FROM BOOK CULTURE TO DIGITAL CULTURE – CHALLENGES POSED BY ICT TO YOUNG ARAB READERS

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Abstract

Relying on the data of the Galilee Society, this paper discusses cultural issues regarding book culture and the implications of ICT culture on reading books among Arab Palestinian youth in Israel. The data show clear reduction in book reading among this population, while computers and Internet service are on the increase among Arab families. The accelerated development in ICT dominates the Arab youth life intensively. Therefore, they do not find a meaningful place for books in their everyday life. As educators, who lived through book culture and ICT culture, our big challenge is how to get students to enjoy reading books.

Introduction

Culture is the beliefs, customs, arts, values, attitudes, meanings, religion, etc., of a particular society, group, place, or time, that are passed along by communication, teaching and imitation from one generation to the next (http://www.learnersdictionary.com/definition/culture).

Culture refers to a set of phenomena relating to quality of life, customs, and so on, expressed in broad circles of society and affecting the quality of life directly and indirectly. It "determines what is acceptable or unacceptable, important or unimportant, right or wrong, workable or unworkable. It encompasses all learned and shared, explicit or tacit, assumptions, knowledge and norms, as well as behavior, dress, and language" (http://www.businessdictionary.com/definition/culture.html).

The book, in its various forms, has always been a source of religious knowledge, information and emotional experience. Book culture has evolved as a result of the use of written language. It relates to cultural texture that is made-up within a specific society, based on knowledge and basic skills of writing and reading. The book represents a complete system of information technologies that were foreign to the educational and cultural values prior to the printing of the book. Over the years, the development of the printing press replaced the human labor and the printing technologies enabled the mass distribution of the book knowledge (Givon, 1995).

Usually the term *technology* is associated with devices. Givon (1995) argues that this is a limited and misleading meaning of the term. *Technology* is any knowledge organized for practical purposes. Therefore, math, writing and reading are also technologies, regardless of the devices we use in performing these actions. However, devices play a major role in technological applications.

Printing was invented based on the invention of writing technology in purpose to find an easy, quick and inexpensive way to distribute written products to the masses. Printing allowed written materials to all. Eisenstein (1983) argues that the invention of printing brought about the greatest Cultural Revolution in the history of the human kind. This revolution is expressed in the ways in which knowledge was preserved, used and passed on to the succeeding generations. However, printing could not take effect if the masses did not know how to read. Reading and writing are the cultural basis that contributed to the printing machine taking a place as a significant factor in the culture of humanity.

The computer was invented on the basis of developing calculations that were formulated throughout thousands of years. The computer enables the masses to know the processes of calculations and their products. ICT culture has evolved as a result of the development of computerized information languages.

Similar to book culture, ICT culture could be a cultural texture that is open to anything, and based on personal use of computerized information systems. ICT culture is a new cultural factor that is manifested in the ways in which man uses ICT systems to create, to process, to represent and to transmit the information as a factor that contributes to the quality of the human beings.

The rapid expansion of ICT to all areas of life since the '90s of the previous century raised the questions about its contribution to improving education, especially in light of the fact that some of ICT properties correspond to learning principles and are appropriate for improving learning.

In recent years, information consumers have faced a rapid growth in accessibility to digital text and spread of online textbooks, newspapers, encyclopedias and journals. In this context, it is important to distinguish between three kinds of reading: (a) academic scientific reading, (b) learning reading (school), and (c) literary reading. Scientific reading that requires a certain topic is easier to search on the Web as well as is all kinds of articles and learning materials. On the other hand, literary reading from a book for enrichment and enjoyment is more convenient and easier. The book enables consistent leisurely reading, relaxation and improves focus and concentration (Da'eem & Younis, 2007).

This shift, from print towards digital reading is especially critical in higher education and the school systems, where learning from digital texts becomes increasingly more common (Cargill, 2011). Reading from digital displays poses a wide range of challenges for readers (Altonen, Mannonen, Nieminen, & Nieminen, 2011), mainly, because of the large reading distance from a computer screen as opposed to the short reading distance from a printed book, the long lines of text on the wide computer screens and the problem of shifting the eye gaze from line to line while reading (Evans, Charland, & Saint-Aubin, 2009). In addition, text fragmentation, associated with the nonlinear nature of hypertext, results in a decrease in text coherence (Ozuru, Dempsey, & McNamara, 2009). Reduced text coherence in digital displays creates disorientation, presents readers with a high cognitive load (Ackerman & Goldsmith, 2011) and harms text comprehension (Chang & Ley, 2006). Consequently, many studies report that text comprehension from digital displays is inferior to comprehension from print (Ackerman & Lauterman, 2012). Ackerman and Goldsmith (2011), claim that differences between print and digital comprehension are mainly a result of differences in self-regulated learning that are dictated by these two media.

