The Theoretical Rebuilding of Literacy in Pakistan *apropos* Custom to Contemporary Technology

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Abstract

With an unchanged orientation, objectives, meaning and use, the word Literacy has stayed alive for centuries. Its explanation mainly aims for the teaching and learning of two basic skills: reading and writing and a brief knowledge of arithmetic. The overwhelming emergence and rife existence of digital tools, screen literature and digital media has significantly reshaped the concept of learning and the definition of literacy, the academicians all over the world are attempting to examine and if need be, redefine the term literacy in view of digital technology. This study was undertaken to evaluate the scope, role and influence of technology in the context of Sindh, Pakistan. The data was collected from the students of English Literature studying at four major general public sector universities in Sindh applying random sampling technique. The data was processed through descriptive and inferential statistics, and the results were drawn on the basis of achieved statistics. The results reveal that students at higher education institutes in Pakistan are fast adopting digital technology mode/form of literacy. The findings show that more than 90% students use digital media. 80% students use digital tools for research and information. Only 10% students use technology for editing and proofreading. It was also learnt from the findings that despite overwhelming use of digital form of literacy by the individual youth population in Sindh, Pakistan, there is however; a significant need for the academic and other professional institutions also to adopt this innovative, current and popularly proliferating form of literacy.

Keywords: Literacy, New Literacy, Multimodal Literacy, Digital, Reading, Writing,

1. Introduction

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The term literacy is usually identified as an ability to read, write and use the basic applications of arithmetic (Merriam-Webster). Literacy is a systematic way of decoding sounds, symbols of a discourse in a meaningful content (Lankshear and Knobel 2006a: 64).This definition has governed our educational systems as the preamble of literacy for many years. In view of this orientation, students have all along been exposed to the learning of reading and writing as the core skills of literacy.

In recent times, the term literacy has expanded its role and scope to the use of numbers, symbols, graphs and other common means of communication to understand the message and convey a piece of information as per the existing culture of symbols (UNESCO). Under this doctrine, the existing schooling system begins with teaching pupil how to read and write. The teaching learning goals of early education are set accordingly; but in the world where keyboard is replacing the pen and voice recognizing programs are replacing the keyboard, the digital writing reading interface tools dwarf the significance of the skills like reading and writing (Andrews and Smith 2011). The ever-changing scenario dominated by the technology calls for revisiting the definition of literacy. The domain of education is going through a dramatic phase of revolution (Kellner 2002). It offers and unruly excess on literature to the readers. Today it is impossible to treat education in an utter isolation from the technology (Zhu and Goldberg 2009). The screen literature offered in cinemas and theaters, by remaining the social media rife through smartphones and media literature and by prevailing on television channels is far more powerful means of literacy. The inevitable role of technology has enormously encroached our academic life.

In this study, the main focus lies on evaluating the concept of pressing demand of changing our orientation towards the ways of teaching/learning and the literacy through the skills of reading and writing. There is significant possibility to see a world where we no longer need to write for writing and read for reading (Charan, Buriro et al. 2017). The study attempts to explore the possible paradigm shift of literacy skills from a manual way of reading and writing to a digital mode of reading and writing.

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2. Literature Review

2.1 New Literacies and Multimodal Literacies

It is important to evaluate our literacy goals as whether or not they would be helping our students to meet the challenges of future workplace life and its demands. The unlimited scope of digital technology demands the educationists to redefine the term "Literacy". The digital technology revolution rife urges drastic conceptual reconstruction of literacy with new pedagogy, curriculum, and goals (Marshall McLuhan1961 and 1964), (Walter Ong 1988). Hence, the terms like New Literacies (Lankshear and Knobel 2003), Multiliteracies (Cope and Kalantzis 2000) have been coined to identify the role technology in education and its applications on the existing definition of the term literacy. The terms like "new" and "multi" indicate the digital technology when associated with the term literacy(Rowsell and Walsh 2011).The screen literature with its vast capacities, has transformed the idea of teaching/learning. The digital literacy helps to express the ideas in a way deemed for the particular topic and theme (Lanham 2010). Moreover the term Multimodal Literacies emphasize on adoption of a multiple and plural forms of literacies (Kress, 2014). In other words, a unified definition of literacy for all fields and literacy objectives may not find acceptance in the future. It has empowered the text to be more meaningful and colossal, thus urging the educationists to renegotiate the preset definition, role, and objectives of literacy (Group 1996).

2.2 Media Literacy

The immensely powerful offspring of digital technology, inarguably, is the Media Literacy. Media has come up as more powerful means of entertainment and information and largely acquired the role of constructing the images of concepts in the society. Hence, the question is not whether or not media is good but how to utilize it for a better purpose (Kellner 2002). It offers a more powerful schooling for learning science, ethics, culture politics and much more. Media Literacy is flexible and convenient for learning languages (Lou, Wu et al. 2010). It emancipates learning from a traditional classroom setting and makes it more functional and relevant (Liu, Ho et al. 2011). Media Literacy is essential for students to acquire 21[st]century literacy skills to have global learning of literacy, communication and research (Rahamat, Shah et al. 2017). Although the Media Literacy has often been criticized for developing a less critical

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attitude in the students as it does not possess the authenticity and validity of traditional text literacy (Coiro 2003).

