

Technology and Literacy: Means of Library Advancement

Nicholas Westbrook

Southern Connecticut State University

Libraries are a more integral part of our society due to the effect of methods of communication have had an incredible effect on the state of literacy through out the years,. By looking at three major events and technologies to promote literacy, it can be surmised that the world of the library would be vastly changed if not for strides in technology.

In Hellenistic Egypt (approximately 330 B.C.), kings in the line of Ptolemy began collecting literature for a massive library. While not officially a technological undertaking, the construction of the library was the first of its kind as a repository of knowledge. Scholars like Andrew Erskine believe that Ptolemy I, a student of Aristotle, began the project under his rule and the library was continued after his death. They collected not only Latin and Greek literature, but also Jewish, Buddhist and Hindu texts in the language of those they ruled over. Scrolls were easy to keep track of and those who could read them, could easily teach pupils. But in that time, literacy was a rare gift only available to a few scholars and academics (those who would teach their kings).

Erskine describes the library as:

“...A community of scholars which was both academic and religious...These scholars engaged in the study of science (for instance, medicine, mathematics, astronomy) and in the study of literature (editing the major Greek texts such as Homer). As well as studying they seemed to have acted as teachers” (Erskine, 1995).

The world of the library in the age of Ptolemy focused on the education of a few so they may teach others. Without this undertaking, the word ‘library’ would have a very different meaning to us, focusing more on selective education that education of the

public. The Library of Alexandria became a model for all future libraries, a sort of common ancestor between all types of information science. Without the Alexandrian effort, libraries would only exist in the private collections of those rich enough to afford them. Literacy would be practically non-existent and only a select few people educated enough to read could teach. Without the Library of Alexandria, the education system itself would be completely changed by relying on a few knowledgeable individuals in a culture who could teach those who could afford it. Not only would literacy be rare, but education would also change as a result. Educators would have to learn from those who could read, so the ideas expressed in the written word could be vastly altered. Instead of learning the facts, education would be about learning one person's interpretation of the facts, for better or worse. After the rise and later destruction of the Great Library, the most notable advancements in literacy and library didn't come until the middle of the Italian Renaissance.

Emerging from the Dark Ages, Renaissance thinkers began to increase their worldview through personal study as opposed to mentoring. Due to their interest in learning, the aristocrats of the Renaissance became literate. In Stephen Fussel's Essay "Gutenberg and Today's Media Change" (2001), Fussel brings up the Humanist movement during the renaissance and the reaffirmation of man's ability to learn. Fussel states, "The Humanists believed that through the great wisdoms of the classical authors, they could educate their contemporaries" (2001). Universities began including libraries as a part of their campus (rich donors often contributed books to these libraries, such as the case of Adams or Harvard). In roughly 1450, a revolutionary new device, made books less expensive and therefore more accessible to the general public, increasing

literacy on a countrywide scale. Probably the most important shift in the world of literacy occurred with Guttenberg's printing press. In addition "newspapers, magazines, broadsheets, and pamphlets provided general information and ultimately gave birth to public opinion and created a forum for the reformation of the Church and the society" (Fussel, 2001). Now, literacy was common enough that lower socio-economic groups could read, not simply the upper class aristocracy. Gutenberg's device paved the way for public awareness as well as literacy. Learning was available to a much wider audience. Imagining life without Gutenberg's achievement is difficult. Bookmaking would still be an extremely labor intensive career and the price of books would likely be extremely high, as fewer could be printed at a time. Literacy before Gutenberg's printing press was limited and only the very rich could afford to be educated enough to read. In a world without Gutenberg, education and opinion would still belong to a very limited class. Like Gutenberg's printing press, the introduction of the digital technology caused a spike in literacy, regardless of socio-economic class.

In the present day, the library had become more like what we know it as today. Libraries of the twenty-first century still include books, but the communication technologies have become more available and consistently more advanced. These technological strides have also altered literacy and our perceptions of the library. With the arrival of the Internet, new areas of study arose, concerning how to use this tool in education and literacy. Now, children can learn to read and write through programs on digital devices and through the Internet. Hillman and Moore's essay "The Web and Early Literacy" (2004) clearly states, "using technology like the Web to increase literacy does work if used appropriately" (17). Digital versions of books are another major technology

that increased literacy similar to the way Gutenberg's printing press increased literacy. Books that aren't even written on paper are more accessible than their typed predecessors. Quickly comparing prices of a random paper back (Neil Gaiman's Neverwhere) to a digital copy from a site such as Amazon, the Kindle e-book is seven dollars cheaper than the paperback. The Kindle option also requires no waiting, since it instantly downloads onto your digital device. There are arguments for both the Kindle and paperback in terms of quality, but when discussing accessibility, paperless books are much more convenient and cost less for consumers.

The impact of digital technologies on literacy and libraries is very significant. In the absence of these advances in communication, research would be more based on books than search engine results and the position of the library would probably be viewed as much more important in our current culture. In my family, imagining life before the digital age is a simple matter of remembering back to their own college years. While discussing the disappearance of digital technologies could go for ages, when specifically looking at literacy and libraries, there are some major differences. Also, books and periodicals would remain the norm in library research materials, but they would take up a lot more space than the computer databases that we currently have access to in our libraries. Literacy would probably still be mostly taught based on books and 'traditional' models of literacy education. Without the digital technologies we have access to today, our education system would be stuck in an older model that only helps the privileged classes, but probably wouldn't suffer as much as the removal of the printing press, for example. Teachers would still be able to educate their students, but the model for doing

so would be similar to my parents model of education as opposed to this new school of thought where using the Internet is just as important as knowing your times tables.

Communication technology makes massive leaps that help to increase world literacy and education. This is especially evident when considering how technologies changed libraries. With the advancements in communication technology, literacy was able to spread rapidly across civilization and change how our culture uses libraries.

References

- Erskine, Andrew. Culture and power in Ptolemaic Egypt: The museum and Library of Alexandria. *Greece & Rome*, 42, No. 1. Retrieved from <http://0-www.jstor.org.www.consuls.org/stable/643071>
- Fussel, S. (2001). Gutenberg and today's media change. *Publishing Research Quarterly*, 16(4), 3.
- Hillman, M., & Moore, T. J. (2004). The Web and early literacy. *Computers In The Schools*, 21(3/4), 15-21. doi:10.1300/J025v21n03_03