The recent abundance in learning from digital displays and the accumulating evidence on the inferiority of comprehension from digital raises the need for a better understanding of the role that learning strategies and active learning tools play in digital reading. Studies on printed text suggest that a reader can improve monitoring of the learning process by utilizing learning tools such as annotation, highlighting, writing keywords, summaries and reflection (Pressley, 2000).

Examining the difference in students' attitudes towards reading between those using e-readers and those students not using e-readers during guided reading instruction, Long & Szabo (2016) found that the e-reader participants had a negative gain, while the traditional text group had a positive gain in attitude toward reading.

The findings of Ben-Yehudah & Eshet-Alkalai (2014) suggest that employing an active learning strategy during reading from print is effective mainly for deeper processing and understanding of the text, and not for learning that is based on memorization of facts. For the digital reading condition, highlighting did not improve comprehension at all.

On the other hand, Leutner et al. (2007) found that a computer-based training program designed to improve readers' use of text highlighting and self-regulation led to greatest improvements in text comprehension, relatively to other training programs.

Reading habits of young readers are acquired through exercise and imitation (Sobrino, 1994). Undoubtedly, the dilemmas that accompany the Arab reader are universal dilemmas, since they are the direct result of the post-modernist world. Twenty-first century students are surrounded by technology that brings the world to their fingertips and many have been surrounded by technology since they were babies (Derene, 2013).

However, we cannot ignore the unique nature of the Arab society in Israel, as an indigenous minority in a multicultural society. This entails and steers the youth on the path of reading and influences the product. The technological development enables accessibility to digital books more than in the past, and the percentage of people who can read is larger. However, not all books are of a good quality and not all those who are able to read do indeed read. Using the reports of the Galilee research association on reading among Arabs in Israel between the years 2004 - 2014, this paper tries to estimate the effect of the abundance of digital texts on reading printed books among Arab youth.

Reading

Reading is an acquired cognitive mental and linguistic ability that allows the reader to interpret texts and construct through them meaning and identity. Reading in its broad meaning is a form of cultural consumption, a decoding process of a lot cultural products, cultural works, plays, newspapers and so on.

Literary reading is a process in which the readers absorb the message and the meaning of the literary work in a manner that suits their own perception. The transactional theory of reader response (Rosenblatt, 1978) supports the idea that readers understand or "make sense" of their reading based upon their personal experiences. Every time a person reads, there is a transaction between the reader, the text, and the context. Reading motivation is correlated with how much time a child reads (Morrow, 1992). Children, who read more tend to be better readers, perform better on standardized testing and develop into lifelong readers (Wang & Guthrie, 2004).

Reception Theory, focusing on the reader's reaction and his interaction with the literary work, argues that there is a dialog that take place between the writer and the reader, who constitutes two factors interacting outside the literary work and the text, assumes a life of its own during the reading process (Iser, 1978).

Readers use reading not only as a source of pleasure but also as a process for identity formation and as a tool to gain cultural capital. The cultural value readers place on cultural products such as books, and works of fiction in particular are dependent upon not only what they learn from parents, but also through what they learn through school and university, work and social networks (Ross, McKechnie, & Rothbauer 2006).

Learning to read and write in Arabic constitutes a significant challenge for readers mainly because it is based on a unique social context called *diglossia*. One of the essential linguistic features of diglossia is the considerable linguistic distance between the spoken language of children, which is acquired as a mother tongue, and standard Arabic, which is represented in writing and is acquired mainly in formal teaching of reading.

The orthography of the Arabic language has its own unique characteristic. The Arabic language has 29 letters, which have 119 forms. Each letter has three or four forms: at the beginning of the word, in the middle of the word, at the end of the word, connected or not connected (Abu-Rabia & Taha, 2006). This aspect constitutes a triple challenge of reading and writing the same letter accurately, in all its forms and wherever it occurs.

