EDUCATION TECHNOLOGY CHANGING FACE OF SCHOOL LIBRARY SCIENCE AND SCHOLARLY COMMUNICATION AREA IN K12

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ABSTRACT

The theoretical framework is important to understand communication between technology, communication and school library science changing face of Turkey. "Empowering Learners: Guidelines for School Library Media Programs (AASL, 2009) charges school librarians "to play a leading role in weaving such skills throughout the curriculum so that all members of the school community are effective users of ideas and information" (Johnston, 2015, 17). Changing first start in human culture, the internet is giving a change for people to communicate the World and other people. Find the information is very easy in 21st century but the important difficulties come to same time. This problem is find the true knowledge problem. "The last three decades have been marked by the gradual digitalisation of human culture, knowledge and learning. Evolving digital media and technologies – such as computers, the internet and mobile devices – have been constantly generating new waves of promises and fads." (Markauskaite, 2010, 79). The face of communication and education change with technology. Digital devices and social media is usefull for peoples communication process. Technological artefacts and computers could be useful for assisting with or doing some traditional cognitive tasks. (Markauskaite, 2010, 92). Traditional communication process start with oral culture. Walter J. Ong said that "The Technologizing of the Word" his book of Orality and Literacy. Firstly oral culture start with the first communication process. People telling and memorize the culturel things. Second of them is literacy when the first letter of semitic alphabet using this literacy culture process is starting. "When this is all said, however, about the Semitic alphabet, it does appear that the Greeks did something of major psychological importance when they developed the first alphabet complete with vowels. (Ong, 2002, 5). This research about the 21st century school library science scholarly communication process changing with technological development and case study for Turkey.

KEYWORDS: Scholarly communication, communication, scientific collaboration, new media, academic collaboration, high tech, education technology, edtech, social media.

INTRODUCTION

The theoretical framework is important to understand school library science between technology, and scholarly communication. "The last three decades have been marked by the gradual digitalisation of human culture, knowledge and learning. Evolving digital media and technologies – such as computers, the internet and mobile devices – have been constantly generating new waves of promises and fads." (Markauskaite, 2010, 79). The face of school library science change with technology. Digital devices and social media is usefull for peoples communication process. Technological artefacts and computers could be useful for assisting with or doing some traditional cognitive tasks. (Markauskaite, 2010, 92). Traditional communication process start with oral culture. Walter J. Ong said that "The Technologizing of the Word" his book of Orality and Literacy. Firstly oral culture start with the first communication process. People telling and memorize the culturel things. Second of them is literacy when the first letter of semitic alphabet using this literacy culture process is starting. "When this is all said, however, about the Semitic alphabet, it does appear that the Greeks did something of major psychological importance when they developed the first alphabet complete with vowels. (Ong, 2002, 5). Technology and library is going nearly, one of them is change the other of them change will be. Because reading is open the door of evalution, revolution and development of the World. "Cameron came to the conclusion that school librarians and instructional technology specialists both look for ways to incorporate information technology into the curriculum of the school and provide support and resources for the entire school community and it is this overlap in responsibilities that makes collaboration between the school librarian and the instructional technology specialist important." (Johnston, 2015, 20).

1. SCHOOL LIBRARY SCIENCE

21st century is change the world education system. The new world education system is not a "Oral Culture" or "Writing Culture", this new culture name is "Dijital Culture". Born in dijital world child understanding the world very differently for other genaration. The 21st century teachers first job is understanding this born in dijital

