

# *FUTURES THINKING FOR ACADEMIC LIBRARIANS: HIGHER EDUCATION IN 2025*

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## Executive Summary

For academic librarians seeking to demonstrate the value of their libraries to their parent institutions, it is important to understand not only the current climate. We must also know what will be valued in the future so that we can begin to take appropriate action now. This document presents 26 possible scenarios based on an implications assessment of current trends, which may have an impact on all types of academic and research libraries over the next 15 years. The scenarios represent themes relating to academic culture, demographics, distance education, funding, globalization, infrastructure/facilities, libraries, political climate, publishing industry, societal values, students/learning, and technology. They are organized in a “scenario space” visualization tool, reflecting the expert judgment of ACRL members as to their expectations and perceptions about the probability, impact, speed of change, and threat/opportunity potential of each scenario. Finally, the study draws out implications for academic libraries.

For scenarios which have been identified as high impact with a high probability of occurring, it is incumbent upon library directors and those who set strategic agendas for academic libraries to plan to act now upon these scenarios. This report reinforces the notion that academic libraries are part of a larger ecosystem, and librarians should be consistently scanning the environment to look for signs of the changes that may come. It includes an appendix with a suggested activity to engage library colleagues in stretching your imaginations and considering possible futures. This can build capacity to engage in strategic thinking and planning, supporting librarians in making better decisions now that can address a variety of possible futures.

## Introduction

Since April 2009, the Board of Directors of the Association of College and Research Libraries (ACRL) has been working to determine how best to help members demonstrate the value of academic libraries to the academy. ACRL is interested in developing research that will support library advocacy efforts to influence decision-makers and funders in higher education. As a first step, ACRL commissioned a comprehensive review of the quantitative and qualitative literature, methodologies, and best practices currently in place for demonstrating the value of academic libraries.<sup>i</sup>

In addition, several ACRL leaders have indicated it is not enough to know the current state; we must also know what will be valued in the future and draw implications so that librarians can begin to take appropriate action now.

The authors of this report, together with ACRL Executive Director Mary Ellen Davis, Past President Erika Linke, President Lori Goetsch, and Vice President Lisa Hinchliffe, conceived of this futures project as a way to help stimulate thinking for ACRL is a division of the American Library Association. ©2010 American Library Association. We determined that a 15-year horizon would help academic and research librarians see beyond the worries of this budget cycle and the short-term future to consider, instead, what may happen further down the road, to better anticipate the changing context within which academic librarians will operate, and to make more informed strategic decisions. The group decided it was important to understand not only how library directors and deans see the future, but to

understand the perceptions of all academic librarians, no matter how long they've been in the profession or what positions they hold.

This document presents 26 possible scenarios based on an implications assessment of current trends, which may have an impact on all types of academic and research libraries over the next 15 years. The scenarios are organized in a "scenario space" visualization tool, reflecting the expert judgment of ACRL members as to their expectations and perceptions about the probability, impact, speed of change and threat/opportunity potential of each scenario. Finally, the study draws out implications of the scenario space assessment for academic libraries. We expect to challenge your mental models. By reflecting on alternate futures, you may see your strategic assumptions and values in a new light. We hope this report provides you with a stimulus for thinking about and managing change differently.<sup>iii</sup>

## Theoretical Frameworks

For many the word *futurist* conjures up Alvin Toffler, George Orwell, Buckminster Fuller, or Faith Popcorn. According to conventional wisdom, futurists make predictions (based on mathematical extrapolations of trend lines), write science fiction fantasy, or, cynically viewed, are consultants seeking to implement yet another management fad. Practicing futurists and futures researchers, however, have much more nuanced views, speaking in the plural of *futures* to emphasize the value in exploring and considering multiple alternative futures.

Anthropologist Margaret Mead turned to anticipatory anthropology in the later part of her career, and, in a 1977 lecture, explained, "I use the term 'open-ended' to suggest that our future is neither predetermined nor predictable: it is, rather, something which lies within our hands, to be shaped and molded by the choices we make in the present time" (2005, p. 329).

Futurists begin with the assumption that the future is uncertain, because a combination of variables and unknowns could produce any number of results. Thus their goal is not to predict but rather to posit alternate futures, each of which aim to provide, "a plausible, internally consistent view of what might happen." (Johansen, 2007, p. 17). The aim of considering alternate futures is to make better decisions in the present, as suggested by Mead and echoed by many others (Hines & Bishop, 2006, p. 143; Johansen, 2007, p. 146; Schwartz, 2006, p. xiv; Slaughter, 1995, p. 33; Van der Heijden, 1996, p. 16). The process of constructing scenarios and reflecting on alternate futures causes us to consider in a new light the

### *Participant reflections*

*"It's good to think around the corners. Change, while a little unnerving, is inevitable and gives us opportunities to be creative and increase our relevancy."*

*"Almost any scenario could be turned into an opportunity for the academic library with enough vision. It seems like the future of the academic library certainly lies in the academic librarian becoming more and more of a curator and creator, trading in the traditional passive role for a much more active and collaborative one. Very exciting."*

*"This reinforces our need to define the role of academic libraries in the future and now as we are evolving. Some of the scenarios are only a threat rather than an opportunity if we are not players in the future."*

strategic assumptions and values we hold. Considering the future as uncertain and multidirectional in its potential allows us to look with fresh eyes at how the choices we make now may play out under various conditions. Given these notions of agency and reflection, some see futures thinking and scenario planning as valuable ways to support organizational learning (Schwartz, 2006, p. xv; Van der Heijden, 1996, p. 7).

Because the future is inherently not open to direct experience, there are no facts established and no evidence to measure. “Knowledge of the future is not empirical knowledge, but interpretive knowledge” (Slaughter, 1995, p. 32). As Dator (2002) noted, “What futurists can and often do study, are ‘images of the future’ in people’s minds” (p. 7). Further distancing futures studies from empirical science and positivist views, Staley asserted that futurists should not aim for predictions and certainties as a scientist might, “but rather should view the future in the same way that a historian views the past – aiming for representation and understanding” (2007, p. 2).

Creating scenarios that suggest alternate futures is more than fancy or fiction. Futurists balance evidence from the present to draw inferences about the future, aided by their imaginations. While futurists do use their creative skills in crafting scenarios, to be sure, they recognize the importance of “restrained imagination,” using it judiciously in the same way that historians combine evidence and imagination (Staley, 2007, p. 109 -114).

We hope this report plays a guiding role in helping you make sense of the myriad possibilities emerging in the many systems of which academic libraries are part. We hope that reflecting on alternate futures helps you consider anew the decisions you make now in a light of what futures may be possible. (See **Appendix C** for a suggested activity to use in your library). We hope to help you change your perspectives about what our organizations are and what they will become.

## Methodology

We undertook two months of intensive environmental scanning, looking for distant signals of the changes that could be coming to higher education and academic librarians. We cast a wide net gathering

### *Participant reflections*

*“It was interesting to consider the future in these scenarios. We often only look ahead a few years in the profession, not 10 - 20. I think it was valuable to me because I took stock of what the distant future may actually hold and the effect it will have not only on libraries but my children and grandchildren.”*

*“Very creative and innovative. I really like some of these ideas and see opportunities for the academic library in most. It feels very joyful.”*

*“The scenarios were thought provoking and a few of them were hard to comment on as I hadn't imagined them before. This survey helped me identify some possible topics that will affect the profession in the years to come. Not that they necessarily will happen, but just the idea that some aspects of them could become reality was interesting to me.”*



evidence from trade journals, magazines, newspapers, blogs, conference presentations, and research in progress. We looked across industries and disciplines for evidence of changes, events, and innovations already taking place in the here-and-now that are not yet widespread in higher education and academic libraries, but could become common.

We purposefully looked for some examples of trends that are currently on the fringe. Futurists refer to these as “wild cards,” trends with low probability of occurring, but tremendous impact if they do.

Together with ACRL staff members Kathryn Deiss, David Free, and Mary Jane Petrowski, we took this evidence from the present, combined with our tacit knowledge of higher education and academic libraries, to create interpretive stories of how this landscape could look in the future. We created *possible* scenarios – not just those that were most likely or preferable. Through these stories, we aimed to represent a variety of themes: academic culture, demographics, distance education, funding, globalization, infrastructure/facilities, libraries, political climate, publishing industry, societal values, students/learning, and technology. While some scenarists, following in the footsteps of anthropologist Clifford Geertz, aim for “thick description” with scenarios of several hundred words, we decided to address just one element or construct in each scenario.