Reading Books Among Arab Youth in Israel

The data about the percentage of reading in the Arab society in Israel relies on a socio-economic survey of the Arab population in Israel that has been conducted four times in the years 2004, 2007, 2010, 2014 by Galilee Society Research Association & Rikaz - database (Mohammad & Rezek, 2015).

The Galilee Society correlated reading interest and proficiency with larger patterns of academic, economic, cultural, and civic achievement among Arabs of all ages. The following table highlights basic data relating to individuals and households characteristics.

Table 1

Basic Data: Technologies in Household,	, Education and Media Culture Among
Palestinians in Israel (ages 10-19), 2007	7, 2010 and 2014

Per year	2007	2010	2014
Total amount of families participating in the survey	3270	1931	1689
Housing Unit			
Computer in Household	49.6%	59.5%	65.3 %
Internet Service in Household	33.8%	55.2%	74.4 %
Telephone Line	62.7%	53.7%	53.5 %
Home Library	42.8%	39.8%	41.4 %
Education, Media and Culture			
Literacy Rate (15 Years and over)	95.1 %	94.2 %	96.1 %
Educational Enrollment Rates	41.2 %	39.2%	39.2%
Drop-out Rate (Population Age 5 years and Above)	22.5%	21%	19.2%
Computer Usage (10+)			
Always	23.1%	38.5%	42.9%
Sometimes	13.2%	17.9%	16.7%
Internet Usage (Persons Age 10 years and Above who use a Computer)	52.9%	90.6%	90.4%
Email (Persons Age 10 years and Above who use a Computer and the Internet)	49.5%	66.5%	72.4%

The table shows that purchased computers and Internet service are on increase among Arab families. In 2014, 65% of the families had computer and 74.4% had Internet service, compared to 50% and 34% in 2007, respectively. However, acquiring a phone line is on the decrease: 53.5% in 2010 and 2014, compared to 62.7% in 2007. We can associate the reason with the development of Smartphone technology that allowed access to the media anytime and anywhere. About 40% of the participants in average reported they have home library.

The findings show no notable differences in educational data from 2007, 2010 and 2014. Most Palestinians in Israel (15 years and above) are literate (96.1% in 2014). The education enrollment rate is 39.2%, and the general dropout rate of Palestinians in Israel aged 5 years and above is 19.2% in 2014, compared to 22% in 2007.

In 2014, 90.4% of computer users aged 10 years old and above used the Internet, 43% of them always used it, compared to 52.9% and 23% respectively in 2007. In addition, the use of email is in significant increase in comparison between the years 2007 (49.5%), 2010 (66.5%) and 2014 (72.4%).

The following table highlights several findings from 2004, 2007, 2010 and 2014 relating to reading among young people in the 10-19 years age group.

Table 2

Reading practice per year	2004	2007	2010	2014
Total amount of families participating in the survey	3270	3270	1931	1689
Do not read newspapers	41.4%	48%	53%	60.5 %
Do not read magazines	57.5%	63%	74%	80 %
Do not read books	70.6%	74%	82.6%	75.2 %
Read one book during the month of the survey	21.1%	14.3%	8.8%	13.4 %
Read two books during the month of the survey	4.9%	6.5%	2.9%	6.2 %
Read three books during the month of the survey	3.3%	4.7%	5.7%	5.2 %
The general population (all ages) – did not read any books during the month of the survey	74.1%	80.3%	82.6%	83.1 %

Reading Practices of Arab Youth (ages 10-19) in Israel, 2004, 2007, 2010 and 2014

The table shows a clear reduction in book, newspaper and magazine reading among Arab youth in Israel and in book reading among the general population. In the years of the survey, an average of 75.6% of the youth reported that they had not read a book during the month prior to the survey, and 83% of the general population (all ages) – did not read any books during the month of the survey in 2014, compared to 74.1% in 2004. Reading newspapers and magazines is also declining among Arab youth. In 2004, 59% read newspapers and 43% always read magazines, compared to 39.5% and 20% in 2014, respectively.

The data created concern regarding the younger educated generation. The results imply increased responsibility for the Ministry of Education, the educational and cultural institutions and all the agents of change to publish good quality books and establish a program to encourage reading. Of course, we should not disregard the importance of the family in encouraging reading and visiting book fairs and public libraries.

It is important to mention that the accessibility to books and newspapers is today far greater than in the past and its cost is reasonable, but we have no statistics about reading in the past of this particular population, for comparison.