2.3 Rationale

The paper highlights the possible shift in the literacy paradigm. The concept of literacy is expanding beyond reading and writing to achieving the ability of interacting through technology (Pianfetti 2001). The educationists need to gauge the potential indicators of such a change and steer the literacy objectives accordingly. The media literacy is going through a phase of development hence, it is essential for the educators to watch its role in the literacy (Coiro 2003). In countries like Pakistan it is essential to foresee such changes and prepare accordingly. Kellner (2002) believes that without adequate knowledge and training of technology, the institutions will fall victim to ambiguity and chaos. The powerful domain of media literacy is yet out of our curriculum focus. Hence, the study is carried out to evaluate the role of modern technology in the context of curriculum and literacy goals. The area under this study has rarely been exposed to any research in such topics. Consequently, it will further lead to other potential research areas in the same and more related perspectives.

3. Research Methodology

The study is a part of a research project in which the participants were invited to contribute in evaluating the problems they faced in academic writing skills. During the study, the participants were given a comprehensive profile form to obtain from them the correlated data. The participants profiles were cross-tabulated with their responses through IBM SPSS statistics software. In the analysis, the study revealed certain invaluable facts which are presented in this paper.

3.1. The Participant Profiles

The profiles were developed with the help of a comprehensive profile proformas which asked the participants if they used computer for study purpose. If yes, how and why they found it useful in their studies. Similarly, they were also asked if they used social media tools like Face

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book, Twitter etcetera. and how much time they devoted for it. The profiles were further transferred to the IBM SPSS software for cross tabulation.

3.2 The questionnaire

A comprehensive questionnaire was developed after a rigorous procedure of pilot testing. The questionnaire was validated through face-validity; whereas, the reliability was established through test re-test reliability tool.

3.3 Population

The research population scope was delimited to four major general public sector universities situated in the province of Sindh, offering enrollment in the programs of four years BS English or two years MA English. The research population was drawn from following universities: Karachi University, University of Sindh, Shah Abdul Latif University, Khairpur and Shaheed Benazir Bhutto University, Nawabshah.

3.4 Sample

Simple random sampling method was applied to select the participants for the study. As the enrollment strength varied from a university to university; hence a minor variation in the sample size was inevitable. The table given bellow highlights the statistics of research sample.

Table No.01:*Participants Sample details.*

University	SBBU	UoS	SALU	KU	Total
Boys	25	30	30	20	105
Girls	25	25	30	25	105
Total	50	55	60	45	210

SBBU: Shaheed Benazir Bhutto University, Shaheed Benazirabad.

UoS: University of Sindh, Jamshoro.

SALU: Shah Abdul Latif University Khairpur.

KU: Karachi University, Karachi.

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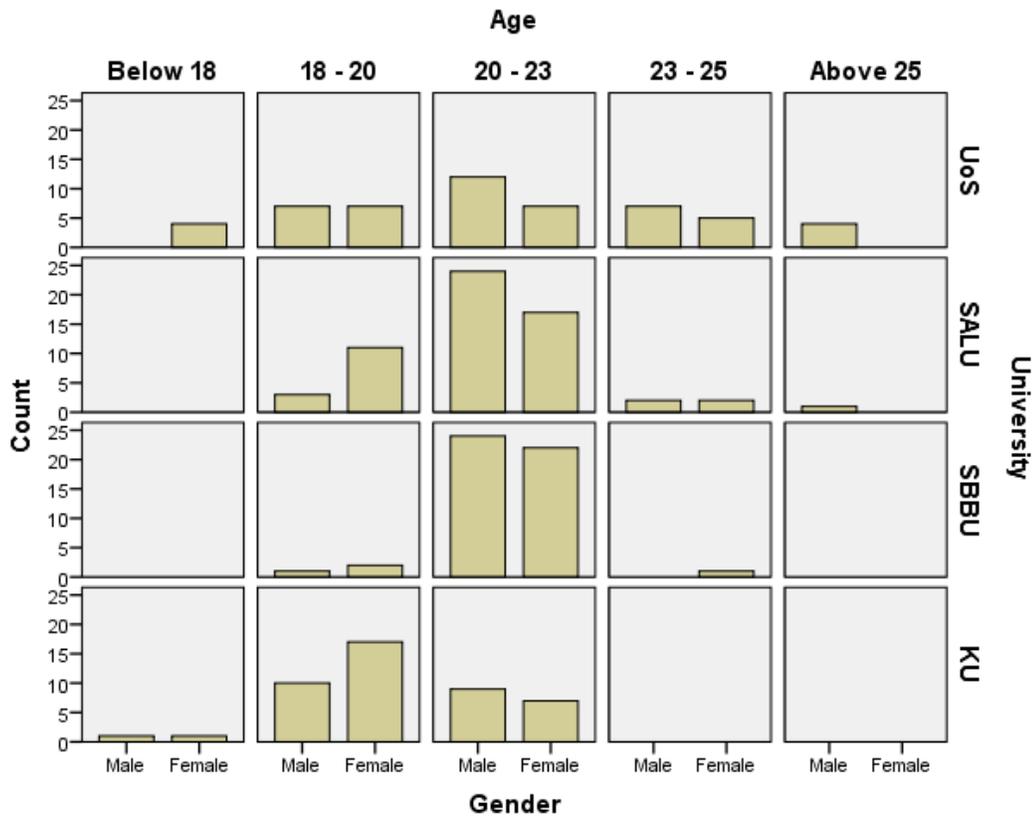
Graph No.01 *Sample details by gender, age and university*