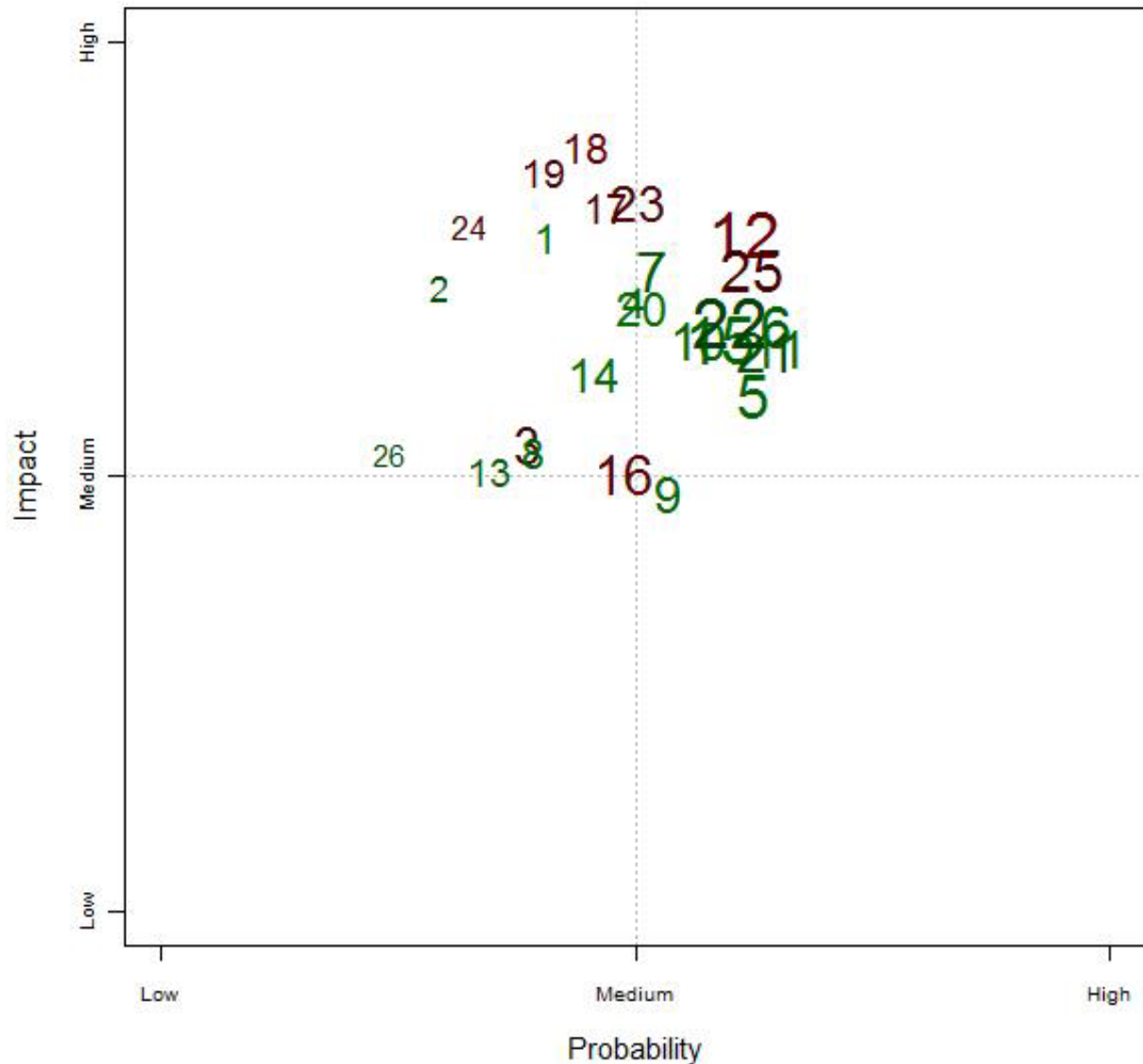
Research on forecasting suggests that foresight processes that aggregate the judgment of large groups of participants, rather than one or two experts, produce more reliable forecasts. Rather than presenting an undifferentiated list of possible scenarios, we are using a visualization tool, developed by Staley (2007, 2009), which encourages and manages collective imagination. To understand the collective imagination of academic librarians, we developed a survey instrument and invited nearly 2,900 ACRL members to participate. (For more details see **Appendix A. Methodological Notes** and **Appendix B. Demographic Profile of Survey Respondents**.) Through this survey instrument, we sought out the expert judgment of ACRL members as to:

1. The probability that each scenario will occur. (1 Low - 5 High)  
(Note: this is not a statistical probability, but rather a subjective Bayesian probability.<sup>iv</sup>)
2. The impact of each scenario, if it were to occur, on academic and research libraries. (1 Low - 5 High)
3. The speed at which the scenario is unfolding.
  - a. Immediate change: in the next year or is already happening.
  - b. 1-3 years, Short term.
  - c. 3-10 years, Medium term.
  - d. 10-20 years, Long term.
4. Whether the scenario reflects a threat or opportunity to academic libraries.

Each of these variables reflects a dimension of the scenario space. The x-axis equates to the impact of the scenario, the y-axis to the probability. The speed of change is represented by the size of the scenario number. A green-colored number reflects an opportunity, a red-colored number a threat (and various shades in between). The survey results for each numbered scenario are then mapped onto the scenario space. The final result is a map of our collective perceptions about the future.

## The Scenarios

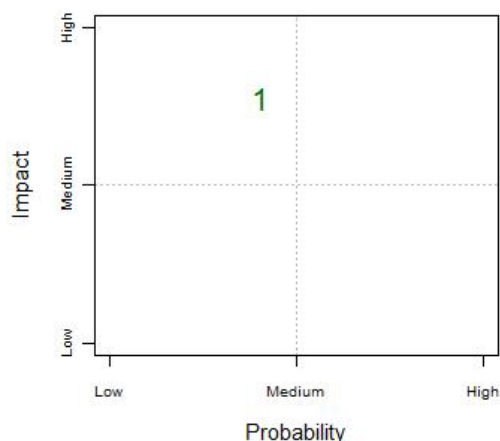
Graphically represented, then, the scenario space for this project is:



The font size of the scenario number indicates the speed at which the scenario is unfolding (smallest is long term, largest is immediate change with various sizes indicating lengths in between).

The color of the scenario number indicates opportunity (green), threat (red) or a mix (various shades in between).

The scenarios themselves follow in alphabetical order, including representative quotes from ACRL members to help provide context for why academic librarians situated a scenario at a particular point in the scenario space. In some cases, the range of opinion was quite great, as the quotes reveal.

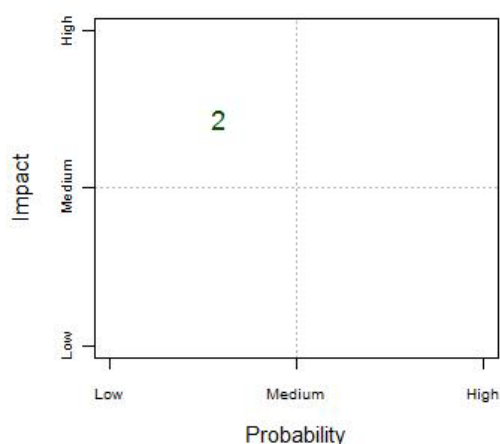


### A college degree for every citizen

As expertise is given more credence and peer opinion lessens, the public appreciation for higher education increases. Beyond the thoughtful life of the mind, it is an economic imperative to go to college in order to obtain anything more than a menial job. Education is so valued that the federal government repurposes the Hoover campaign slogan and proposes, “A college degree for every citizen!” spawning a debate about universal higher education.

*“I don't see this as likely. I see almost the opposite. Other forms of credentialing and learning start to compete with higher ed as the focus on ‘expertise’ increases. Traditional college enrollment could actually go down as people seek other paths to secure jobs. If it actually played out like this, we'd be very lucky.”*

*“I wish education were valued more, but I also fear that we now have so many utterly unqualified and unprepared people graduating not only from high school but from college that the idea of letting more and more unprepared people in is unsettling, and devalues the education we have now. I wish all citizens were so literate, and valued education so highly, that they would all go to college, and that colleges no longer had to engage in remedial education. But I can't see it turning around like that.”*



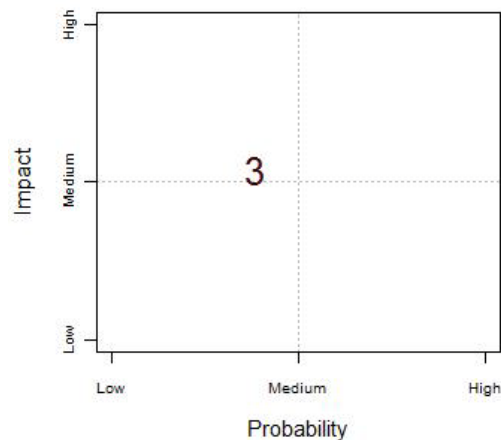
### Academic niche networking

The hyper-specialization of professions has caused a near complete breakdown of traditional academic departments at physical universities. Instead of working with their colleagues on campus at “State U,” free agent professors from across the world share ideas in small online communities. Students are only required to take courses in their highly specialized majors.

*“Traditional departments are definitely breaking down, and online communities are gaining hugely in prominence, as are niches, absolutely. On the other hand, though, fields are becoming ever more inter- and multi-disciplinary, so that niches are also bumping up against growing encounters with many disciplines... (I see) maybe, a mix of hyperspecialization with intense inter- and multidisciplinary – paradoxical, sure, but I think this reflects the growing complexity of our educational landscape.”*

*“This would give further strength to the idea of specialty librarians, which is a worry, as more systems are phasing out departmental librarians in favor of centralized services. However, as outreach and liaisons have become more important, we might see a strengthening of those positions.”*



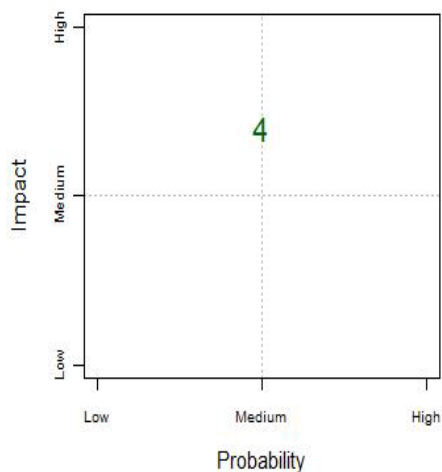


### Activist seniors keep on working

Having run headlong into ageism, activist Boomers galvanize around this social justice/discrimination issue. Now routinely in the workplace to the age of 75, seniors demand respect for their years of wisdom. This lends a new tenor in U.S. workplaces, where being young and quick is not the advantage it once was.

*“Respect is earned, not demanded. Newer technologies and fresh thinking will be what makes the world continue to turn. If elders keep up and keep innovating, they will earn respect like everyone younger.”*

*“I don't see this happening unless the economic environment makes it impossible to survive without a job. Most people are looking forward to retiring.”*



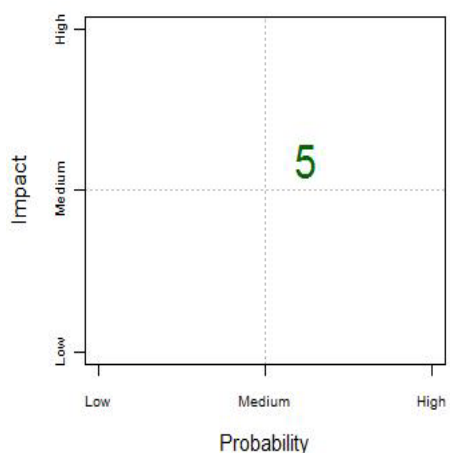
### Archives on demand

Affordable 3-D printers are ubiquitous, and every teacher, researcher, and student is a manufacturer. History students “print” copies of objects from distant archives and museums to hold and study close up pieces of ancient Rome. In other disciplines, distance education students manufacture a human heart, model of the solar system, and textiles from far-away lands. The study of material culture expands, and the special collections in academic libraries reach new worldwide audiences.

