LIBRARY OF THE FUTURE
CENTER FOR THE FUTURE OF LIBRARIES

TREND CARDS

These cards are based on trends identified by ALA's Center for the Future of Libraries *(ala.org/transforminglibraries/future/trends)* as relevant to libraries and the communities they serve. Special thanks to ALA members, library professionals, and our advocates and allies who have contributed their insight and advice.

You can use these cards in multiple ways, including:

- As conveniently packaged information for your own review and consideration

- As conversation starters with colleagues and members of the community

- As starting material for innovation exercises (a structured innovation activity is available from the Center's site at *ala.org/transforminglibraries/future/engage)*

- As mapping tools to illustrate how trends fit together or how they fit into your specific community

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TREND

AGING ADVANCES

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TREND

ANONYMITY

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TREND

BADGING

AGING ADVANCES

An aging workforce and population will change the United States and other developed nations, impacting the workplace, government budgets, policy, family life, and more.

Why It Matters

Needing adequate income and access to health care, adults may continue to work past traditional retirement ages.

An aging population will challenge governments to balance support for pensions against funding for programs that benefit all citizens and/or younger citizens.

Younger generations may increasingly be called upon to support, through time or money, older family members.
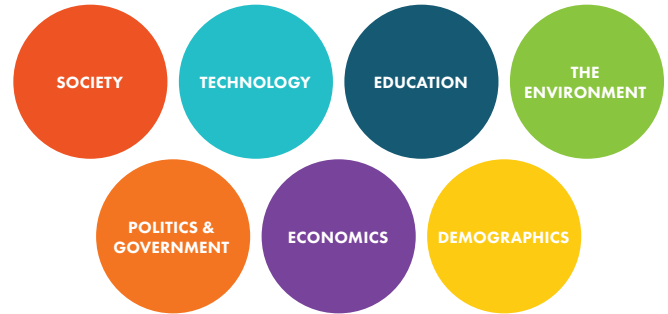
Increased time in retirement could result in demand for leisure activities, deeper pools of volunteer talent, or need for new community and gathering spaces. Retired adults may find their way back into the workforce or campuses.

Growing older adult populations will significantly influence the economies of communities, increasing demand for health care workers, the food service industry, and even new retailers.

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TREND CARDS

Each card includes information about the trend and considerations for why it might matter for libraries.

The trends are color-coded into broad categories of change:

SOCIETY · TECHNOLOGY · EDUCATION · THE ENVIRONMENT · POLITICS & GOVERNMENT · ECONOMICS · DEMOGRAPHICS

As the Center identifies new trends, supplement card packs will be available on the Center's site at *ala.org/transforminglibraries/future/engage*. We welcome your questions or suggestions for how these cards can be used or improved. Please email *futureoflibraries@ala.org*.

BADGING

Digital badges offer opportunities to recognize individuals' accomplishments, skills, qualities, or interests and help set goals, motivate behavior, represent achievements, and communicate success in learning offered in schools, professional settings, or daily life.

Why It Matters

As badging systems evolve to recognize learning that happens across a wide environment, including out-of-classroom, libraries of all types may be called upon to support the development of badges.

Community- or campus-wide initiatives to support learning will likely involve cultural institutions, including libraries.

If digital badges disrupt existing forms of credentialing (college and university degrees), they could significantly alter the environments in which libraries operate, especially academic libraries, or the services libraries provide, such as spaces for individuals to complete modules towards a specific job credential.

As users become more aware of badging's role in professional development or continuing education, libraries may be important partners in supporting individuals' pursuit of badges.

ANONYMITY

Anonymity, long a hallmark of communication on the internet, is a promoted feature of applications and forums allowing users to share information secretly.

Why It Matters

Anonymity, wherever it occurs and for whatever reasons, may be easily used to promote racist, sexist, offensive, and horrible sentiments. Libraries and librarians may fill a growing need for open dialog and reputable information.

The rise of anonymity and the vulnerabilities it exposes, especially for governments and businesses, may lead to a movement against it. Understanding the role anonymity plays in free speech and intellectual freedom may become increasingly important for libraries and librarians.

For some users, anonymity provides opportunities for deeper discussion and personal revelation. If anonymity can help build community, it may take on a more significant use than simple secret sharing.

