

Playing with the Future

Library Professionals, Trends, and Looking Ahead

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In the preface to his book *Futuring: The Exploration of the Future*, Edward Cornish, a founder of the World Future Society, notes that futurists recognize that “the future world develops out of the present world. Thus, we can learn a great deal about what may happen in the future by looking systematically at what is actually happening now.”¹

Cornish goes on to clarify the importance of monitoring trends—“long-term, ongoing shifts in such things as population, land use, technology, and governmental systems”²—as signals that point toward the future. With this direction in mind, ALA’s Center for the Future of Libraries (www.ala.org/libraryofthefuture) has worked with librarians and library professionals to more intentionally monitor the trends that will affect the future of libraries and the communities we serve. This monitoring requires that we look beyond our own immediate environments to explore changes happening in other sectors—including society, technology, education, the environment, politics and government, economics, and demographics.

Any future-focused effort should be a learning process and over the past two years, the work at the Center for the Future of Libraries has provided several opportunities to re-tailor approaches and discover new opportunities. There have, however, also been some obvious insights that are worth noting.

Librarians and information professionals, by nature of our interest in information and our skill in synthesizing and making connections across sources, might be particularly well-suited to this future-focused trend scanning. But our skills are only useful in so much as we are intentional in scanning outside of our environments and actively thinking through these trends’ implications for our work.

Our professional values (diversity, education and continuous learning, equitable access, intellectual freedom, literacy, etc.) and the values we advance in communities (creation and expression, democracy, discovery, place, preservation, privacy, public discourse, etc.) play an incredibly important role in our trend work. Our goal in monitoring trends should not be to accept trends as answers, but rather to consider these trends in light of our values.

We can identify trends that advance our values and with which we might align our efforts. We might identify trends that defy or jeopardize our values and we can introduce efforts to help redirect these trends toward more preferable ends. And we can be inspired by trends to adapt our existing physical and virtual spaces, services, and collections to continue to advance our values. It shouldn’t just be spotting trends, but seeing trends through our shared professional context.

Because we are integrated into the communities we serve—in cities and towns, on campuses, or in organizations—we have tremendous first-hand access to the trends that are influencing our users, our administrators and funders, and our partners. And, it’s worth noting here especially, library professionals who serve



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children, young people, parents and families, and educators, are particularly close to a regular stream of signals and trends that point to their communities' future needs and interests.

When we activate our minds to look for trends in the news sources that we review, in our day-to-day experiences outside the library, in our conversations with colleagues, and in our professional interactions with children, their families, and our community partners, it becomes easier to identify opportunities to innovate and adapt services to maintain relevance with the changes happening around us.

Thinking about Trends

Library professionals regularly identify new opportunities in their communities and adjust or invent services to address those opportunities. This is, at its core, an awareness of trends and an integration of those trends into library services. We can observe trends in the work that we are already doing—the use of maker spaces, connected learning, and digital badging in our summer learning programs or instruction. We can also think about trends by observing related professions, like journalism and education, to better understand the future information formats that our users will use to construct their worldviews. And we can look at the products and services marketed to our communities, to understand how expectations might be changing and how vulnerabilities might be exploited.

Maker Movement, Connected Learning, and Digital Badging

One of the societal trends that libraries have capitalized upon, and in many cases helped accelerate, is the maker movement. Technologies and new channels of communication have helped do-it-yourselfers, tinkerers, and hackers lead a movement away from consumption and toward production. Individuals can now prototype, make, produce, and repair goods for their personal or their communities' benefit.

The maker movement has paired with growing appreciation for connected learning that is “highly social, interest-driven, and oriented toward educational, economic, or civic opportunity and hands-on production.”³ Connected learning has provided library professionals with an important opportunity to assert the value of the social and interest-driven learning that has always happened in libraries and to refocus our attention to the productive value of library use (“less about what they have for people, and more about what they do for and with people”).⁴

And as both of these trends have moved forward, there has also been a growing trend to help recognize the range of learning that happens across environments. Libraries, cultural institutions, and community organizations have begun to explore digital badging as an opportunity to recognize the learning that happens outside the classroom. These digital badges help

learners document the skills they acquire in libraries, museums, parks departments, theaters, and other spaces.

Virtual Reality

For many years, virtual reality has been observed as a future-focused technology that was just around the corner. Through 2016, there have been several signals that indicate its growing accessibility. In its “Viewing the Future: Virtual Reality in Journalism”⁵ report, The Knight Foundation notes three related categories within virtual reality's expanding role—“virtual reality,” which creates environments that allow people to be present in an alter-

native environment; “augmented reality,” which starts with the real world and overlays virtual objects and information (think Google Glass, Microsoft's HoloLens, or the much-discussed Magic Leap); and “spherical” or “360-degree” video, which captures an entire scene in which the viewer can look up, down, and around.

While higher-end and higher-priced equipment (Oculus Rift, Samsung Gear VR) helps drive virtual reality, spherical and 360-degree experiences have become more accessible for everyday consumers, including for uses in storytelling and education.

As part of its promotion for the feature article, “The Displaced,” *The New York Times* delivered more than one million Google Cardboard⁶ viewers to Sunday edition subscribers in October 2015. With the viewers, readers could go beyond the print story to experience a 360-degree account of refugee children.