*“Clearly the homogeneous nature of our collections combined with electronic resources means that the real gems will*

*increasingly be uncovered in our archives and special collections. With the trend to pushing those items out into the digital sphere this scenario is likely, but getting there is expensive, time consuming and labor intensive so it will probably take a while. BUT IT IS EXCITING!!”*

*“This would be a boon in terms of learning opportunities, but I think unlikely to be a reality any time soon.”*

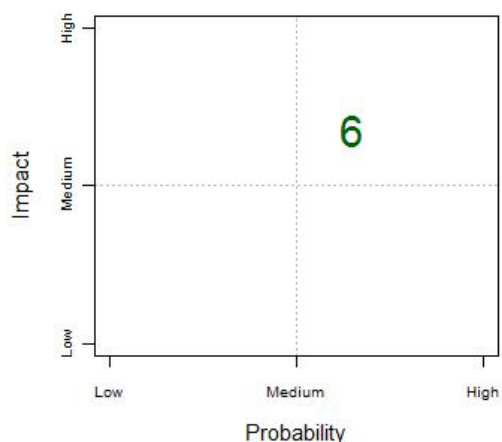


### Breaking the textbook monopoly

Most states have passed legislation that requires textbook publishers to make textbooks affordable. Faculty members, sympathetic to their students, have embraced online open educational resources (OER). More faculty create and share openly their course materials, modules, streaming videos, tests, software, and other tools. Although widely accepted seminal OER exist for introductory courses, faculty create materials for advanced courses based on their own knowledge and interests, inviting student contributions.

*"This is already occurring in some fields and at some institutions. It is a positive move, but also radically impacts and changes the way we do things in academia and in the library. We need to start re-thinking things now and help lead our colleagues at our institution in determining our policies."*

*"This is an excellent opportunity for libraries to prove their worth as information collectors, organizers and evaluators. Creating LibGuides by course/subject that allow professors to select alternative curriculum materials is an excellent way for librarians to once again become an essential part of the planning process."*

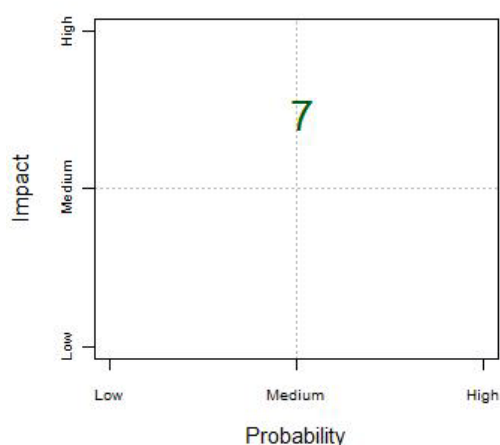


### Bridging the scholar/practitioner divide

Open peer-review becomes the norm for many fields, speeding up application of discoveries. Online publications, by scholarly societies in partnership with trade organizations and professional associations, are open access. They support robust community-based dialogue on articles as soon as they are accepted via traditional editorial procedures. Scholars and practitioners alike discuss the findings, how the theory would apply in practice, and suggest additional research needed.

*"I think this is mostly an opportunity for libraries to become involved. Peer reviewing and technology speeds up the 'game' as it where. In turn this creates more materials at a quicker rate. Librarians become mediators of this large amount of information."*

*"Libraries will need to reconsider what their relevance is in the research process. We need to start considering what our 'deeper meaning' is to researchers to ensure that we fit into this new model. I feel strongly that we will have a role - it will look different from our role now, and we need to be careful not to cling to past practice for nostalgic reasons."*

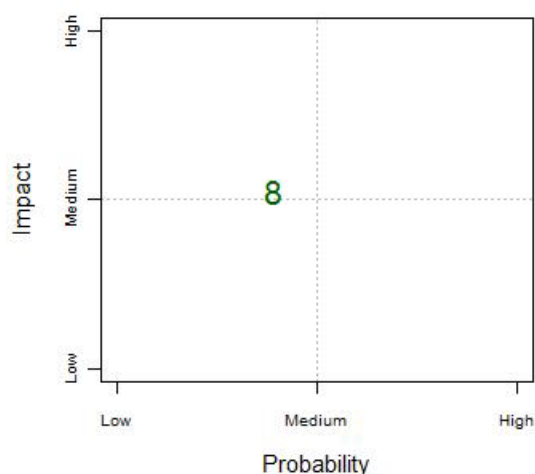


### Community over consumerism

In the wake of the Great Recession, the simple living movement is not only a lifestyle choice, but also an economic necessity. Contributing to community is now seen as more valuable than making money. Colleges and universities adopt triple bottom-line accounting to consider financial, human, and environmental costs of their operations as well as contributions to society in these three areas. Students embrace distance education as a way to reduce carbon footprint – attending in-person events a few times a year.

*“We’d have to really finally actually re-think the website as a branch and ensure that our virtual service points have the excellence of our physical ones, since they will be it. We should be doing this now.”*

*“Fewer students in the doors can be rough on statistics-oriented administrations, leading to possible budget cuts. However, as technology gets better, we can find that our own distance-learning tools will get more effective.”*

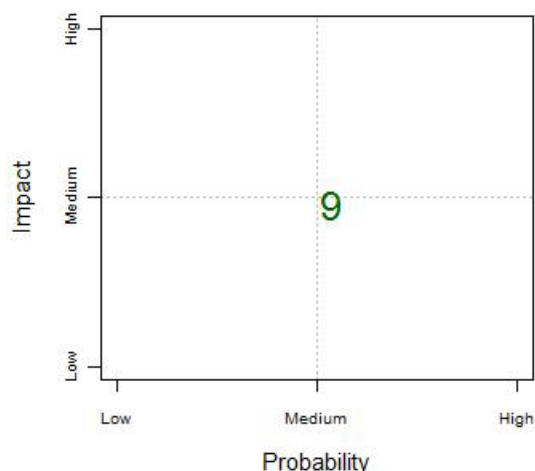


### Creative conscription

In response to rising innovations outside the United States, the federal government collaborates with the private sector. Private sector companies increase their research and development budgets, and federal agencies aggressively fund applied research in science, engineering, technology, and medicine in the name of national competitiveness. An agency or company recruits and sponsors the top students, as once was common with student athletes or ROTC programs. The students are obligated to give the agency/company six years of service or two patents after graduation.

*“It would be nice if the federal government had enough money to aggressively fund research. In our current anti-tax climate this is unlikely.”*

*“An opportunity for libraries to support those students and bond with the same private sectors. Those students will need support, and the more your institution recruits those students the better equipped it needs to be.”*



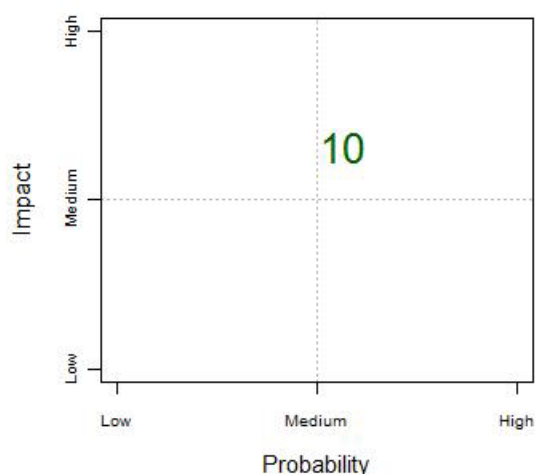
### Design for disability

To aid our aging population and others with limited mobility, all new buildings have easy grip doorknobs and push buttons to open automatically all interior doors. Showers in dorm rooms and recreation centers have grip bars, roll in access, fold down benches, and large private dressing areas. Assistive devices retrieve books from high shelves, and computers are routinely outfitted with headphones and text readers.

*"The probability does not match my desire to see the scenario play out. I think that many libraries, understandably swamped with budget crunches and*

*overwork, will only allow the bare minimum when it comes to accessibility."*

*"While the assistive devices that are added to the dorm rooms and locker rooms are already available, the assistive devices to retrieve books and computer assistive devices are much more expensive to implement in some ways. Also, don't you think Kindle-esque devices will replace books, especially for those with disabilities?"*

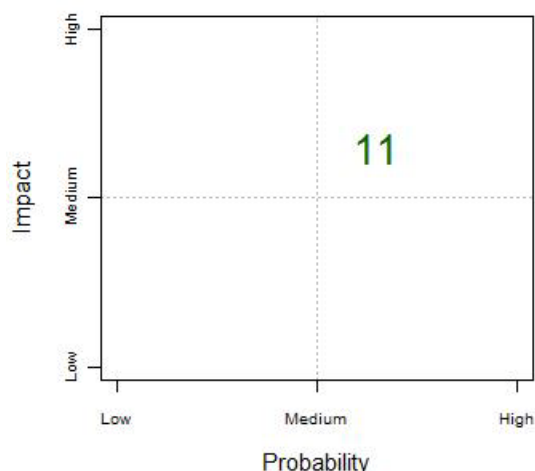


### Everyone is a "non-traditional" student

The interwoven nature of work/life/school is accepted in higher education as life spans increase and students are unable to fund tuition in one lump. Co-op education is widely embraced and faculty increasingly value students' life experience. Knowing what the workforce wants, students are active in designing their own learning outcomes, and the personalized curricula becomes the norm. Faculty evaluate students on demonstrations of learning – such as policy documents, marketing plans, or online tutorials – rather than old measures based on "seat time" and "credit hours."