BASIC INCOME

COLLECTIVE IMPACT

CONNECTED LEARNING

CONNECTED TOYS

COLLECTIVE IMPACT

In the face of limited resources and persistent social issues (poverty, violence, education, health, the environment), organizations from different sectors are adopting common agendas to combat issues within their communities.

Why It Matters

Libraries and librarians are frequently considered key collaborators for projects that address big social issues and may increasingly be approached to participate in projects that utilize a collective impact model. Libraries may seek to reframe library issues and priorities to align with the big social issues with which society struggles.

Funders, frustrated by a lack of progress in traditional models of giving, may become interested in the collective impact model and may prioritize projects that utilize the strategy.

Participation in collective impact projects may require more time and commitment. The collaborative relationship will need to be managed in addition to the organization's regular duties, mission, and priorities and within the organization's regular budget.

BASIC INCOME

Basic income—frequently referred to as universal basic income—is a payment from the government to all people in society, regardless of their income or work circumstances, meant to guarantee basic needs like food and shelter as well as enable individuals to pursue their self-improvement and contributions to society.

Why It Matters

An obvious question. Would the work of library professionals be automated and so result in our own personal needs for a basic income?

At the same time, part of the assumption of a basic income would be that individuals would be free to pursue education and training—and so libraries' role as spaces for teaching and learning would remain and perhaps become even more popular in a society where individuals are freed from labor and able to pursue their own interests.

Basic income could also liberate people to pursue productive leisure activities—the arts, hobbies, crafts, reading, writing, etc.—making library spaces and resources essential for these types of activities.

CONNECTED TOYS

A new crop of toys take advantage of trends in wireless connectivity, the internet of things, artificial intelligence, and machine learning to create highly personalized exchanges between object and child.

Why It Matters

Connected toys raise issues of privacy and security, especially if the toys transmit private information to third parties or utilize machine learning or artificial intelligence to collect, store, and personalize information.

Some connected toys could limit children's imagination, curiosity, or opportunity for authentic play—steering children toward rote answers that fit into a pre-formatted script, limiting socialization, and replacing real human connections.

Connected toys could create more robust, educational, and evolving systems of interaction with children, forging stronger educational and developmental outcomes.

Connected toys could allow parents and families to more closely monitor and involve themselves in children's development, transmitting information that would allow parents to better understand the activities their children are engaged in.

CONNECTED LEARNING

Social and digital media connects students and young people to each other and to a host of formal and informal educators, advancing learning that is "highly social, interest-driven, and oriented toward educational, economic, or civic opportunity."

Why It Matters

By encouraging exploration and interaction with resources, connected learning may re-engage learners with some of the fundamental benefits of libraries.

In order for connected learning to help level the playing field, students must have regular access to new and emerging technologies and the internet.

With a focus on production, connected learning could provide opportunities for libraries to engage communities in the production of new knowledge and resources that could further connect and integrate the community's role in the library.

Connected learning might also serve as a model for faculty, professionals, or even the community.

DATA EVERYWHERE

DIGITAL NATIVES

DRONES

EMERGING ADULTHOOD

DIGITAL NATIVES

Children and young people born into and raised in a digital world (post 1980) may work, study, and interact in very different ways from "digital immigrants," those born just a generation before.

Why It Matters

Digital natives are heavy consumers of social networking services, consider speed to be among the most important characteristics of digital products and services, and multitask across devices and between work and entertainment.

Characteristics of digital natives may not apply universally—those who grew up in low-income communities, are immigrants or children of immigrants, or who simply have alternate preferences may not have the same level of digital and technological influence.

Collaboration between digital natives and digital immigrants may be particularly important.

Digital natives might have higher activity in the parts of the brain responsible for short-term memory, the sorting of complex information, and the integration of sensations and thought; other research suggests diminished abilities to develop empathy, interpersonal relations, and nonverbal communication skills.

DATA EVERYWHERE

Mobile devices, internet-connected devices, and applications have greatly improved the opportunities to collect, store, and analyze customer data and personal information to develop products and services, improve marketing and communications, or monetize information.

Why It Matters

As data is used to control or shape search results and information access, users may need to be reminded of the full diversity of information available to them.

Organizations that collect data and that are interested in improving products and services could use data for their own purposes or share their data with businesses, governments, or other organizations—posing technical (providing data that can be understood and processed by systems) and ethical (user privacy and intellectual freedom) challenges.

As data sets become valuable information resources, libraries may be called upon to serve as repositories and access points for data sets.

