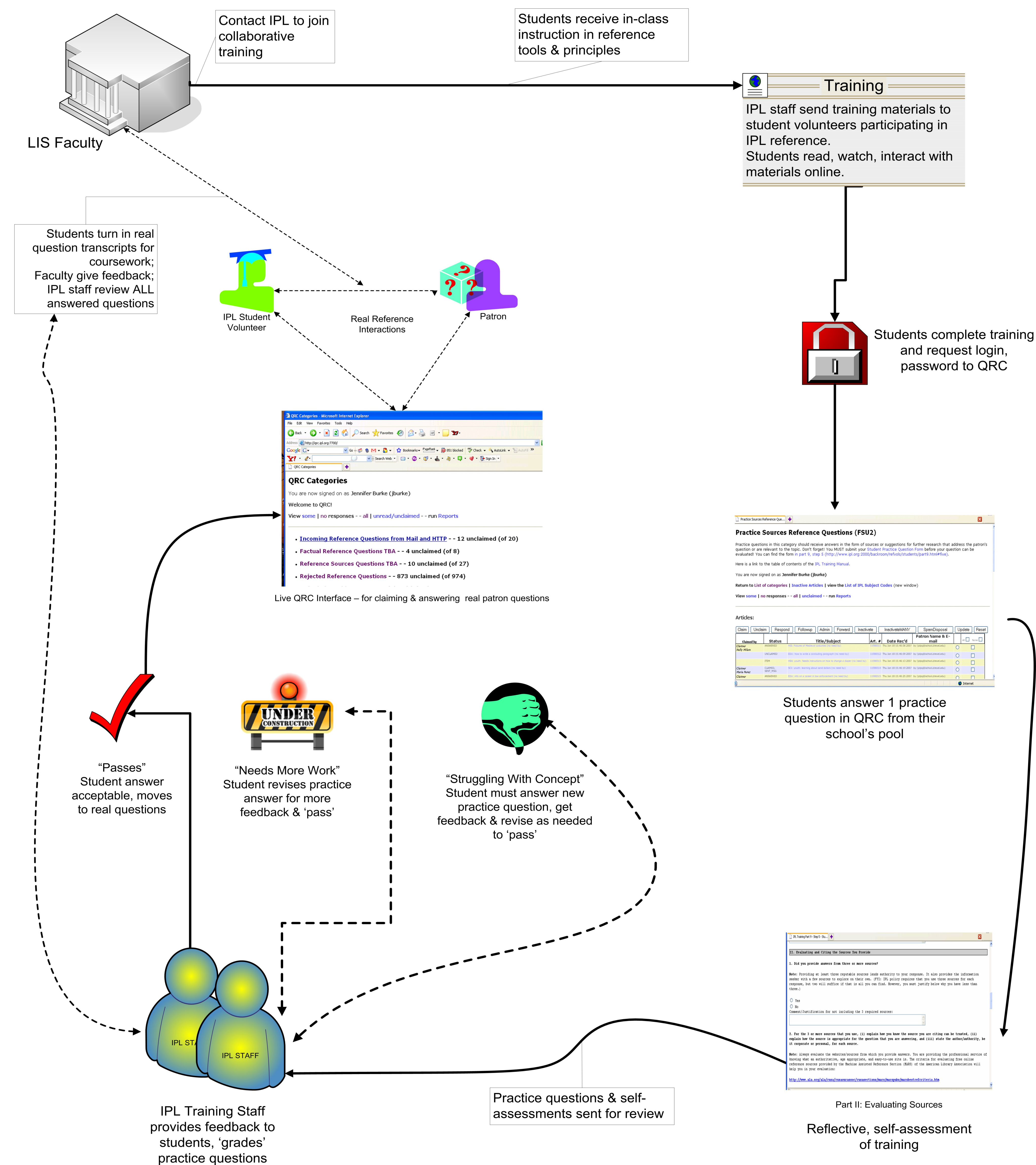
The daily activities of the IPL are handled by a team that included: two paid staff members overseeing student reference & collection work; two technical staff members who oversee the website; student volunteers, at both the masters and doctoral level, who serve as reference administrators; and a doctoral student who assists in the provision of feedback to students. Working volunteer librarians assist in answering questions as needed and often provide feedback to students.