*"Some of it is based in economic reality, but enriched education with experience is not new and there are great examples of cooperative education... that produces skilled practitioners who know how to be an employee. What it does do, is break up the four year experience, as students move on and off campus more frequently. Addressing core literacies will be more challenging."*

*"This scenario gives libraries an opportunity to play a larger role in the teaching function of the academy. We have a lot to offer the changing face of the university."*

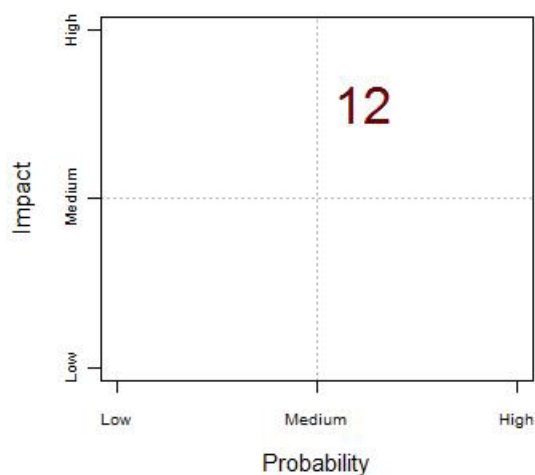


### I see what you see

Large touch screen tables positioned beneath cameras and projectors are standard equipment in campus computing labs, local public libraries, and for a fee at stores as photocopiers once were. The tables read and respond to items placed on them, changing distance learning for fields like engineering, GIS, and architecture. Group-designed visual projects happen easily when students are distributed across space as these touch screens allow simultaneous use.

*"Would create new demands on libraries and IT organizations as well as others to create and support new learning environments. As well, methods to capture, store, and disseminate the created information."*

*"Libraries will be challenged to find physical space for this type of collaboration and also to deal with any copyright issues that may occur as a result of the mashup of information scanned into such systems and the issue of who owns the rights to the works that are created by the groups."*

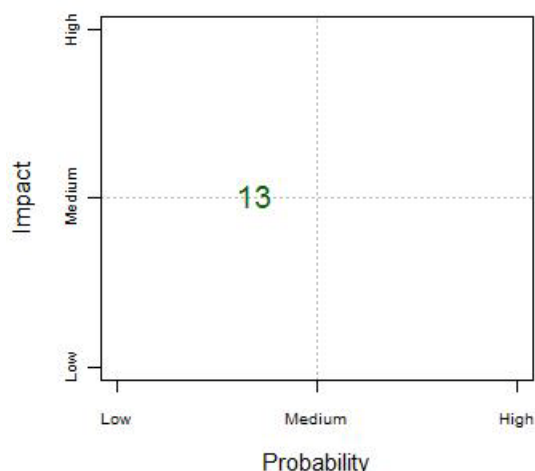


### Increasing threat of cyberwar, cybercrime, and cyberterrorism

College/university and library IT systems are the targets of hackers, criminals, and rogue states, disrupting operations for days and weeks at a time. Campus IT professionals seek to protect student records/financial data while at the same time divulging personal viewing habits in compliance with new government regulations. Librarians struggle to maintain patron privacy and face increasing scrutiny and criticism as they seek to preserve online intellectual freedom in this climate.

*"This is mostly a huge threat; the only bright side is that this is another area that librarians will be able to offer real training in secure personal computing habits... Social analytics and even email have taken great liberties with your information and are so embedded in culture now that a step back to look at the bigger picture regarding privacy would be welcome."*

*"I'll be honest - while I favor people being able to research what they want, I want the safety of our country and citizens to be the top priority. If it saves a child's life, lives of workers in a building, travelers on a plane, I'd rather let the Feds have the information. I know there are other librarians who feel the way I do so the problems for libraries will be the struggle between those who think sharing any information is wrong and those who think holding back information that can save people is wrong."*

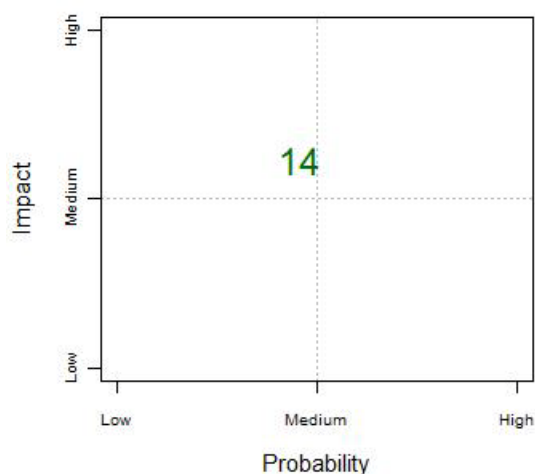


### Kinesthetic fluency

Course use of gesture-based computing explodes. Classrooms and study rooms feature handheld devices and dance mats so students can interact through movement with projected images. This is in part because we have come to grips with the detrimental effects of a sedentary lifestyle. Moreover, we now understand more fully the mind-body connection and developing bodily-kinesthetic intelligence is increasingly valued. We learn a wide diversity of subjects differently through movement than we could by listening, speaking, reading, and typing.

*"While still providing information to students, libraries would struggle with how to classify information that is not easily cataloged. I think this scenario would strengthen the credibility of knowledge systems of other cultures (Native American, Indigenous people throughout the world) as much of this information is learned through other means besides reading, and it is not currently viewed as important in the mainstream library profession."*

*"I see tradition beating innovation, here. However, academic libraries could certainly tailor their services to a more movement-oriented crowd. Comfortable stationary bikes with reading trays attached, which also help power the building, for instance, instead of the usual plushy seating."*



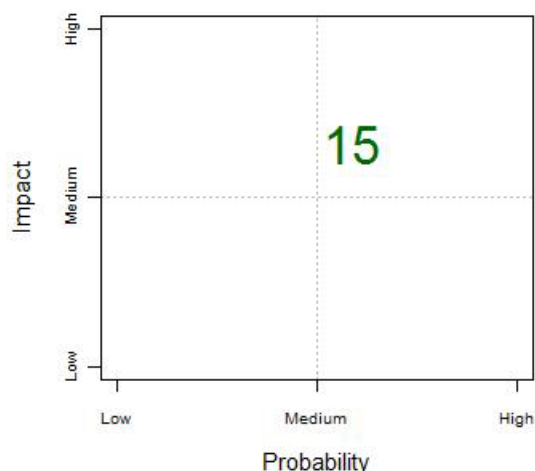
### Longevity is the new wealth

Taking care of our brains through mental exercise is as important as physical exercise. Seniors pursue passions they previously put off – learning meditation, foreign languages, advances in nutrition, and new technology to stay connected with family and friends. Nomadic in their midlife years, Boomers return "home" to the college campuses of their youths to reside in specially designed communities, complete degrees, find new spouses, and, ultimately, to be buried. Faculty deliver continuing education in assisted living settings as satellite campuses and specially designed distance education for seniors, generating new revenue streams.

*"This is already happening in some places where colleges have started assisted living communities on their campuses and enrolled residents as part time students. The opportunity for the library to have new customers is large but at the same time these new customers may have more needs for assistance than other students."*

*"As a 56 year old, I like this scenario because I'd like to start the next stage of my life living like this. My college has explored this as an option."*





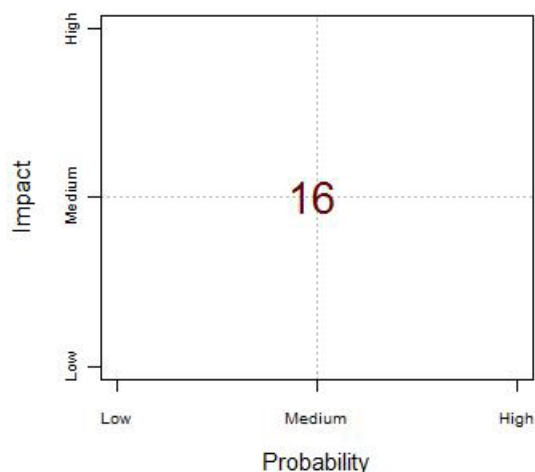
### Meet the new freshman class

With laptops in their hands since the age of 18-months old, students who are privileged socially and economically are completely fluent in digital media. For many others, the digital divide, parental unemployment, and the disruption of moving about during the foreclosure crisis of their formative years, means they never became tech savvy. “Remedial” computer and information literacy classes are now *de rigueur*.

*“We can aid in bridging that gap – which already exists – by embedding librarians or library science*

*students in the remediation classes, assisting in training these students to be excellent researchers and creators of digital media and participants in digital scholarly conversations.”*

*“This would possibly mean going back to the times when libraries had the most computers on campus because students didn't have their own machines. Space considerations would become a concern.”*

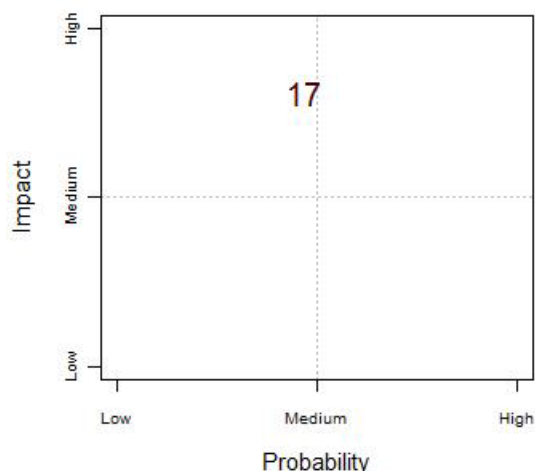


### Money makes the world go around

Nonprofit colleges and universities have been aggressively generating revenue in novel, and sometimes suspect, ways. They have come under increasing scrutiny from politicians, unions, and community groups, who argue that they have not justified their tax-exempt status based on charitable service to the community. A pending state Supreme Court case, which could revoke the nonprofit status of one college, has sent shock waves through the education community.