EMERGING ADULTHOOD

Emerging adulthood considers the period from the late teens through twenties as a time of distinct psychological and behavioral characteristics that in more affluent countries may result in individuals taking longer to move out of their parents' homes, involve themselves in careers, get married, and have children.

Why It Matters

Publishing trends, including the "New Adult" genre, demonstrate the opportunities for services and products marketed to those in between established young adult and adult categories.

In the same way that adolescence became a recognized developmental stage, leading to distinctions in education, health care, social services, and laws that addressed the specific experiences of teenagers, emerging adulthood may come to be recognized as a distinct developmental stage and warrant similar distinctive accommodations.

Significant changes in home ownership, educational attainment, workforce entry, and even family planning patterns could significantly disrupt communities' composition and the funding sources that communities generate.

DRONES

Drones will become a regular part of life, used in research, transportation and delivery, artistic production, news coverage and reporting, law enforcement and surveillance, and entertainment.

Why It Matters

Drones could be used to deliver internet access in underserved areas.

Drones could help improve outreach efforts, delivering resources to the geographically isolated or homebound, providing deposit collections to areas affected by disasters, transporting equipment to individuals borrowers or communities, or even connecting expert researchers via video-equipped drones.

Because drones will provide new opportunities for content creation and research, users may expect drones to be part of the technology resources available from libraries. Additionally, video or survey content produced by drones may become content collected and managed by libraries.

Even as drones open opportunities for creativity, research, and production, they also raise concerns for privacy and safety.

FANDOM

FAST CASUAL

FLIPPED LEARNING

GAMIFICATION

FAST CASUAL

Fast casual restaurants are positioned between fast food (McDonalds, Burger King) and casual restaurants (Applebees, Chili's), setting themselves apart with counter service, customized menus, freshly-prepared and higher quality foods, upscale and inviting dining spaces, and technology integration.

Why It Matters

Fast casual could raise consumers' interest in both affordability and more social, experiential, and aspirational spaces.

Fast casual will have a profound influence on how users encounter spaces, building expectations for active, flexible, and social furniture and roomsets.

Fast casual's promotion of wireless internet, charging stations, and mobile apps may change consumers' expectations.

Even as these restaurants incorporate traditional third space elements, they provide these features in pursuit of profit.

FANDOM

Fandom refers to a community of people who are passionate about something (films, music, television, books, sports). The growing availability of media and social networks have provided individuals more opportunities to discover content and then more easily find groups of like-minded people with whom they can share and exchange proof of their fandom.

Why It Matters

As cultural institutions that preserve and provide access to media, fandoms may be obvious partners in promoting literacy, engagement with culture, and creation.

Fandom increasingly assumes active creation—writing, recording, remixing, role-playing—rather than just passive consumption.

Because fandom encourages and furthers a "remix" culture, it may be an interesting space for information professionals to observe copyright law, derivative and transformative works, and fair use.

As a tool for constructing community and identity, fandoms may help further libraries' goals to be centers of community and engagement. Fandoms may also help libraries bring together diverse individuals around shared culture.

GAMIFICATION

Gamification (the application of game elements and design techniques to non-game settings) and game-based learning (game playing that has defined learning outcomes) are seeing greater adoption and recognition in educational and professional settings.

Why It Matters

Gaming offers an important opportunity to develop emerging and traditional forms of literacy. With minimal instructions, players are motivated to seek out information about how games work—communicating with experts, watching or creating tutorials, or reviewing how-to texts.

Libraries can capitalize on the benefits of co-play, helping to improve players' social skills by encouraging play together, in small groups, or large classes.

The skills that games help develop—digital literacy and understanding how systems (computer and otherwise) work, for example—will become increasingly important in a work environment where jobs and responsibilities are regularly changing.

FLIPPED LEARNING

Flipped learning—or flipped classrooms, backward classrooms, inverted classrooms, or reverse teaching—utilizes a model where students review content online via video lectures and assignments are completed during class meeting times with students and teachers working through and solving questions together.

Why It Matters

Transitioning to a flipped learning approach may require a significant amount of work for educators, including recording, uploading, and managing lectures. These might all be services that librarians and information professionals might be consulted on or proactively seek to support.

Library instruction, whether integrated into a course or presented as stand-alone sessions, may seek to adopt flipped learning models.

Continued access to and management of many of the learning elements involved in the flipped learning environment may fall to library and information professionals.