Discussion and Conclusions

The adaptation of innovative technologies for learning and teaching faces learners, developers and instructors with a wide range of challenges that should be considered for a successful implementation. This paper discusses cultural issues concerning the implications of digital culture on reading books among Arab Palestinian youth in Israel.

The ICT revolution is a deep cultural revolution changing all modes and patterns of our lives and is hence bound to lead to dramatic changes in education. It has a powerful defining impact on all-important aspects of our lives and hence our culture (Aviram & Talmi, 2004).

Language is a significant cultural element. Every nation wants to preserve its culture and transmit it from one generation to the next. For this purpose, people need to acquire language skills, particularly reading, writing and understanding.

Book culture is based on knowledge and basic skills of reading and writing that provide strength and advantage in relation to those who lack them. This knowledge and these skills expand and enhance the individual's ability to perform actions relating to communication, thinking and information processing.

The data of Galilee Society indicate clear reduction in book, newspaper and magazine reading among Arab Palestinian youth in Israel and in book reading among the general population. On the other hand, computers and Internet service are on increase among Arab families.

As a part of the Global village, the accelerated development in ICT including smartphones has dominated intensively people's life, especially the youth life. The youth do not find a meaningful place for books in their everyday life. Their daily reading habits center on tweets, Facebook and Instagram updates, games or chats. Eshet-Alkalai et al. (2010), argue that most of the innovative technologies are developed for organizational, entertainment, and communication management purposes, and not inherently for educational purposes.

Undoubtedly, in the ICT era changes occurred in book culture, and the books went through some process of renewal. Innovative systems for coding, cataloguing, distributing, and tracking books have been implemented. Still, the price of paper books is relatively high and to achieve them we need to go to a bookstore or library. Moreover, they require storage space, and some of them are heavy to carry. On the other hand, digital storage is easier and can be retrieved from anywhere. In a click, one can get novels, newspapers, dictionaries and all types of information.

In the ICT world, educational activities can be performed online without having to go to the library. Although people saved time and effort, the way to the public library has been accompanied by a walk and face-to-face communication. However, the buzz of electronic media predominates in this era. Within the incessant flow of twenty-four-hour radio and television, the visual and sonic entropy of digitally enhanced cinema, the dizzyingly connective Internet maze, the kaleidoscopic intensity of digital gaming, and the frenetic pace at which new media of all stripes seem to shape the patterns of our daily lives, it seems difficult to imagine books shouldering much world-historical responsibility anymore.

Reading seemed to be corruptible, and consequently, in need of immediate intervention (Striphas, 2009). In the ICT world, the young generation does not get sufficient advising to read printed books, and their attention is drawn in many different directions at once. During single 5-minutes, average people will divide their time between working on a task, checking email, chatting with a couple of people, keeping an eye on twitter, monitoring their smartphone, and interacting with colleagues.

However, books have played-and will continue to play-an important role in shaping the syntax of everyday life. They continue to serve, sometimes in new ways, sometimes in traditional ones, equipment for living. In other words, books remain key artifacts through which social actors articulate and struggle over specific interests, values, practices, and worldviews. Books are artifacts with a deep and abiding history that belong in and to our own age, no more and no less so than flat-screen televisions, MP3 players, computers, and other so-called cutting-edge technologies (Striphas, 2009).

The value of books lies in their capacity for moral, aesthetic, and intellectual development. While reading a book, the readers' attention is focused on the story for example, and they can immerse themselves in every fine detail they are absorbing. Therefore, the challenge of writers is to write in a correct and rich language, aesthetic and artistic style, maintain the quality and diversity of contents, produce and present in decent, beautiful and creative manner; writing in different levels for different abilities and publishing good literature.

Other parties such as parents, educators, school and public libraries should be involved in cultivating reading habits among children by training and guiding them towards the right choice of books and by maintaining warm relationships between the child and the book. Schools should activate programs for promoting reading such as competitions between readers and provide various reinforcement for this purpose. The challenge of ICT makers is to publish good literature and useful e-books as well.

Book culture and ICT culture are two different faces of the coin; each face has different implications on reading books, some are positive, and some are negative.

As an intermediate generation of educators who lived through book culture and ICT culture, we are aware of the importance of reading books while our big challenge is to get students to read and enjoy reading books. However, we are in a dilemma between ICT culture that takes over people's lives and book culture that is declining among young people.

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