*“Without sustainable funding, (with) shrinking endowments and budgets, and competition from 'for profit' schools, the traditional university/college will have to be entrepreneurial to meet its mission and cater to the ever-growing demand for higher education. Seems to me that by being more entrepreneurial and looking for money making opportunities is a perfect storm for the library to get more innovative and creative about selling commodities and services that it has always given away for free.”*

*“The current practices that we are using to survive today will most likely hurt us in the near future as politicians, etc. begin looking into our practices. It is really a no win situation.”*



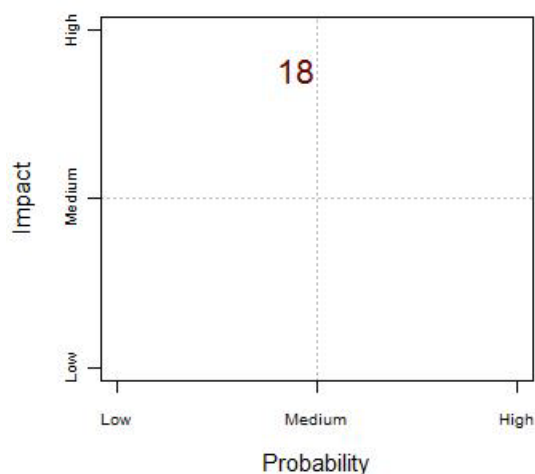
### No need to search

Content aware software senses topics as we write and inserts high quality and vetted metadata, citations, and images. Students are media savvy, easily navigating platform to platform to manage visual data and text. They no longer need the skills of acquiring and evaluating information as machines do that work. Instead, they spend time on tasks of synthesis, analysis, and interpretation.

*"Boy, I hope not. Not for my own job security, but the implications for redefining critically informed learning are huge! Who (or what) decides what information is*

*relevant, accurate, etc. That skill (IMHO) has always been and should remain a part of what it means to be 'educated.'"*

*"We already have the beginnings of such systems such as the recommendation systems found in Amazon and other online retailers. It seems a bit of a stretch to see this happening in more complex academic subjects, but it certainly seems possible since the computer processing power and communications infrastructure already exists. I remain skeptical about the robustness of this solution and its ability to provide high-quality evaluation of information."*



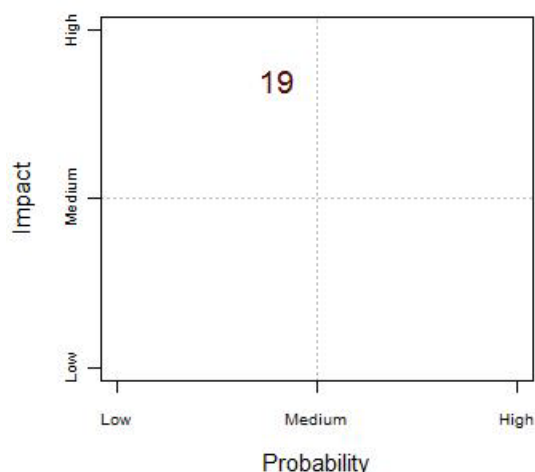
### Out of business

As information companies come to dominate the market – providing superior tools and services for students and faculty – the academic library is less visible and less necessary. With only a small user base remaining, colleges and universities outsource many of the remaining functions, as they did with meal service and bookstores earlier. In an era of endless abundance, the curation skills of librarians are still valuable, and they are employed at these companies.

*"This is already happening in the corporate arena. If the library does not show value or ROI, they get cut.*

*We need new metrics that show the value of the library vs. outsourcing. Sadly, money, money money."*

*"Certain disciplines will really advocate for this not to happen. Some departments may 'adopt' librarians and have them join their departments to ensure they do not lose what they value. Disciplines where our particular brand of research skills are not valued probably will not use any outsourced services anyway, so some academic librarian specializations might be lost."*

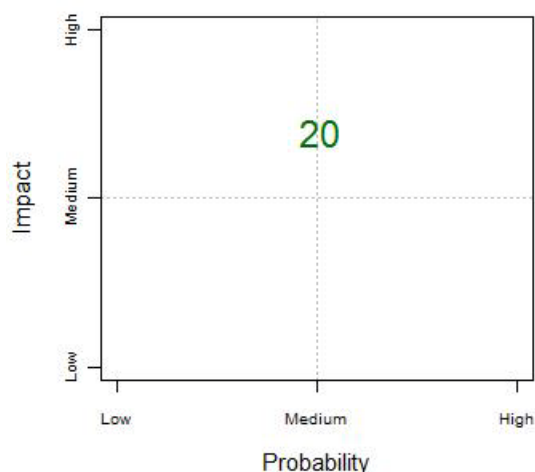


### Pop-up campus

Given the explosion of online learning, only a minority of institutions still maintain physical campuses. While all the services and functions remain, “the college” and “the library” exist only virtually, with no physical home. Higher education emulates retail with “pop-up” work/class spaces, used temporarily when students congregate regionally at the beginning of the term. Then the equipment is disassembled and stored until the next need for rental space arises. Faculty and staff work from home-based offices or in rented office space.

*“The brick and mortar library would cease to exist. It would be very bad for education. We need a face and a name for education to retain its humanism. We need sacred and silent spaces for study to be given the time and concentration it deserves.”*

*“We are starting something very like this. We have cohort groups all over the state... Our online instructors come from everywhere. I often wonder if our campus will still be here in even 5 years.”*



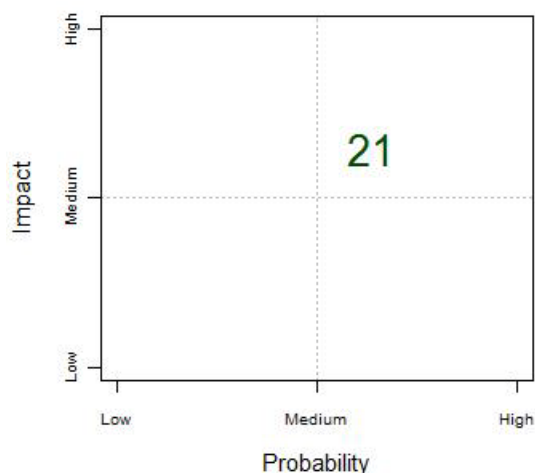
### Renaissance redux

As in the Renaissance, ideas come forth in exponentially increasing amounts at the crossroads of disciplines. The academy has knocked down the walls of the ivory tower to engage with society. Scholars no longer think that scholarship is divisible – with discovery of new knowledge at the apex. Taking a holistic view, teams consolidate around one knowledge problem, with diverse members – academics, community, politicians, social workers, and other practitioners – bringing expertise from their diverse disciplines and worldviews. These

groups yield action-based answers to enduring riddles, such as how to overcome the complex factors that keep diabetes and heart disease rates so high or how to improve air and water quality.

*“Some of this is already occurring at my institution, both in the curriculum with the integration of service learning, and in some broadly multidisciplinary programs that intentionally pull these types of groups together, including community practitioners. I do not believe that it is all that common or widespread yet, but things do seem to be moving in this direction.”*

*“The democratizing and crowdsourcing of research would be a very good thing for our society and would challenge libraries to play a role in making research available to all and creating tools that aid in collaborative research.”*

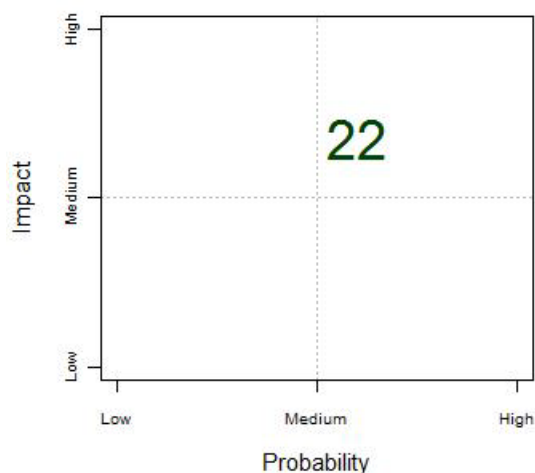


### Right here with me

Students “talk” through homework with their handheld devices, which issue alerts when passing a bookstore with material they need to cite. Scanning the title page, this information is instantly embedded in proper citation style with an added endnote. Checking in on location-based services, students locate study team members and hold impromptu meetings without the need for study rooms. Their devices have whiteboards and can share notes with absent members.

*“A lot of the technology needed for this is already in place or being developed. Implanting RFID chips inside books from their creation (will happen) as costs go down...Tablets may have whiteboard options in the future. The impact on the library may be great in that some physical space for meetings is not needed and also that students are interacting with the ILS system in new ways. Perhaps it may even get them into the stacks more and promote the return of serendipity.”*

*“Students still need a place to study, reflect, and escape from the 'noise' of their lives. The bookstore will likely charge students for this service, so they will want their libraries to provide that service to them for free (as part of what they pay tuition for). They still want to talk with librarians about how to approach a particular topic since the librarian is still the friendly face they trust.”*

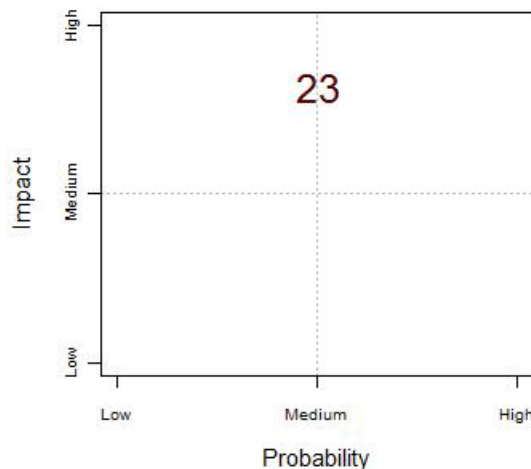


### Scholarship stultifies

The systems that reward faculty members continue to favor conventionally published research. At the same time, standard dissemination channels – especially the university press – implode. While many academic libraries actively host and support online journals, monographs, and other digital scholarly products, their stature is not great; collegial culture continues to value tradition over anything perceived as risky.

*“Academic libraries need to be more proactive about this future. The university press is in decline, but as we tend not to sit on tenure committees, there is little we can do except preach to faculty until the tenure system changes.”*

*“The academic culture that values tradition both benefits (by maintaining the status quo) and threatens (by reinforcing stereotypes) the library. As academic librarians, we know that traditional means of ‘publishing’ will not last. We need to stay ahead of the issues in publishing, open access, the tenure process, etc., in order to maintain relevancy.”*



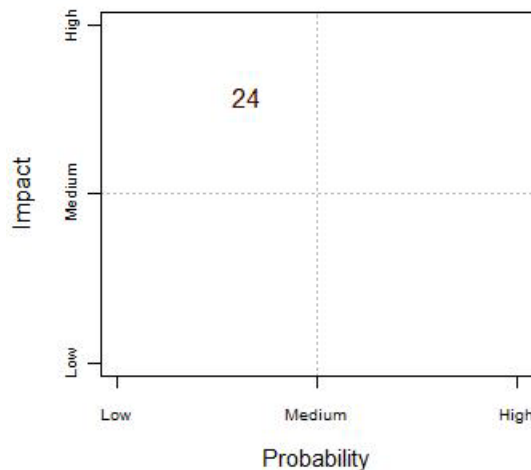
### Sign on the dotted line

Tenure is no longer offered to librarians, and most are hired on a contract basis. Incentives to those who generate revenue – by creating new search and research tools that are patented to the university, increasing enrollment/retention, or bringing in grants – include bonuses and longer renewal contracts.