world child. Their communication process is very important and using education technology process is other important thing of this process. Digital technology change the world immediately. Education technology and digital technology using together in K12 (Kindergarden to high school) school area. The classical library science change too. If the teacher using school library regularly their academic achievement to rise up. The school library science change their face to ARGE School Library Center. This library center is research center, new project center, new educational technologies center, scholarly communication and academic achievement center... Marshall McLuhans teory of "Global Village" is heart of this project because of library get a transformation of "Global Village Library". This area is specific education of teacher academic achievement. Reading book, researching data, making a new curriculum model, conecting with other countries teacher, doing digital project all of this things we are doing, using the school library. If the teacher academic achievement rise up, students academic achievement rise up too. This is new Scholarly Communication model of School Library Science. Because next generation education model's first substruction is "Communication". Communication with other, communication with world, communication with their job and other area. Second important part of library is creativity; creative project is very fantastic in school library. Creative science project using book, creative art project using book and other area. Communication and creativity is our Global Village's first model's of education principle. This research analyzing the what is the new education technology and scholarly communication project using in private schools and their school library? Using schools Facebook and Twitter social media authorized page.

2. SCHOLARLY COMMUNICATION

"Social Penetration Theory (called a "stage theory" by Mongeau & Henningsen, 2008), has enjoyed widespread acceptance by a number of scholars in the communication discipline." (West 2010, 169). What is the difference of conventional education and digital education or education technologies? Education technology is useful for communicate all academic and students freely. They are collaborating projects together very easily. Universities use social media, teaching management systems, Tablet technologies for their education systems. Information allocation process has been changed too.

> "First, the dynamic ways in which papyrologists, medievalists, and early modernists engage with the digital primary sources suggests that an emerging model of data curation may be more appropriate than the special collections model on which scholars have traditionally relied when seeking help from librarians and other information professionals about primary sources. Second, the ways that they communicate about these sources with each other and with students and the public alters the publishing functions normally associated with academic publishers. Finally, the lessons of these cases suggest the need for key new elements in the academic infrastructure" (Waters, 2013, 21).

 "This changed as technical development entered into a feedback relation with the progress of the modern sciences." (Marcuse, 1968). On the other hand, scholarly communication is changing along technological transaction and people connecting to others very easily and frequently. Marshall McLuhan's approaches this period with his "Global Village" theory. This has opened a new for changing the world with the help of communications. Technological development, new media and digital technology are drivers of this process. "Globalization has been accompanied by the creation of new institutions that have joined with existing ones to work across borders. In the arena of international civil society, new groups, like the Jubilee movement pushing for debt reduction for the poorest countries, have joined long established organizations." (Stiglitz, 2002, 8). Mc Luhans "Global Village" start with internet and social media is the mail part of this "Global Village". Internet is changing face of scholarly scientific collaboration. The people find the other people very easy and they share something with other quickly. Electronic devices and electronic books is another part of communication process. "One Internet company that struggled with the buy/share issue is Infonautics, which offers a product called the Electric Library. The Electric Library offers full text of 150 newspapers, hundreds of magazines, international newswires, radio transcripts, and many other high quality sources of information." (Shapiro, 1999,49). The early decade of 21st century nobody know the social media people using library and card catalog but this perspective change with internet. Academic staff share their news and article very quickly using the social media and internet. "Since the early 1980s, the scholarly community has been witnessing a considerable increase in the use of information and communication technologies. The networked personal computer, e-mail, the internet, of and online databases, the World Wide Web, electronic publications, discussion lists and newsgroups, electronic conferences, digital libraries, and knowbots are but a few of the trends that increasingly influence the daily work of the scientific community." (Olson, 2008, 33).

3. SCHOOL LIBRARIES AND THEIR SCHOLARLY COMMUNICATION FACE
The school librarians changing face of using education technology. This process changing the face of scholarly communication area in schol libraries. "The specific purpose of this study was to identify what is enabling those

most accomplished school librarians to thrive in the role of technology integration leader, as well as the barriers they face." (Johnston, 2015, 17). School climateew everytime change with developmental things. 21st century education skills and approach change school libraries and school librarians face and jobs descrption. "If school libraries have long functioned as sites where students have less-structured and more unmediated interactions with large collections of information, these experiences with traditional media may present good models as educators consider how to approach digital literacy education in new ways." (Losh, 2012, 17).