Students and other learners, seeking environments where they can view recorded lectures without distraction, may seek out spaces in the library for focus and serious study.

HAPTIC TECHNOLOGY

INCOME INEQUALITY

INTERNET OF THINGS

MAKER MOVEMENT

INCOME INEQUALITY

Income inequality refers to the extent to which income is distributed in an uneven manner among a population. In the United States, income inequality has been growing markedly for the past 30 years.

Why It Matters

In an economy where income potential is dependent on educational achievement, programs that combat the "achievement gap"—pre-school, tutors, summer camps, after-school activities—will be recognized as opportunities to also address income inequality.

Less economically advantaged individuals have lower levels of life satisfaction, high levels of stress and worry (about daily struggles and growing uncertainty), are far less optimistic about the future and the American Dream, and are focused on short-term horizons and have difficulty investing in the future.

High-income and low-income people increasingly live in separate spaces, with city governments, schools, and communities more fragmented and less inclusive than before.

HAPTIC TECHNOLOGY

Haptic technology, haptic feedback, or haptics, is technology that incorporates tactile experience or feedback as part of its user interface, creating a sense of touch through vibrations, motion, or other forces.

Why It Matters

The integration of haptics into media may add a new descriptive feature into information objects, requiring libraries to rethink their systems for describing, classifying, or even retrieving resources.

Haptic technology may play an important role in learning—tactile interaction improving the acquisition of information or revolutionizing online or distance education.

As libraries work to make text-based or image resources available to a wider audience, including those with visual or audio disabilities, haptic technologies could become a significant part of accessibility.

Haptic technologies could become an important part of wearable technologies, which patrons would presumably wear with them into the library and could integrate into search, navigation of the library space and stacks, or even reading time.

MAKER MOVEMENT

Makers take advantage of the availability of new technology and traditional craft tools, improved communication between community members, and new pathways to the marketplace (sharing economies, e-commerce, crowdsourcing).

Why It Matters

Libraries may adopt new functions, providing communities with opportunities to create or co-create content for an individual's own use, for use by the community, or for inclusion in the library collection.

Local governments may capitalize on the maker movement as an opportunity to revitalize manufacturing, build small businesses, attract investment, or even revive neighborhoods or centers.

Makerspaces may provide libraries with new opportunities to further technological innovation and entrepreneurship in the community.

Schools, colleges, and universities may adopt maker practices that provide hands-on learning activities for students.

INTERNET OF THINGS

Smaller computing and radio devices, often unseen or built into objects, will sense and transmit data offering greater control of and connectivity between objects.

Why It Matters

As connected objects proliferate, consumers may have technical questions about their use or will require new skills to implement and manage the devices.

As with other technological trends, there is a potential divide between the haves and the have-nots.

Implications for privacy abound and while many may evaluate the trade-off for improved quality of life worth the relinquishing of privacy, others may not.

The data generated by these objects has tremendous value—for companies and marketers, but also for researchers and governments.

The growing number of devices that make up the internet of things will necessitate a move toward API-centric (application programming interfaces) development, allowing developers and engineers to build pieces on top of existing layers within larger ecosystems.

PRIVACY SHIFTING

RESILIENCE

ROBOTS

SHARING ECONOMY

RESILIENCE

Resilience or resiliency incorporates preparations for and rapid recovery from physical, social, and economic disruptions, including environmental disasters, terrorist attacks, or economic collapse.

Why It Matters

As city, state, and the federal governments adopt resiliency as a strategy for addressing potential disasters, libraries may promote their facilities, services, and programs as part of a resilient community strategy.

Resilience requires community involvement—encouraging individuals to make decisions that help prepare for and prevent the impact of disasters, providing resources and information to help them make informed decisions, and offerings programs and services that allow individuals to respond to issues as they arise.

Resilience may also align with library values of equity and access. Truly resilient communities would embrace distributed, renewable energy, support diversified local agriculture, and foster social equity and inclusion—avoiding situations where the greatest impacts are felt by the most vulnerable members of the community.

PRIVACY SHIFTING

The way that society and individuals value privacy will change, especially as technologies acquire more and more personal information; become smaller, cheaper, and more available; or monitor users and connect to the internet.

Why It Matters

The less technologically skilled—but also the technologically obsessed—may need to be made aware of the privacy concerns raised by new technologies and may need help in managing their privacy while benefiting from technology's use.