*“It certainly is the case that many academic librarians are not tenure-track, and are hired on yearly contracts. And there is always interest in people who can bring in money. What we have not yet seen in our field is a requirement to bring in money (as some lab*

*science faculty now need to do). If we have that type of requirement, it will be a definite threat.”*

*“For whatever reason, the academic librarians must convince the majority of faculty of our vital role we play in nurturing students and some faculty as they pursue their research, study and teaching objectives.”*

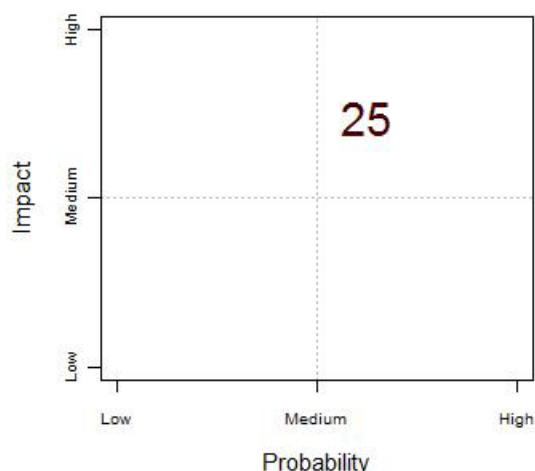


### Think U

Most of the knowledge we acquire and convey is of a graphic, schematic, and visual nature. Using teaching techniques of early childhood education, like simulations and play-based learning, we rarely access word-based knowledge. As a high tech oral culture, students master digital storytelling. With our brains no longer making neural pathways to understand written language, we sharpen other skills like sensing and intuition to understand how to relate to others and share ideas.

*“While I don't think it will get to the point that we ‘rarely access word-based knowledge,’ I see growing awareness of learning modalities and an accompanying incorporation of creative instructional techniques.”*

*“I think that the high tech oral culture is in addition to written language, not in lieu of, and I think that libraries that have not prepared for collecting, preserving, and providing access to media collections are behind the curve and better get cracking!”*



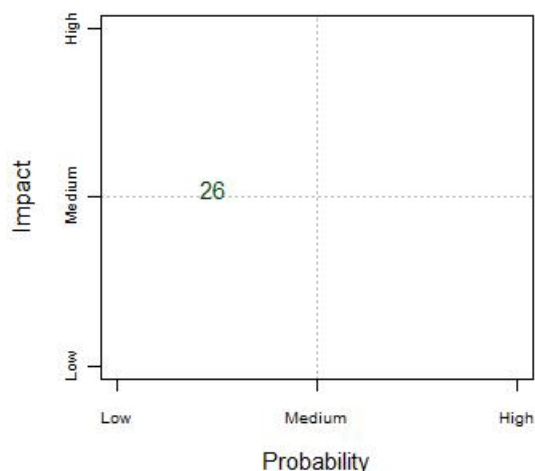
### This class brought to you by...

At for profit institutions, education is disaggregated and very competitive. Students no longer graduate from one school, but pick and choose like at a progressive dinner party. Schools increasingly specialize by offering online courses that cater to particular professional groups. Certificate courses explode and are sponsored by vendors of products to particular professions.

*"My president has said that he wants this college to look like a NASCAR car – have 'partnership' labels plastered all over it. We pay more attention to what*

*the partners in industry have to say than what the faculty says. Faculty can be censured for jeopardizing lucrative partnerships. In two-year schools and business colleges, this is probably now the norm."*

*"If this were to occur, libraries will be struggling even more to deliver services – who will pay? A 'per course' library fee may not fly unless services are meaningful at the individual level... Can an academic library make a shift like this? What about traditional services like circulation, database availability, e-content subscriptions – how would the library plan for an ever-evolving, moving target of enrollment?"*



### Woven learning

Learning is designed holistically, with subjects interwoven and multiple intelligences in mind. We learn experientially – through images, sound, taste, and smell – things we previously learned through text. Learning spaces are transformed so that students can smell census data in an olfactory economics classroom or hear a symphony of health statistics in a medical auditorium.

*"This is just too far out there in terms of changing how humans interact and work. It would take decades to socialize changes on these levels not to mention*

*mature technologies and create infrastructure. We constantly add new channels to media, tools to our toolkit. The idea that we'll just throw out the old ones always seem deeply wrongheaded."*

*Some of this is already taking place where students use films, audio interviews and other non text resources to learn about concepts. While the smell and taste effects appear to be extremely futuristic, I am sure that some people are working on such things, and with the speed of innovation something that incorporates these may come to be. I'm not sure how that will affect libraries except in the types of materials they collect and the orientation of the physical space to use these kinds of materials.*



## Analysis of Findings and Discussion

Nine of the scenarios – scenarios 5, 6, 10, 11, 12, 15, 21, 22, and 25 – were adjudged by the survey participants to be both high impact and high probability and are located in the upper-right quadrant of the scenario space diagram. Additionally, the perceived speed of change for four of these scenarios was judged to be particularly fast:

- INCREASING THREAT OF CYBERWAR, CYBERCRIME, AND CYBERTERRORISM
- MEET THE NEW FRESHMAN CLASS
- RIGHT HERE WITH ME
- SCHOLARSHIP STULTIFIES

These four touched on a variety of themes: academic culture, infrastructure/facilities, political climate, publishing industry, societal values, students/learning, and technology. What are we to do with these highly probable, fast-changing scenarios that will have a significant impact on academic libraries?

We define this space in the upper-right quadrant the area of the “actionable future.” That is, if scenarios here are high impact with a high probability of occurring, then it is incumbent upon library directors and those who set strategic agendas for academic libraries to begin to plan to act now upon these scenarios. Given their perceived high probability and high impact, due diligence would mandate, we believe, that these scenarios guide the thinking of all strategic planners for academic libraries.

In order to make these scenarios actionable, we would advise library leaders to perform a business capacity exercise. For each of these scenarios, and especially for the four fast change scenarios, ask yourself these four questions:

- 1) If this scenario were to exist today, would we be able to leverage it to our advantage? Do we have the resources, staffing, organizational processes, and strategy right now to take advantage of this scenario?
- 2) If this scenario were to exist today, in what ways are we currently vulnerable to the change it represents? In what ways are we unprepared, lacking in resources and staffing, or to what degree are our strategies and underlying values unable to respond effectively to the conditions this scenario represents?

Looking beyond current conditions, it is also useful as a strategic planning exercise to imagine proactively ways that an academic library could leverage this scenario in order to innovate. Strategic planners might ask:

- 3) Assuming we had all the staffing and resources we need (a very big assumption, we concede), what could we be doing to leverage this trend to our advantage?

This third question is a “blue sky” exercise, useful in helping to stimulate strategic vision. However, such visioning exercises need also to be followed up with a related question:

- 4) What would need to happen – internally and in the external environment – for this vision to become a reality?

Answering this last question can help create a roadmap for making the strategic vision a reality.

Eleven of the scenarios – 1, 2, 4, 7, 14, 17, 18, 19, 20, 23, and 24 – were located in the upper left-hand quadrant of the scenario space diagram. Three of the scenarios – COMMUNITY OVER CONSUMERISM, LONGEVITY IS THE NEW WEALTH, and SIGN ON THE DOTTED LINE – were identified as particularly fast changes. We identify scenarios in this quadrant as wild cards or Black Swans, scenarios with low probability of occurring. But were they to occur, they would significantly impact academic libraries. These are the events on the periphery of the actionable future (Bazerman & Watkins, 2004; Day & Schoemaker, 2006; Ramo, 2009; Taleb, 2007). Because they were perceived by the survey participants to be of lower probability, we do not recommend that academic libraries devote time, resources, and staffing to leveraging these trends. However, we do recommend that strategic planners keep these scenarios within their strategic peripheral vision. When we say that “we never saw it coming,” that is often because we lack a mechanism to imagine and conceptually manage these unforeseen strategic surprises. In having identified these scenarios as in the wild card region of the scenario space, library directors have now made strategically visible these unforeseen changes.

It is noteworthy that participants viewed nearly all 26 scenarios as having above average impact, thus appearing in the upper two quadrants. Given the role that external factors can play in affecting libraries, this reinforces the notion that academic libraries are part of a larger ecosystem. We should be consistently scanning the environment to look for signs of the changes that may come from outside the library and outside the academy.

Because it maps our perceptions of potential futures, the scenario space is not a static document. Scenarios can shift positions and move about the scenario space, as new data are uncovered and as the external environment changes over time. We recommend, therefore, that you return to this document from time to time, and note if any or all of the scenarios occupy a new position within the scenario space. We also recommend that you begin to examine your own external environment for signs that any of these scenarios might be coming to pass. For example, if you notice a rise in legislative actions mandating affordable textbooks, you will then realize that the BREAKING THE TEXTBOOK MONOPOLY scenario is becoming a reality. Use the scenario space to similarly signpost all of the scenarios, and be ready to act upon them.

Especially note if you perceive the wild card scenarios have in any way changed position in the scenario space, meaning that changes have occurred in the external environment that make the scenario seem more probable to occur. Like our ocular peripheral vision, this “strategic peripheral vision” helps us avoid being blindsided by surprises.

Finally, build upon the scenario space here. Engage in your own process of environment scanning and implications assessment to produce new scenarios, and locate these alongside the other scenarios. Seek out new wild card and Black Swan scenarios as a way to exercise strategic peripheral vision. (See **Appendix C** for a suggested activity to use in your library).