Th print culture librarian's integrated to new education technology for scholarly area is difficult process but the digital culture immigration librarian's (they are born in a print culture but use technology effectively) use education technology in scholarly communication area. "Research suggests that teachers are less likely than many of their professional peers to have had formative experiences playing games or exploring the Web; they are often creatures of print culture, which is a good thing in many ways, but leaves them less than fully prepared to integrate digital media into their instruction or to be able to advise their students about safe and ethical engagement with the online world." (Losh, 2012, 18). Online world changing the school library science area. First important changing is reading book culture is changed. E-books is important part of school libraries. Second important changing is online database and searching on internet is changing the researching method in school library. Third important changing is librarian communicate with students using online technology. Those are school libraries facebook, twitter and blog pages. "Technology is a major force in the transformation of schools today and librarians are becoming more and more critical to the process of shaping both teaching and learning with technology." (Dotson, 2015, 55). If school librarian using technology successfull and communicate with children fluent, students academic achievement and library utilization is good.

Librarian and their scholarly communication process

Scheme 1 (Christa Harelson Deisler, 2015, 40)

Domain 1: People and Interpersonal Relationships

Enabling Factors	Impeding Factors
-Personal support system at work - Positive working relationship with school administrators - Mentoring or modeling from respected colleagues -Collaborative team work with other teachers -Mutual respect and interdependency of the staff -Recognition provided for work -Encouragement and support from family and friends	-Lack of personal support at work -Passive or active opposition from colleagues or administrators -Tense relationship with principal or school administrators -Lack of collaboration, teachers work on their own -Lack of professional respect from other staff, resentment -No recognition for work -Passive or active disapproval or non-support from family and friends

The librarians goods communication is important for the school and students academic achievement. The education technology specialist librarians first important role is follow the technological development and good communicate with school climate.

4. NEW EDUCATION TECHNOLOGIES IN LIBRARIES

In 21st century technology is changed immediately. Social media, blogs, wikis, reader, kindle and onlie resources is opened the door of new communication process. This communication process based of technological development.

4.1. SOCIAL MEDIA, BLOGS, WIKIS

Facebook, Linkedin, Twitter is the social media fenomen. Sharing the academic news on Facebook. "One way that Facebook may hinder social integration is that the communication tools provided by Facebook might contribute to a communication skills deficit. The freshman experience provides a wide range of opportunities for freshmen to practice a variety of communication skills that will be useful throughout their academic career and beyond." (Wankel, 2011, 15). Digitalization is changing all of the academic period. The Turkish academic staff find the another academic staff in another countries. Scientific academic collaboration is very easy for using social media. "Digital etnography is among the emerging research methods for understanding and analyzing industry habits in virtual communities such as Facebook, Twitter, and YouTube. Digital ethnography has evolved from habits and norms of virtual communities." (Wankel, 2011, 28).   Academic daily news transportation and accessibility is very easy when using Facebook and other social media. "Social media gives study abroad administrators the ability to exchange information with colleagues and experts they usually would not have access to on a daily basis." (Wankel, 2011, 131).   Facebook and Linkedin users network for other people is very strong. "Unique situations with regard to travel or visas can be quickly remedied by tapping into a network of people who either have a solution or know someone who can help." (Wankel, 2011, 131).   Social media is make a new e-social science. People is more social when using social media. "E-social science is underpinned by a vision of the transformation of research practice into collaborative activity that combines the abilities and resources of distributed groups of researchers in order to achieve research goals that individual researchers or local groups could not hope to accomplish." (Jankowski, 2009, 85). Social media is make a new communication model. This new model is make people interchangeably. "People often the terms social networking and social media interchangeably. Social networking often facilitates many forms of social media, but a lot of social media also exist outside of social networking sites." (Shih, 2011, 17).

