

Thinking Ahead  
Salt Lake City Public Library  
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Congrats on being named Library of the year.

We are witnessing a rapid change in the way people communicate and gain information. Libraries are challenged to incorporate the new media and technologies to stay in step with their users. But must libraries adopt every fad that comes along? How do these opportunities affect our service models and push us either into the main stream or further to the edge?

Over a long career I have witnessed significant changes in the way we obtain and process information. When in undergraduate school, I was working in the university library, and the first Xerox 914 arrived. It was placed behind the counter, lines queued to get copies made, and it was slow, tedious, and temperamental. For the first time, however, faculty and students were able to make copies of reference works and journal articles and take them away instead of sitting and writing down endless paragraphs or merely tearing the pages out of the books or journals. I knew at that point that change would come, but I did not realize how rapidly.

I will not recount the introduction of automation nor reflect on my days with the Washington (Western) Library Network. Nor will I relate the frustration of introducing programs which would engage users in using computers in public libraries in the early '80s when I was state librarian of California—a project called InfoPeople which remains strong today. Who would have thought that the Pacific Northwest Bibliographic Center, CLASS, or the California Union Catalog would be replaced today with “WorldCat.org”?

There was great fear that television would replace reading and libraries—come on, I'm not old enough to remember when radio became popular! We bought our first computer when our kids were born in the 1970s and remember how thrilled we were to have a hard drive that took a floppy that held 48K. Today I carry a laptop that has 250 megs of memory!

Libraries are all about connecting people and information and knowledge together. They are about empowering people to take charge of their lives and participate in their communities. I believe they are still essential institutions in both campus and community. And reading is not dead, even though there are reports of its demise.

So what about our future? I will not recount the numerous reports and studies that have come out recently looking at libraries and the behavior of people in accessing and using information. I encourage you as librarians to find them and learn what they are saying.

What I would like to do this morning is to vision with you three scenarios that I hope will encourage some thought and then presents several topics in the form of questions for you to think about as you “think ahead.”

It is not my intent to give you a comprehensive look at the applications of technology but to interest you in discovering more that will guide you in looking at options that are open to you and your libraries.

#### Scenario One:

Libraries, particularly public libraries, have been extremely successful in working with children and families in improving their literacy and appreciation of literature. We conduct story hours, toddler times, and lap sits. Envision with me a children’s library that introduces the young child and his/her family to science, math, geography, and the global world around them. This model adds object-based, experiential science learning to the text-based information conventionally found in children’s libraries.

This library will draw on rich educational theory that calls for integration of reading and experiential exploration. It also puts into action theories of multi-modal learning that argue that children benefit from moving between different sensory modalities or multiple intelligences. Focusing on science is based on the fact that 1) science centers have been pioneers in the use of interactive exhibitry, providing a wealth of proven exhibits and useful research to draw from; 2) knowledge of and comfort with science is critical to academic performance; and 3) competencies in science, technology, engineering, and mathematics increase career opportunities for children.

As one enters this discovery space, exhibits, hands-on activities, and interactive experiences await along with books and professional help. Programming centers on discovery and exploration. There are small, durable versions of science center exhibits about *Forces in Motion*, *Living Systems* and *Perception*. Most of these will be clustered throughout the children’s library with books and electronic resources to form changing themed areas. Others are found among the stacks or in reference areas as single experiences.

Exploration plazas composed of a flexible system of furnishings, exhibit panels, banners, and digital projection screens will be interspersed among stacks and reading areas. The plazas are the primary location for discovery exhibits and learning cart activities and will change over time as librarians draw from the content collections to experiment with different themes.

Learning carts with activities to be conducted by staff among the exhibits and collections or in a closed learning lab will expand the capacity to interact with children and families. Unlike the exhibits, some carts involve loose parts and consumable supplies. Activities invite children to generate their own representations of information and experiences, ranging from low-tech drawings to high-tech images.

A discovery teen program will train youth to interpret exhibits, conduct programs, and facilitate discovery exhibits along with book/resource connections.

The library's children's Web site will connect children from home and classroom into the discovery center. Online chat and video streaming will connect children in remote locations (other branches, schools, or at home) with specialists and program presenters.

Teachers, artists, storytellers, librarians, and other community partners come together to enrich the discovery experience. A child can progress into middle school and move to an extended experience in a teen-focused space.

#### Scenario Two:

We begin this story with a persona: some information about the character to help us think about his background, capabilities, interests, and goals.

Consider Ryan an undergraduate in his second year at UCLA. He is majoring in international relations.

We can think of Ryan's goals as a hierarchy, some of which relate directly to the library:

- Have a good life
- Get a good job
- Graduate from college
- Pass this course
- Finish this paper
- Retrieve reference material
- Locate material
- Identify material
- Understand enough to organize a search
- Decide on a topic/thesis
- Make sure enough research materials are available

He has grown up with computers and is comfortable with both Macintosh and PC platforms, handheld devices including his iPod, cell phones and personal organizers, and all types of software. If he has a technical problem, he tries to solve it himself or enlists the help of a friend.

Ryan is twenty-one years old. He is single and lives in the dorms on campus. He attended a good high school.

This scenario addresses Ryan's goal to finish a paper. Currently he is doing research for a paper on trade in Vietnam.