## Conclusion

Effective futures work requires observation, intuition, interpretation, creativity, and imagination. The aim of futures research is to reorient our thinking. For the futurist Gordon, the worth of a forecast is in how well it prepares us for an inherently uncertain future. He advocated that we reflect on:

Whether it has illuminated the unknown while shaking our assumptions, forcing us to clarify our thinking, stimulating and structuring difficult discussions, and getting us to ask the right questions and face the hard choices required to adapt ourselves and our organizations to manage future change (2009, p. 24).

Based on the participant responses to the wide range of possible scenarios we presented, it seems we have indeed helped academic librarians think about what questions to ask and choices to make to thrive in the future. We hope it does the same for you.

## References

- Bazerman, M., & Watkins, M. (2004). *Predictable surprises: The disasters you should have seen coming and how to prevent them*. Boston, MA: Harvard Business School Press.
- Dator, J. A. (2002). Introduction: The future lies behind – thirty years of teaching futures studies. In J.A. Dator (Ed.), *Advancing futures: Future studies in higher education* (pp. 1-32). Westwood, CT: Praeger.
- Day, G. & Schoemaker, P. (2006). *Peripheral vision: Detecting the weak signals that will make or break your company*. Boston, MA: Harvard Business School Press.
- Deiss, K. & Petrowski, M.J. (2009) *ACRL 2009 strategic thinking guide for academic librarians in the new economy*. Chicago, IL: ACRL. Retrieved from <http://www.acrl.org/ala/mgrps/divs/acrl/issues/value/acrlguide09.pdf>.
- Giesecke, J. (Ed.). (1998). *Scenario planning for libraries*. Chicago, IL: ALA Editions.
- Gordon, A. (2009). *Future savvy: Identifying trends to make better decisions, manage uncertainty, and profit from change*. New York, NY: American Management Association.
- Hines, A., & Bishop P. (2006). *Thinking about the future: Guidelines for strategic foresight*. Washington, DC: Social Technologies.
- Johansen, R. (2007). *Get there early: Sensing the future to compete in the present*. San Francisco, CA: Berrett-Koehler Publishers.
- Mead, M. (2005). *The world ahead: An anthropologist anticipates the future* R. B. Textor, (Ed.). New York, NY: Berghahn Books.

- Norbut, M., Jacobs, S., & McNamee, B. (2009). *ACRL 2009 membership survey findings: Final report*. Washington, DC: McKinley Marketing. Retrieved from <http://www.ala.org/ala/mgrps/divs/acrl/about/whatisacrl/09survey.pdf>.
- Ramo, J. (2009). *The age of the unthinkable: Why the new world disorder constantly surprises us and what we can do about it*. New York, NY: Little, Brown and Co.
- Schwartz, P. (1991). *The art of the long view*. New York, NY: Doubleday.
- Slaughter, R. A. (1995). *The foresight principle: Cultural recovery in the 21st century*. Westport, CT: Praeger.
- Staley, D. (2007). *History and future: Using historical thinking to imagine the future*. Lanham, MD: Lexington Books.
- Staley, D. (2009). Imagining possible futures with a scenario space. *Parsons Journal for Information Mapping*, 1(4), 1-8.
- Taleb, N. (2007). *The black swan: The impact of the highly improbable*. New York, NY: Random House.
- Van der Heijden, K. (1996). *Scenarios: The art of strategic conversation*. Chichester, England & New York, NY: John Wiley & Sons.

## Appendix A. Methodological Notes

### Survey design

Limiting the scope of our scenarios to one element or construct each was important for this study as we were checking our scenarios against the images of the future that ACRL members hold. This was via a survey, not in a focus group where we could ask clarifying questions and probe answers further. We needed to be certain our participants were clear on the element to which we were asking them to respond. The scenarios in this report are, then, short vignettes. They are building blocks that could be combined to create more robust, rich scenarios.

As this project serves, in part, to demonstrate learning for Kara Malenfant's doctoral studies in the Antioch University leadership and change program, the Antioch University Institutional Review Board fully vetted and approved the survey instrument and invitation letter, sent under the name of ACRL president Lori Goetsch. We pilot tested the questionnaire with ACRL staff members who had not yet been involved in the project, made modifications, and performed another round of pilot testing with 280 ACRL members (26 or 9% responded). These people were chosen at random from the ACRL membership database. While our survey included required questions for demographics, all of the questions for the scenarios were optional. For each scenario we asked four questions:

1. Probability that this scenario will occur. (1 Low - 5 High)
2. Impact of this scenario, if it were to occur, on academic and research libraries. (1 Low - 5 High)
3. If this scenario were to occur, how soon?
  - a. Immediate change: in the next year or is already happening.
  - b. 1-3 years, Short term.
  - c. 3-10 years, Medium term.
  - d. 10-20 years, Long term.
4. If this scenario were to occur, do you feel it would be:
  - a. A threat to academic libraries.
  - b. An opportunity for academic libraries.
  - c. A mix of both.

For our pilot group, we asked how long it took to complete the survey and if there was anything we should change that would make it easier for others to complete. The self-reported average time to complete was 22 minutes, and a large number commented that it was too long and the scenarios too numerous. As all questions on the scenarios were optional, we could also see the completion rate dip lower as the survey progressed.

Based on this feedback, we modified our final instrument, breaking the scenarios into two groups of 13 and sent the invitation to two new lists of participants. Group A had 1,300 ACRL members, and Group B had 1,315 ACRL members. They surveys remained open for one week. There were 378 complete and partial responses from members overall, netting a 14.5% response rate. We were careful to ensure that the two scenario groupings represented a mix of themes: academic culture, demographics, distance education, funding, globalization, infrastructure/facilities, libraries, political climate, publishing industry,

societal values, students/learning, and technology. Because the scenarios themselves didn't change, we included the responses from our 26 pilot respondents in the report of findings.

Additional feedback from our pilot group revealed that many people wanted to explain why they had made certain choices about each scenario – particularly around the threat/opportunity question. We responded to this in our final version by including a gently worded open-ended question at the end of each scenario, which invited responses from those who were interested. It was optional and read, “If you'd like, please feel free to share your reactions or thoughts about this particular scenario.” We had between 23 comments (13%) and 68 comments (35%) per scenario. We included some of these comments after each scenario in the report. The scenarios with the most open-ended comments, and which, therefore, seemed to pique strong interest, were ACADEMIC NICHE NETWORKING (68 = 35%), RENAISSANCE REDUX (56 = 30%), and BREAKING THE TEXTBOOK MONOPOLY (57=29%).

We asked participants in both the pilot group and final groups to share their final thoughts with the question, “How was the experience of considering these scenarios valuable to you? Is there anything else you would like to share with us?” Of the 184 people who responded (45% of the total participants), only a handful made neutral comments and a dozen were negative. An overwhelming number (92%) reported positively about the experience. Moreover, most people demonstrated an understanding of how scenario thinking can open our minds to different possibilities and can be used for making better decisions now. The selected participant reflections included in the sidebars in the early pages of the report reflect this understanding.

### Strengths and limitations

The participants who responded to our survey are representative of ACRL membership at large (see **Appendix B**. Demographic Profile of Survey Respondents). The findings here, then, represent a broad understanding about the collective imagination of the profession.

We intended both the invitation and questionnaire to be conversational in tone, so we used language carefully. We attempted to draw people into a dialogue and to make it clear we value their opinions. For example, within the survey, we did not dryly state “other comments” but instead asked, “How was the experience of considering these scenarios valuable to you? Is there anything else you would like to share with us?” The nature of our approach resonated with a few respondents who commented favorably on the instrument itself. One participant noted, *“It was very interesting way of doing a survey. More like an online anonymous focus group. I might look at implementing a similar survey.”*

While we aimed to present only vignettes, not full scenarios with “thick description,” it was not always easy to be so concise. With a few scenarios in particular we did present multiple constructs or elements – making it difficult to know what participants were reacting to. As an example, with the scenario ARCHIVES ON DEMAND, people who said it was not probable could have been thinking any number of events were improbable. Perhaps they believed 3-D printers are not likely to be developed (although they already exist), not probable that they would become affordable and widespread, not probable that students would adopt them for academic work (but perhaps for other uses), or not probable that libraries and archives would respond to make their materials accessible in this way. A few participants



commented that because some scenarios included multiple elements, it was difficult to reply. A focus group approach that facilitated dialogue and probing could have helped to clarify and delve more deeply into understanding images of the future in cases like this.

We had not planned in our initial research design to include an open-ended question after each scenario, deciding to include this based on our pilot survey feedback. We were unprepared for the wealth of comments that streamed in. Scanning through these seems to indicate that many participants are explaining why they chose a certain designation (i.e., high probability, low impact, mix of threat/opportunity). Others indicate signs on their campuses that certain elements are already occurring. Still others articulate implications for the library, were a scenario to come true. We were unable in the scope of this project, however, to analyze them in any systematic way, as with coding and multiple raters to draw out themes.

### **Critically appraising futures research**

Readers unfamiliar with futures research may well ask how one determines its merit and worth. It would be easy to know if a prediction based on a trend line comes true in five years. But how does one analyze alternate futures? Gordon offered an in depth discussion of the factors one should take into account as a consumer of futures research. For every future-oriented claim, we should ask,

How credible is it? How accurate or biased? Which parts of it are worth integrating into my mental framework? Which parts should be part of our organization's preparation and planning and which can be discounted and safely ignored? Can I use this knowledge to further the goals of my institution? Can I base a decision on this with confidence? (2009, p. 14)

While readers should consider, with any piece of research, who conducted the study, for what audience, and why, with futures research, we should specifically ask, "What debate about the future does it form part of? What is it justifying? What is it lobbying for or against? What incentives apply and how will the forecast fulfill them? Whose interests are served or whose cause furthered?" (Gordon, 2009, p. 78).

We expect that you will ask these questions and others as you evaluate the usefulness of this report to your work environment.

## Appendix B. Demographic Profile of Survey Respondents

All demographic questions were required. The table below shows our respondents compared to the ACRL 2009 Membership Survey Findings: Final Report (Norbut, Jacobs, & McNamee, 2009), which is statistically valid and representative of ACRL membership as a whole.

