



Coping with Constant Obsolescence: A Lifelong Task

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Knowledge and skill obsolescence is a common obstacle in individual, organization, and society development. Thanks to the modern technologies, the rate of obsolescence accelerates rapidly in the information age. In the library workplace, obsolescence occurs constantly. We may be used to routines, but changes are inevitable as we have witnessed the evolution in library services and librarian workplace since the advent of the internet. To cope with obsolescence, it is crucial to have a lifelong learning mindset, make it a habit, and find ways to update our knowledge and skills to stay competent and serve the clientele effectively.

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Coping with Constant Obsolescence: A Lifelong Task

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ABSTRACT

Knowledge and skill obsolescence is a common obstacle in individual, organization, and society development. Thanks to the modern technologies, the rate of obsolescence accelerates rapidly in the information age. In the library workplace, obsolescence occurs constantly. We may be used to routines, but changes are inevitable as we have witnessed the evolution in library services and librarian workplace since the advent of the internet. To cope with obsolescence, it is crucial to have a lifelong learning mindset, make it a habit, and find ways to update our knowledge and skills to stay competent and serve the clientele effectively.

Keywords: Obsolescence, Librarianship, Technology, Reference Librarian, Mindset, Lifelong Learning

INTRODUCTION

Helped by the advancement of modern technologies, the rate of both knowledge growth and knowledge obsolescence in library science accelerates rapidly in the information age. Consequently, we, the librarians, are vulnerable to professional obsolescence as soon as we graduate from library school as what we learned might have already become dated or even obsolete. This is certainly not a new issue. According to a research paper from 1970s dealing with knowledge obsolescence, "The threat of knowledge obsolescence imposed by the press of new knowledge and deterioration of formerly held expertise render the professional vulnerable to the loss of his expertise almost as soon as it is acquired in the college or university" (Rothman and Perrucci 1971, p. 156). Allen and de Grip (2012) divided a person's job skills into two categories: skills the person already possesses and skills the job actually requires. In other words, some of our knowledge and skills may not be relevant and practical to our current job, and some knowledge and skills are new and unfamiliar to us but needed to do the job. If nothing is done, the authors assumed in an earlier paper, the gap between the two would widen because of constant changes made by technologies. "We would expect the match between a worker's available skills and the skills required for the job to deteriorate steadily over the life course" (2007, p. 2), and thus, the risk for the job security. The authors confirmed their assumption in the results of their continued research in 2012.

It should be noted though that knowledge obsolescence is not equally distributed among all the subject fields. It is more often seen in IT-intensive areas. For example, while engineering is

greatly affected by the implication from obsolescence, philosophy holds a status of relative stability. In library science, however, obsolescence is common and frequent in both knowledge and skills as it is closely tied to computer science and technology. In fact, we are dealing with more technological issues than ever before. As one writer put it, “The 21st century library and information services are characterized by advancement in the use of electronic means in the accessibility, retrieval and dissemination of information” (Ajie, 2019, p. 1).

In this article, the terms “knowledge obsolescence” and “skill obsolescence” are used interchangeably. The focus is on obsolescence in general.

THE PROFESSION

“Librarianship,” defined by the *Online Dictionary for Library and Information Science*, is “the profession devoted to applying theory and technology to the creation, selection, organization, management, preservation, dissemination, and utilization of collections of information in all formats” (Reitz, 2004). Further, librarianship is a service profession, and library science, or *information studies* in a modern term, is an applied science, the discipline dealing with the science of applying scientific knowledge to practical problems. It is especially pertinent to the reference librarians who work on the frontline helping users seek needed information on a regular basis. In a typical academic library, clientele includes students, faculty, staff, and general users from local communities. Needless to say, in order to serve people well, the reference librarian must have up-to-date knowledge in, but are not limited to, collections (general and special), finding tools (catalogs, indices, and discovery tools), databases (general and subject), computer applications (MS Office and web browsers), access tools (remote access and online communication platforms), and the workplace itself (environment and points of services). These areas of knowledge are evolving constantly. All these changes require continuing learning or retooling. As London (2011) put it, “Learning is all about change, and change drives learning”.