In the coffee shop on campus, Ryan begins research for his paper. The local wireless network gives him access to the UCLA Web site and Library catalog. He logs in to the UCLA network. The network recognizes him and presents his "MyUCLA" page.

On the "Library" tab of the MyUCLA portal, Ryan searches the catalog. He finds a book that he thinks will be a good resource, but it is checked out.

Ryan sees that the book is due in five days. He sets up an agent to alert him when the book becomes available. Setting up the alert reserves the book for Ryan and notifies the current book holder that someone else has requested the book.

A few days later, back in his dorm room, Ryan uses the university's wireless network to access the Internet. He checks his email and sees that he has received an alert from the UCLA Library Catalog. The book he was interested in has been returned and is now available.

The alert not only tells Ryan that the book has been returned but also where it is located in the stacks.

Ryan transfers the information about the book and its location from his computer to his iPod using Bluetooth.

Later, in the library, Ryan looks up the information about the book on his iPod.

Ryan's iPod (a future version, with new capabilities) uses the Library's wireless network to guide him through the stacks. The network knows where Ryan is based on the location of his iPod. It also uses radio frequency identification to pinpoint the location of the book.

Ryan finds the book in the stacks. The Library Catalog confirms that it is the correct book based on the proximity of the book and Ryan's iPod.

Ryan looks through the book to make sure it contains the information he is interested in.

Ryan decides to check out the book. He doesn't have to wait in line; when he leaves the building with the book, the wireless network knows that he has taken it and automatically checks the book out to him.

This scenario is particularly compelling because it uses technology that already exists. While not all of the technology is widely distributed today, I believe that this story is likely to occur in the near future.

### Scenario Three:

Martha Smith works on organizing an activity for her community organization. She is setting up a Web site for the group and is preparing the background readings for them.

She wants the reader to be public and available for those in the group as well as others who might be interested in the topic. This reader is what librarians might call a pathfinder or a bibliography. But she wants to do it herself because she knows the material, and she wants the members of the group to keep the reader once the class is done and perhaps add to it.

On the library's Web site Martha can set up a Web site for her organization.

She can use the library Web site to set up her reader, including searching for library materials, reviewing them, flagging materials for inclusion, and formatting.

She searches the library catalog for an article she read last month that she'd like to include in her reader.

When Martha finds a likely search result, she looks at the complete text to make sure it is the article she wants. She then adds the article to the reader. Likewise, she locates a chapter in a recent best seller that relates to her topic and flags it. There is also a podcast focusing on her topic that she identifies.

When she is done, she submits the citations to the intellectual property office of the library, because the items come with associated rights metadata so the library is able to negotiate these permissions easily. The library will negotiate copyright and price issues and inform her of any costs.

Once copyright and price issues have been resolved, the library notifies Martha that the reader is ready to be reviewed.

Martha checks a proof and approves it for duplication and distribution to the members of her organization and those enrolled in the program she is giving.

The reader is posted on the library Web site and available for downloading.

This same scenario could have been developed using a faculty member and a class as the focus of the discussion.

These three scenarios are only a few of the ways that technology can extend not only throughout the materials available in the library but across other collections, university services, and the physical world. As technology is advanced and connected, the library has an opportunity to serve as a hub for information and services, making it easier and more efficient for people to find and share information.

Our concentration, however, must extend beyond the tools of technology to the implications and use of these tools. There are several issues that I wish to raise for your thought and discussion:

- Copyright and “fair use” in an age of licensing and the fact that libraries will own less of the content they provide.
- Mass digitization. Google’s approach is one avenue, but so is the Open Content Alliance, which will focus on out-of-copyright and public access resources. How will your library fit into these various possibilities?
- How will the library incorporate gaming and other learning strategies into its program?
- What is the implication of Google Scholar, Microsoft Live Academic, and Worldcat.org on the future of your library’s OPAC and people’s ability to access a wide range of resources held in their local communities in all types of libraries? Are there use agreements in place to make access transparent?
- How will your library create and support collaborative learning environments? What are the implications for library spaces, professional assistance, and connectivity?
- Globalization and diversity issues must be considered. Many in your community here in Salt Lake spend part of their lives around the world, in other cultures, and living among people unlike themselves. What is the library’s role in keeping information at their fingertips and allowing them to stay connected with home and family?
- How should the library respond to the need for multilingual resources? Many of these services will involve new media that are particularly attractive to nontraditional library users.
- What should the balance between print and media be? As new formats and technologies are introduced, how do you make the decision of what to include?
- Are your services user-driven? Do they not just embrace new media and technology but also give people personal control over their library and access experience?
- How do we create user-driven Web sites and spaces for exchange of ideas and communities of thought?
- How do we protect freedom of speech in an increasingly intrusive environment?
- How does the library create a virtual presence that provides the same level of access and user services that our traditional “in-building” services provided?

I have been careful not to touch on the sacred areas that some may feel are involved in these scenarios and issues. I will leave that to others who are speaking during this conference and for your discussion. I encourage you to think about developing scenarios for planning these new services. Approach issues from the viewpoint of the end user.

It is clear to me that we are facing a fascinating future if we are willing to engage with new media and technology and find ways in which to incorporate the “best” of the breed into library practice. And we need to find ways of incorporating it into the library’s long-term mission and connecting people and ideas and knowledge. We cannot wait to change, as others are already changing around us. We will either be part of the future, or we will be an excellent record of what libraries once were.

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