## Cooperative Teaching Process

LIS education provides the theoretical foundation to understanding reference work, and the IPL provides a platform for students and volunteers to practice their newly acquired knowledge. LIS Faculty interested in working with the IPL for real, hands-on reference training contact IPL Staff for 'permission' to join and have their students 'enrolled'. In one term of this school year there were a record 10 schools with more than 500 students participating in the IPL learning experience: Florida State U., U. of South Florida, U. of Buffalo, Drexel, Rutgers, U. of Illinois Urbana-Champaign, U. of Missouri Columbia, U. of Western Ontario, Canada, U. of Stuttgart, Germany.

To aid in learning about reference and to become accustomed to the "IPL way", the staff have used years of experience to create online, interactive training tools to address both procedural aspects of the question-answering software (custom designed, called 'QRC') and more intellectual or conceptual aspects of reference such as source evaluation. Tools also include training on using the varied and extensive collections of materials in the IPL website.

Students answer practice questions (based on real, former patron questions) in QRC and receive feedback from the IPL training staff. A newly revised, reflective self-assessment questionnaire has been implemented this year based on collaborative learning on student challenges, it is hoped this will improve feedback, learning and question-answering performance. Once IPL staff determine students' responses meet quality and form standards students 'pass' on to answering reference questions from patrons around the world. They keep copies of their responses to turn in to their LIS faculty for further feedback and to meet their course requirements.



IPL Collaborative Training Process Model

## Challenges

Learning reference sources and service in a digital information environment presents educational challenges that didn't exist in years past, when print dominated reference and when the Internet (and IPL) was nascent. The dynamic nature of today's information technology, the global structure, the variety of authors and uncertain credibility of content challenge students learning to act as information intermediaries. In review of students' practice questions this year patterns of technical and conceptual difficulties have emerged.

Determining authority of information published on the web can be difficult, if not sometimes impossible and students have been confusing authoritative sites with those which are questionable or ad-supported. They don't seem to conceptually understand how information exists on the Web, particularly in sites that are larger collections of further information, such as *Bartleby.com*. Students also have problems differentiating between a search engine (SE) finding "sources" and finding "answers" to the particular patron question. So students use SEs to look for "answers" rather than for an authoritative source which contains the possible answer. Over-reliance on SEs, failure to grasp the impermanence of hyperlinks, not telling patrons why a particular site was a good source for their answer — all are signs of a lack of information literacy skills among the very students who are supposed to one day teach them to others in their library careers.

## Research

Dr. Eileen Abels and PhD student Andrea Japzon are currently investigating the observation that most students experience difficulty in identifying, evaluating, and citing the sources they use in answering IPL reference questions. Ten student responses to practice questions were randomly selected from those observed above. The current study compares search results from Google, the IPL collection, Answers.com, START (a question-answer IR system from MIT) and xreferplus subscription database (ready reference sources) for each of the 10 questions. The search results from each of the 5 resources are rated and compared in terms of completeness of answer and authority of source. This study is expected to provide insights on how best to direct students in their approach to using online resources while learning how to answer patron questions.

Future research issues include: the role of the IPL in educational environments; further engaging students within a collaborative online LIS learning environment; increasing opportunities for interaction and shared learning among students as they evaluate online information; the role of Web 2.0 style resources and other social computing sites as tools for reference; opportunities for greater interactivity and increased collaboration between students, faculty, volunteers, and IPL training staff — possibly through a rating system, or knowledge base of previously answered questions; exploration of automated question-answering services and many others. There is rich data from long history of service in the IPL which will hopefully be available to a cooperative, collaborative group of researchers in the near future.

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