THE PROBLEM

We are used to routines. Some of us may even like routines because it makes life easier and work predictable. When a change happens in a routine, it may meet reluctance if not resistance. The problem is not the “change” itself but the unwillingness to change. Unfortunately, the inability in keeping up with constant changes affects our work in a negative way.

Computerization and automation have revolutionized the library universe in many ways. We have witnessed card catalogs replaced by Online Public Access Catalogs; indices shifted from card drawers and print volumes to electronic databases; and journal articles and books appeared in digital formats. The library is no longer confined within brick-and-mortar buildings. The working environment for knowledge workers, including librarians, has changed dramatically because of the fast expansion of knowledge and the deterioration of previously held expertise. Then, the old routines must be changed from time to time in order to stay in line with the “new normal” regardless of whether we like it or not. In an article on the future of health sciences libraries, the author concluded “health sciences libraries must change to ensure their continued viability. It is up to libraries whether that change will come through evolution or revolution or whether complacency will mean forced obsolescence” (McGowan, 2012, p. 8).

Perhaps no other example is better to illustrate the necessity of readiness for change than the abrupt transformation in library workplace caused by the COVID-19 pandemic that started in the early 2020 in the United States. Suddenly, libraries nationwide were forced to close their physical buildings and nearly all types of services were moved online. Even though libraries might have already offered some services online pre-pandemic, we were not ready for a scale this large. As one librarian described it “The island [the library] needed was a virtual one. The organizational structure of the library, the college and the university were not designed to pivot services abruptly” (Simpson 2020, p. 518). Worse yet, no one knew how long the situation would last and no one knew for sure what to do in this unexpected new world. As inevitable as it was, librarians rushed to learn new skills and familiarize distance learning and teaching tools and software, such as Remote Desktop Connection, Blackboard, Springshare, WebEx, Zoom - just to name a few - in an effort to resume services. The most fundamental change occurred in the work environment, that is the way we work. We were not able to see clients and colleagues face-to-face. Everything and everyone were “virtual.” We lost real human interaction. Unfortunately, there was no way to escape but to cope with the change.

COPING WITH OBSOLESCENCE

How and what do we do to deal with obsolescence? It has less to do with our born intelligence, work experiences, individual characters, or social backgrounds, but more to do with *mindset* and *attitude*. Therefore, all of us can learn how to do it and everyone can improve his or her current knowledge base. Psychologist Carol Dweck (2006) discovered and analyzed two basic mindsets among people: fixed and growth. Those with fixed mindset believe that their talents and abilities are set in stone, thus are unchangeable, and they only do what they know of or within their comfort zone, so that they will look smart and talented. Those with a growth mindset, however, know that intelligence and talents can be developed and that great abilities and skills are built over time. Dweck’s (2014) research also showed that with the growth mindset, people “can grow their brains (make new, stronger neural connections when they stretch themselves to learn hard things)” (p. 10). Further, “stretching themselves to learn makes neurons in their brains form the new connections that make them smarter” (2010, p. 28). It is the path of opportunity and success. (For Dweck’s extensive research on mindset, visit <https://www.mindsetworks.com/>.)

Mindset

Some of us fear change. New, unfamiliar situations cause angst and raise anxiety by the trepidation of uncertainty. The reluctance in accepting change is caused by various factors: fear of failure, established habits, routines, but mainly about mindset and attitude. Gardner (1964) pointed out that obstacles to self-learning, or *self-renewal* in his term, “are to be found in the mind rather than in external arrangements” (p. 43). In dealing with knowledge and skill obsolescence, the key to success is to reset or reaffirm our mind first. Instead of following routines passively, we should make learning new knowledge a permanent “routine.” It is not a new concept. It coincides with the old saying “learning never ends.” We teach students information literacy classes with the ultimate goal being to motivate lifelong learners. This should be the goal for ourselves, too.