Years Working in Academic or Research Libraries	Futures Survey % of Respondents (N= 404)	ACRL Membership Survey % of Respondents (N= 2,437)
Library school student	4%	3%
Less than one year	2%	4%
1 to 4 years	17%	17%
5 to 10 years	19%	21%
11 to 15 years	10%	15%
16 to 20 years	12%	10%
21 or more years	34%	30%
Type of Organization	% of Respondents	% of Respondents
Two-year/technical	13%	11%
Four-year/baccalaureate	12%	15%
Comprehensive (undergraduate/graduate)	21%	23%
University (large research/doctoral granting)	40%	40%
Independent research library	1%	2%
Information-related organization	1%	1%
Graduate school of library/information science	2%	2%
Other	10%	7%
Job Function	% of Respondents	% of Respondents
Access Services	2%	3%
Acquisitions	2%	2%
Administration	28%	24%
Cataloging	4%	4%
Collection development	3%	4%
Development/fundraising	0% (0 overall)	0% (2 overall)
Digital services	2%	1%
Distance/distributed education	1%	1%
Electronic resource management	2%	2%
Government documents	1%	1%
Information literacy/instruction	12%	13%

Interlibrary loan/document delivery	1%	1%
Library faculty/education	0% (1 overall)	3%
Media services/audiovisual	0% (0 overall)	0% (9 overall)
Preservation	0% (2 overall)	0% (3 overall)
Rare books and special collections	3%	4%
Reference/research services	21%	19%
Systems and network services	2%	1%
Web services	1%	1%
Other	15%	15%
<b>Age Range</b>	<b>% of Respondents</b>	<b>% of Respondents</b>
Under 25	4%	1%
26 to 35	18%	17%
36 to 45	18%	22%
46 to 55	28%	27%
56 to 65	29%	28%
Over 65	4%	4%
<b>When Do You Plan to Retire?</b>	<b>% of Respondents</b>	<b>% of Respondents</b>
Currently retired	2%	2%
Less than 5 years	10%	11%
5 to 9 years	17%	16%
10 to 14 years	18%	16%
15 to 19 years	13%	11%
20 to 24 years	14%	13%
More than 25 years	26%	n/a
24 to 35 years	n/a	22%
More than 35 years	n/a	9%
<b>In Which Country or Global Region Do You Reside?</b>	<b>% of Respondents</b>	<b>% of Respondents</b>
United States	94%	96%
Africa	0% (1 overall)	0% (6 overall)
Asia (other than China, India, Japan, Middle East and Russia)	0% (1 overall)	0% (3 overall)
Australia	0% (1 overall)	0% (0 overall)
Canada	3%	2%
Central America	0% (1 overall)	0% (6 overall)
China	0% (1 overall)	0% (1 overall)
Europe	0% (2 overall)	0% (9 overall)
India	0% (0 overall)	0% (0 overall)

Japan	0% (0 overall)	0% (1 overall)
Middle East	1%	0% (7 overall)
Russia	0% (0 overall)	0% (1 overall)
South America	0% (0 overall)	0% (0 overall)
<b>U.S. State of Residence</b>	<b>% of Respondents</b>	<b>% of Respondents</b>
California	8%	9%
Pennsylvania	6%	7%
New York	8%	7%
Illinois	7%	6%
Texas	6%	5%
Massachusetts	4%	4%
Ohio	4%	4%
All other states, D.C., and U.S. territories	56%	58%
<b>Level of Your Position</b>	<b>% of Respondents</b>	<b>% of Respondents</b>
Front line librarian/library staff member (no one reports to me)	34%	n/a
Supervisor/team leader (with staff reporting to me)	14%	n/a
Department/Branch/Unit head	15%	n/a
Assistant/Associate director/dean	9%	n/a
Director/Dean	20%	n/a
N/A (e.g., retired, library school student, or other)	3%	n/a
Other (please specify)	5%	n/a

## Appendix C. Activity: Scenario Thinking at Your Library<sup>v</sup>

### Overview

This activity is intended for people with a wide range of roles within the library, as a diversity of opinion and experience is useful for futures thinking and scenario work. The purpose is to engage library colleagues in stretching your imaginations to consider possible futures and make better decisions now that can meet a variety of possible futures. This can build your capacity to engage in strategic thinking and planning.

One person should assume the role of facilitator and assume duties such as:

- schedule the room,
- send a meeting invitation and convey instructions to participants,
- check in with participants one week before to ensure they are shifting from reading to research and writing,
- ensure materials are available for the meeting (flip charts, white board, post it notes, snacks),
- convene the meeting,
- issue time keeping reminders,
- scribe during the event,
- guide the debrief, and
- help the group determine next steps.

### Pre work for participants

*Two weeks before.* Read the ACRL report “Futures thinking for academic librarians: Higher education in 2025.” Choose two scenarios to research from the high-impact, high-probability quadrant (30 minutes).

*One week before.* Search for evidence from the present that relates to the themes in the scenarios you chose. This could be in the higher education trade press, technology blogs, national newspapers, etc. (60 minutes).

*Two days before.* Engage in a free form writing exercise to flesh out each scenario as a more robust story 5-15 years in the future. Combine the evidence you found with your imagination to draw inferences for how the future could look in higher education. You should write in the present tense, as if you were there living in that moment, and give your scenario a brief title (30 minutes).

### Meeting instructions

Total time: 2 hours

*Meeting convenes.* Facilitator explains purpose of the meeting, provides overview of meeting structure, and introduces small group exercise, emphasizing that members should actively listen and reserve judging comments, whether good or bad (10 minutes).

*Small group.* Participants break into groups of three to take turns discussing the scenarios they wrote and potential implications they could imagine may be possible for the library (2 scenarios x 10 minutes x 3 people = 60 minutes).

1. The first member of the triad shares with her two colleagues a scenario vignette she chose from the ACRL report and summarizes the related evidence she gathered. Those listening should restrain themselves from discussing, but may take notes of anything that piques their interest and any connections/thoughts that form while listening.
2. The first member next shares the full, rich scenario she invented. Those listening should not critique and may not make evaluative comments of any type (even supportive ones). Only two questions are allowed: “Why does this happen?” and “What happens next?” These questions speak to the characteristic of internal consistency. If the presenter can’t answer, the group should move on.<sup>vi</sup>
3. Finally, after each scenario is presented, the triad discusses together possible implications for the library, with one member of the triad recording these. Again, the goal is to aim for wide, divergent thinking so restrain judgment.
4. The round continues with member 2 and member 3 until all six scenarios have been shared.

The facilitator should float throughout the room during the small group exercise, clarifying instructions if needed. She should support the group with time keeping, giving a heads up a few minutes before each 20 minute segment is about to end. Remind triads that shortly they will need to move on to the next member or to the report out and debrief phase.

*Report out and debrief.* At the end of the complete round, each triad reports out to the large group on possible implications they envisioned for the library, reflects on decisions the library would need to make now, and considers others on campus who would be affected. The facilitator will guide this large group discussion and help to synthesize where appropriate (35 minutes).

During this time, the goal is for the large group to hear each other’s thinking and, together, to consider what decisions the library would have to make now to prepare for that type of a future, were it to occur. There is likely to be overlap on topics and scenarios chosen, so the conversation may become less round robin and more organic.

To help guide the discussion, the facilitator may wish to ask prompting questions such as: Is this a preferred future we want to work towards or are there risks here we ought to work to mitigate? What action could we take now to do so? Who else on campus would be affected? What is our relationship like with that group now? In what ways could that relationship be strengthened? (For other potential questions to prompt discussion or encourage participants to probe more deeply, see those suggested in the report’s **Analysis of Findings and Discussion**.)

*Next Steps.* Together the group should consider possible next steps. Is your library engaged in strategic planning? Can this help feed into that process? Is your campus making strategic decisions now? How is the library represented? (15 minutes).

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## Footnotes

<sup>i</sup> In early July 2009, ACRL convened an invitational meeting about the need to develop research-based evidence on the value of academic libraries. As a result, ACRL issued a request for proposals ([http://www.ala.org/ala/mgrps/divs/acrl/issues/value\\_redir.cfm](http://www.ala.org/ala/mgrps/divs/acrl/issues/value_redir.cfm)) and subsequently, Dr. Megan Oakleaf was selected ([http://www.ala.org/ala/newspresscenter/news/pressreleases2010/january2010/researcher\\_acrl.cfm](http://www.ala.org/ala/newspresscenter/news/pressreleases2010/january2010/researcher_acrl.cfm)) to carry out this work. Her report is expected later in summer 2010.

<sup>ii</sup> With its focus on futures thinking, this document complements the *ACRL 2009 Strategic Thinking Guide for Academic Librarians in the New Economy* (Deiss & Petrowski, 2009) available online at <http://www.acrl.org/ala/mgrps/divs/acrl/issues/value/acrlguide09.pdf>.

<sup>iii</sup> ACRL is not alone in this focus on the future for our profession. One foundational book is *Scenario Planning for Libraries*, edited by Joan Giesecke. ALA Editions, 1998. Notable recent efforts include:

- a. *Academic libraries of the future*, a project of the British Library, JISC, Research Information Network (RIN), Research Libraries UK (RLUK) and the Society of College, National and University Libraries (SCONUL). See <http://www.jisc.ac.uk/news/stories/2010/01/lotf.aspx>.
- b. ARL's community-based scenario thinking project. See <http://www.arl.org/rtl/plan/scenarios/index.shtml>.

<sup>iv</sup> Bayesian probabilities are based on expert judgment, are “a measure of a state of knowledge,” and are “a measure of the plausibility of an event given incomplete knowledge.” See Charles Annis, “Bayesian Thinking,” [http://www.statisticalengineering.com/bayes\\_thinking.htm](http://www.statisticalengineering.com/bayes_thinking.htm).

<sup>v</sup> Appendix C is available as an editable document so that you may customize this activity for use in your library. For example, you may wish to create a half-day workshop and integrate some of the prework into the meeting itself. You may also wish to create a worksheet for participants to use during the meeting. Visit the ACRL Web site <http://www.ala.org/ala/mgrps/divs/acrl/issues/value/futures.cfm>.

<sup>vi</sup> Van der Heijden (1996, p. 199 and 222) reported that Adam Kahane used these techniques of restraining evaluation and asking only two simple questions when working in a charged environment with a diverse group of South African political leaders post apartheid.