The New York Times and other news organizations continue to produce 360-degree enhanced content that provides readers with expanded information beyond the words and pictures of traditional journalism.

Google has helped accelerate consumers' interest in 360-degree content by collaborating with partners like *The Lion King* on Broadway and Abbey Road Studios to create 360-degree experiences for its Cardboard viewers. And Google Education's Expeditions program⁷ brings 360-degree experiences into the classroom, integrating content into curricula. At its 2016 I/O

developer conference, Google announced more than 50 million Cardboard-related downloads from its Google Play Store.⁸

Additional signals that we might collect? Mattel relaunched its classic View-Master toy with a virtual reality refresh. The viewer now works with a smartphone and individually sold content packs that explore space, the oceans, destinations, and wildlife with immersive 360-degree visuals. And Samsung's prototype Bedtime VR Stories is designed for parents to share and interact in a virtual reality story with their children, even if they are separated by great distances.

If virtual reality continues to evolve and engage consumers, library professionals may have several opportunities to align and innovate services to respond to this trend. From an information perspective, we might need to consider how to organize and retrieve the valuable information content in virtual reality experiences. As virtual reality and 360-degree content becomes more accessible, the technologies to produce such content might also become more accessible—and library professionals may be called upon to support individuals interested in creating and disseminating content. And as virtual reality provides more immersive experiences, library professionals may play a key role in translating virtual reality into real, live public discourse and engagement, using virtual storytimes as launching pads to peer-to-peer discussion or virtual reality tours as group conversation starters. As we continue to think about the trends in virtual reality, we will find additional opportunities to make our work relevant with this changing sector.

Interactive Toys

A new crop of interactive toys, which take advantage of trends in machine learning, artificial intelligence, and the Internet of things, could have a significant influence on the future of play and learning for young people. Available signals for this emerging trend can be found in the announcement of Hello Barbie⁹ during the 2015 holiday season. Hello Barbie utilizes a microphone and speaker to allow two-way conversations between the child and Barbie. When connected to the Internet, Barbie transmits these conversations to servers at a company named ToyTalk, Mattel's Hello Barbie partner, that convert audio into text and utilize artificial intelligence software to extract keywords from the conversation so that Barbie can improve her conversations with personalized questions, phrases, jokes, and stories incorporating the child's likes, dislikes, and personal details.¹⁰ As we read this, we recognize the privacy concerns inherent in such a product. But we might also recognize some of the opportunities in such products—for developing responsive, educational devices that integrate learning and play.

More recently, Povi has been introduced as an interactive toy that uses machine learning and an “emotional intelligence content platform” to deliver an evolving collection of stories and conversational recordings to help children with expressing their emotions, facing challenges, and problem-solving.¹¹ Povi's

content is curated by experts in psychology, education, and child development. Povi is Bluetooth-enabled and allows parents to connect with Povi via an app that provides discussion prompts and continuing conversations with each set of stories as well as data analytics and algorithms to help parents better understand their child's progress through specific EI skills.

With less focus on monitoring a child's speech and greater involvement from educational professionals, Povi could be a move in the right direction for interactive toys and could be useful to libraries as a tool for storytelling or as a possible partner in developing content related to the work we do.

And, in another more recent announcement, Sesame Workshop, the nonprofit producers of *Sesame Street*, recently announced a partnership with IBM's Watson, the company's natural language processing and machine learning platform, to develop new consumer apps, toys, or even educational tools for preschoolers and preschool educators. Given the trust and reach of Sesame Workshop and the power of IBM's Watson, this could be a strong indicator that interactive toys will only become more popular among consumers.

Now What?

At her 2016 SXSWedu keynote, noted gamer and futurist Jane McGonigal proposed four steps for thinking like a futurist:

- Collect signals from the future
- Combine signals into forecasts
- Create personal foresight
- Play with the future.¹²

Collecting those signals from the future requires activating our trend-spotting skills and thinking about how users are changing with their environments. Based on our professional positions, our inherent perspectives, and our acquired experiences, we have the potential to identify a range of changes across sectors.

As we think about those trends and how they will play out in the future, we begin to develop forecasts—thinking about how they will change user expectations; our own collections, services, and programs; and even how they might create new systems in the larger environment.

Based on our professional values and ethics and the value that we provide to society, we can begin to create personal foresight. Personal foresight allows us to think through how we can leverage elements or aspects of specific trends for our professional benefit or how we might need to align our work to stymie negative or less preferable trends to protect our work and the communities we serve.

That final step, playing with the future, invites all of us to think creatively about what might come in the future. How can we put these trends and signals together to make exciting futures for

our communities? Freed from the normal restraints of budget, time, spaces, or even our current skill sets, what creative solutions would we propose for the future?

Playing with the future can free us enough to come up with big ideas—and then begin the hard work of identifying the funding, partners, skills, and tools that we would need to make those visions a reality.

The brilliance of McGonigal's approach is that it invites all of us to think about and learn with the future. The process of identifying trends and signals, thinking about their potential in our environment, and proposing solutions based on those trends, is something that we all can do from wherever we work in the library environment.

As we work together to think about the future, we can ensure that our libraries remain relevant, no matter what changes might develop in our communities. ☺

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