4.2. READER, KINDLE, IPAD, DIGITAL LIBRARY, ONLINE PAPER, ONLINE ACTIVITIES

Tablet, reader and kindle is actively using in school libraries. Online book activity sheet is another using material in school libraries. Publisher giving the link of books activity sheet and test for students. The students reading the book in their tablet, kindle or reader later they are doing the activity online. The sample of this publishing area is Oxford, Pearson and Little Tiger Press. In Turkey Yapı Kredi Publishing, Red House and too much other publisher using online and pdf publishing page. School librarians important role of helping students and teacher, when they choosing books. "The district's launch in 2013 of its digital learning initiative spurred the need to change how libraries are used. As of next year, every elementary school student will have her or his own tablet, many already do, and every middle-schooler will have a laptop. As a result, kids no longer rely on labs in their schools' libraries for computer access, and media specialists have become more important because they help students and teachers adapt to the array of new hardware and software." (Kompar, 2015, 23).

5.   RESEARCH AND RESEARCH METHHODOLOGY (STUDY)

Turkey in Istanbul's different location ten high school librariens attent to this research. They are telling their libraries new communication process. This research focus on what is the new education technology changing the school library science scholarly communication process. They answer the survey, and doing focus group together. Using content analyzing method when evaluate the survey.

The basic question of survey are;

1.   What frequently using education technology in your school library? Do you share new things other school librarian? Please tell your new project about using education tehnology in your school library?
2.   Which education technology material do you use in your school library?
Blogs, Social media (Twitter, facebook, Instagram)
Reader, kindle, IPad
Dijital library
Online paper and online activities
Internet game
Ilustration travel
And other….
3.   Do you have some scholarly communication problem when you communicate with 21st century dijital born child? Which problem solving method do you use when communicate with dijital born child?

Survey Scheme
K12 Librarian Survey

	A	B	C	D	E	F	G	H	I	J	K
1		1	2	3	4	5	6	7	8	9	10
2	What education technology is used in your school library?	Tablet,	No	Tablet,	Tablet,	No	Tablet,	No	Tablet,	Tablet,	Tablet,
3	Do you share new things with other school librarians?	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
4	Which education technology material do you use in your school	Blogs, Wikis	Social Media	Social Media	Social Media	No	Blogs, Social Media	Blogs, Social Me	Blogs, Social Me	Blogs, Social Me	Blogs, Social Media
5	Do you have any scholarly communication problem when you communicate with a child borned in 21st?	Some times	Yes	No	No	Some times	No	No	Some times	No	No
6	Your Age	32	40	29	27	45	25	39	35	38	24

The school librariens using the;
- Digital devices in to their library
- Blogs and Wikis is very usefull for librarian
- They send a mail for their student to understand their field of interest.
- Videos and games is usefull for learning library system.

The librarian;
- They entegrated the curriculum development process
- They find the new books and daily news. Share this in to the library social media page.

The librarian solve their communication problem with child;
- Using listening method
- Playing with them
- They answer their question
- They are reading children books
- They are talking them and they understand their field of interest

The new scholarly communicater school libraries have a academic role in school development process.
The librarians use the digital devices and edtech technology effectively.
Scholarly communication and librarian;
25 – 45 years old librarian join the survey
- 25 – 30 years old person is scholarly communication process is clear and fluent.
- 30 – 35 years old person's scholarly communication process is middle clear.
- 35 – 45 years old person's communication and scholarly communication process is difficult.

CONCLUSION

Librarians and education technology scholarly communication area are connected each other. Librarians communication skills is very important for students using library treatment. If the librarian is communicate with other sucessfully students using library achievement process is going well. Younger librarian using education technology more than older librarian. Younger librarian communicate succesfull with digital born child more than older librarian. 21st century education skills giving librarian new role. Those are; librarians integrate and join the curriculum development process, life long learning projects leader and school's innovative project leader, technological developement and information literacy leader is librarian too. This roles giving a librarian important position, they must be a good scholarly communicator.

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