Younger generations may lead a change in society's value for privacy or they may grow into current values for privacy—especially as they enter higher education and professional careers.

A middle ground may be sought where information sharing is promoted, but with a goal of developing robust online identities, developing community, and advancing personal goals.

SHARING ECONOMY

A sharing economy (also referred to as collaborative consumption or peer-to-peer collaboration or rental), often utilizing social technologies, allows users to share resources, goods, services, and even skills.

Why It Matters

As the sharing economy advances and moves in new directions—electronic devices, transportation, tools, education, equipment—the roles that libraries play as sharers may need to change and adapt.

Appreciation and interest in the sharing economy may be generational, with younger generations more willing than older generations to use new platforms for renting or sharing products and services.

Cities and governments will likely see opportunities in the sharing economy to help improve the experiences of citizens (e.g. bike share programs).

The sharing economy will increasingly depend on the trust established between and among participants, trust based on data, reviews, and profiles created on web sites and online communities.

ROBOTS

Robots will move from industrial and factory settings to more everyday work, educational, research, and living spaces. These collaborative robots will increasingly perform repetitive tasks and work alongside humans.

Why It Matters

Libraries may introduce robots and robotics into their community technology offerings.

Even as advocates promote the view that robots will improve humans' experiences in the workplace, there is still concern that robots will be used to displace human workers, requiring potentially displaced workers to develop new skills.

The introduction of robots will bring with it significant policy implications, including security, privacy, liability, and intellectual property issues.

As populations age, a shortage of working-age people may necessitate robots in order to provide services and products to a growing population.

SHORT READING

UNPLUGGED

URBANIZATION

VIRTUAL REALITY

UNPLUGGED

In a world where information and technology are everywhere and ever-present, opportunities to unplug may become more essential, benefiting both professional and personal experiences.

Why It Matters

Libraries may capitalize on users' perceptions of libraries as quiet spaces, marketing at least some space in their buildings as places to unplug, concentrate, and focus.

Programming and services that encourage quiet reflection or that limit the use of technology may become novel and popular as they contrast with the everyday connectivity that people normally encounter.

The constant connectedness of society may change the ways that future generations concentrate and collect, synthesize, and analyze information.

SHORT READING

Formats that take advantage of short opportunities to read help encourage reading among those that are pressed for time, reluctant to read, or distracted by technology.

Why It Matters

With a persistent public brands of "books" and a deep value for literacy, short reading's growing popularity could lead users to expect short reading innovations at libraries. Apps that serialize longer narratives or reformat narratives into text messages could provide indications for readers' changing preferences for content.

Short reading may test notions of quality reading. While text message-formatted reading might keep readers reading, the quality of comprehension, learning, or even enjoyment may not be considered.

The popularity of audiobooks and podcasts for commuters has led to some innovations that time reading material to fit into commutes or other specific activities, making sure that perceived down time can still be reading time.

VIRTUAL REALITY

Virtual Reality—computer-generated simulation of images or whole environments that can be experienced using special equipment—is progressing in several ways, including traditional virtual reality that creates environments where people can be "present" in alternative environments; augmented reality that overlays virtual objects and information into the users field of view; and spherical or 360-degree video that captures entire scenes in which the viewer can look up, down, and around.

Why It Matters

Major newspapers and magazines are investing in virtual reality as a tool for informational storytelling.

Virtual reality is making in-roads in education, as a tool to enhance traditional classroom curriculum and instruction.

The creation of VR experiences is becoming more accessible, with 360-degree cameras available and an increasing number of mobile devices equipped with 360-degree recording options.

Virtual reality will continue to be a tool for entertainment, with immersive arts and sports experiences available to users.

URBANIZATION

More and more people will migrate to urban areas, resulting in both the growth of existing urban areas and the urbanization of suburban areas or the greater integration of suburban areas into larger metro areas.

Why It Matters

The growth of cities may provide more opportunities for employment and pathways to higher personal success, further concentrating wealth and increasing disparities.

Suburban and "edge cities" may move to become more urban in nature, investing in vertical development, mass transit, or more urban amenities like downtowns or planned outdoor spaces. Small- and mid-sized cities and towns may align assets like universities, cultural institutions, and entrepreneurs to spur economic growth and stability.

High density development could result in changes to family composition, as most major metropolitan areas in the developed world have fertility rates lower than those in outer areas.