Strategies

To reset or reaffirm our mindset for lifelong learning, we should remind ourselves to be:

- Positive. Learning is a pleasant journey which makes us smarter and competitive.
- Curious. It is fascinating to know and learn new things, especially emerging technologies, as they can improve our work and enhance our lives.
- Proactive. Seeking new knowledge and learning new skills keep us informed about trending issues, so we are not left behind.
- Critical. Learning how to evaluate new things as they may become standard keeps us “ahead of the curve”.
- Brave. It is normal to have setbacks or failures. We should be adventurous and dare to fail. Success is built on failures.
- Flexible. Accepting changes willingly and venturing different forms of learning to explore new information resources and knowledge sources make us versatile.
- Independent. Being self-learners increases our job capability and competitiveness.
- Motivated. Being updated helps us accomplish our mission and gain job satisfaction.
- A lifelong learner. This is the only way to stay relevant and competent.

Once we have the right mindset, we can start planning learning as a routine and exploring learning opportunities. Obviously, the task is “lifelong.”

Lifelong Learning

Lifelong Learning is “the provision or use of both formal and informal learning opportunities throughout people’s lives in order to foster the continuous development and improvement of the knowledge and skills needed for employment and personal fulfilment” (*Collins English Dictionary* 2021).

More flexible than structured education, lifelong learning can happen anywhere in any form. “A lifelong learning paradigm values all kinds of learning – formal, non-formal and informal” (Commission of the European Communities, 2006, p. 7). Formal learning is organized and arranged by teaching institutions and guided by a curriculum. The study may carry academic credits and will likely result in an academic degree or a professional certificate. Non-formal learning is loosely organized and learner-driven, such as webinars or self-paced online courses. Learning objectives are highly focused and topics are usually specific. Informal learning is not organized or arranged beforehand. It is spontaneous, such as a conversation, a casual chat, or an email inquiry, and the instructor can be anyone. No one knows everything and our colleagues or friends may be more experienced on a subject. All the above-mentioned learning activities are investments in human capital in order to keep us updated. The investment is necessary and beneficial to both the individual for competitiveness and the institution for staff quality.

Learning after college is crucial as it affects our job performance. It is more effective if “Learning is both an individual and organizational responsibility” (London, 2011). According to a recent research paper on labor market, “Economic theory implies that rapid technological change will lead to obsolescence of a worker’s skills unless the worker (and the employer) makes investments in human capital to keep up with and adapt to the new technology” (Hudomiet and Willis, 2021, p. 13). Allen and de Grip (2007) developed and tested two conceptual models, static

and dynamic, in their research on skill obsolescence, lifelong learning and employment. They advocated for active learning, the dynamic model which treats skill obsolescence as a “structural characteristic of the job” (p. 8) and learning process as endogenous, over passive learning, the static model which treats learning process as exogenous.

Research literature also pointed out that while the support from the employer is important, continuing learning relies mainly on the individual. In a qualitative study of the academic librarians’ continuing professional development (CPD), the authors stated that there is an urgent need for CPD because

A static body of professional skills and knowledge is insufficient to meet the demands of the twenty-first century workplace. The availability of relevant and accessible continuing professional development opportunities has never been more urgent for librarians, and the survival of the profession depends on the willingness of its members to engage with these opportunities during their working lives and to keep ahead of the curve, as technological developments continue to transform research and scholarship practices. (Corcoran and McGuinness, 2014, pp. 175-176)

Therefore, we should use every opportunity to learn in order to cope with knowledge and skill obsolescence. Routines may change, but the permanent routine remains. That is *lifelong learning*.

The following is a brief summary of learning opportunities from both the institution and the individual. It should be noted that not all institutions or libraries are the same. Learning opportunities vary from place to place.

Employer-Sponsored Programs

- Sabbatical (Length: one academic year or one semester at the author’s institution). In academia, the focus of sabbatical, also known as Fellowship Leave, is on research and writing. We may also utilize sabbatical for re-education or retooling skills. The use of sabbatical has been discussed for a long time. As early as 1960s, Chamberlain (1964) advocated, “In addition to the sabbatical leave for purpose of research, we should make it possible for teachers to return as students to the classrooms...for the maintenance of high standards of instruction” (p. 50). Evan (1963) suggested using a sabbatical to return to graduate school to update one’s knowledge (p. 31). As an important part of professional development and maintaining faculty quality, sabbatical is viewed as beneficial to both the individual and the institution. Kang and Miller (1999) pointed out that “One of the most effective and efficient ways to assure faculty quality and vitality is to provide faculty development programs which enhance faculty professional skills and academic growth in either their specific disciplines or relevant fields that increase the quality and image of the institution” (p. 4).
- Annual leave (Length: eight weeks at the author’s institution). This can be an opportunity to undertake a deep study on a topic which might have been in our thoughts for a long time, and may even write a research paper for publication.
- Research leave (Length: five weeks at the author’s institution). Some universities offer library faculty research leave or Professional Reassignment for research and writing to help them meet the requirement for scholarship for tenure or promotion purpose. A specific research project or professional development activity must be

outlined in the application which will have to be approved by the department and college.

- Mandatory training. Employers usually require employees to attend training sessions when the organizations upgrade their computer network systems.
- Workshop. Colleges often offer a series of workshops conducted by the Information Technology Department throughout an academic year. Typical topics include, but are not limited to, using various application software with updated versions.
- Product demonstration. Vendors come to our library or an online session to promote a new product or to demonstrate how to use a recently purchased database. This gives us an overview of a new product.
- Department meeting. We can use a portion of the regular department meeting to introduce learning tools, report attended conferences, and exchange new discoveries.
- Peer knowledge sharing. Casually arranged, we can help ourselves by doing mini-workshops to share tips, tricks, and experiences that are informative and practical. Contents may include a database, a communication platform, a content management system, and so on.

Self-Initiated Learning

- Self-paced online courses. Some institutions and organizations offer free asynchronous courses on various subjects. Time is flexible and we may earn continuing education certificates after completion. Some examples are Alternative Basic Library Education (e.g., The Idaho Commission for Libraries, <https://libraries.idaho.gov/continuing-education/able/>) and Professional Development Videos (e.g., Library of Congress, <https://www.loc.gov/programs/teachers/professional-development/videos/>). For a variety of subjects, we can try Free Online Courses (e.g., edX, <https://www.edx.org/> and Coursera, <https://www.coursera.org/>).
- Webinars. There are numerous webinars available, usually topic specific.
- Professional blogs or other forms of social networking. There are many blogs on almost every topic. They are not peer-reviewed literature, but reading good ones, especially those about the use of emerging technologies, keeps us informed and updated.
- Consultation with colleagues. No one can master everything and there is always someone better than us on a subject. Learning from each other is an advantage we should take.
- Scholarly work. In the process of writing for publishing, we can always learn something that either new to us or more updated than in our current knowledge base through literature review. Similarly, we should update our knowledge when compiling a LibGuide, a popular publishing platform, to produce a useful user guide to the best of our knowledge.
- Learning on the fly. Sometimes at the reference desk or on web chat we encounter questions that are beyond us. This gives us new topics to study or unfamiliar software to test, a patron-driven learning source.
- Practice. With good time management, we can expand and improve our knowledge base by practicing whenever we can. We can set a designated time in our regular schedule, or even during service breaks, i.e., when there is no patron at the reference desk or on web chat. There are many things we can practice. For example, searching a database that we

are less familiar with, finding definitions and descriptions on emerging concepts, testing a software, and so on.

CONCLUSION

Whether we like it or not, change is inevitable in the library workplace due to the job nature. Coping with knowledge and skill obsolescence is every librarian's lifelong task. It is crucial to have a lifelong learning mindset and use every opportunity to update our knowledge and skillset in order to stay relevant, competent, versatile, and competitive. The goals are to serve our clientele effectively, and to maintain our own job satisfaction.

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