Most of the students had facebook accounts and frequently remained in touch with friends through Facebook/Twitter/Instagram or other social websites. Following figures were discovered about the sample.

Table No.02: *Social Media Cross tabulation*

		Gender		Total
		Male	Female	
Face	Yes	98	84	182
book	No	7	21	28
Total		105	105	210

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The above table shows that 86.66% students are using Facebook, among the non-users is the majority of females 20% who do not use it usually due to the lack of access to the devices or cultural barriers.

Most of the students used Face book less than one hour a day. 64 students use it for one to two hours a day as mentioned in the table given below:

Table No.03: *Facebook user time and gender cross tabulation*

		Gender		Total
		Male	Female	
FB_Time	less than 1 hour	67	53	120
	1 - 2 hour	29	35	64
	2 - 4 hour	4	0	4
	5.00	1	0	1
	N.using	4	22	26
Total		105	105	210

Table No 04: *Frequency Tabulation*

Face book

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	109	51.9	51.9	51.9
	Sometimes	53	25.2	25.2	77.1
	Hardly	10	4.8	4.8	81.9
	Rarely	8	3.8	3.8	85.7
	Never	30	14.3	14.3	100.0

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Total	210	100.0		100.0	

4. Data Analysis

The data was collected in person by the coauthor from the sample. Later the data was transferred to the IBM SPSS program and following results were drawn after applying descriptive statistics and t-test.

Table No. 05: *Response Report on Digital tools will change the literacy definition.*

Digital tools on literacy definition	Mean	% of Total N	N	% of Total Sum
S. Agree	1.4737	18.6%	38	18.3%
Agree	1.5053	46.6%	95	46.7%
UnD	1.5769	12.7%	26	13.4%
Disagree	1.4783	11.3%	23	11.1%
S. Disagree	1.4211	9.3%	19	8.8%
22.00	1.6667	1.5%	3	1.6%
Total	1.5000	100.0%	204	100.0%

Table No. 06: *Group Statistics Digital tools will change the literacy definition.*

	Gender	N	Mean	Response Percentage	Std. Error Mean	t
Digital tools on literacy definition	Male	102	2.6667	97.14%	.22739	0.397
	Female	102	2.8137	97.14%	.29251	

Table value at 0.05 = 1.97166   df = 206   Significant at > 0.05

Table shows that at 0.05 levels the statistical calculations reveal the t-value stands as 0.397 which is less than the table value = 1.97166. Hence, the statement, "Modern writing software will change the writing at all" is accepted.

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Table No. 07: *Response Report on You use modern assessment an editing tools.*

You use modern assessment and editing tools.	Mean	% of Total N	N	% of Total Sum
S. Agree	1.1304	11.7%	23	8.7%
Agree	1.5735	34.5%	68	35.9%
UnD	1.6190	10.7%	21	11.4%
Disagree	1.6102	29.9%	59	31.9%
S. Disagree	1.3846	13.2%	26	12.1%
Total	1.5127	100.0%	197	100.0%

Table No.08*: Group Statistics on You use modern assessment an editing tools.*

	Gender	N	Mean	Response Percentage	Std. Error Mean	t
You use modern assessment and editing tools.	Male	96	2.8542	91.42%	.14583	
	Female	101	3.1089	96.19%	.11160	1.396

Table value at 0.05 = 1.97166   df = 195   Significant at > 0.05

Table displays that at 0.05 levels the statistical calculations reveal the t-value stands as 1.396 which is less than the table value = 1.97166. Hence, the statement, "You use modern assessment and editing tools" is accepted.

Table No. 09: *Response Report on You use computerized software to edit your work.*

You use computerized software to edit your work.	Mean	% of Total N	N	% of Total Sum
Always	1.5455	5.4%	11	5.6%

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	Mean	% of Total N	N	% of Total Sum
Sometimes	1.4894	23.3%	47	23.0%
Hardly	1.4444	13.4%	27	12.8%
Rarely	1.5410	30.2%	61	30.9%
Never	1.5000	27.7%	56	27.6%
Total	1.5050	100.0%	202	100.0%

Table No.10: *You use computerized soft ware to edit your work.*

	Gender	N	Mean	Response Percentage	Std. Error Mean	t
You use computerized software to edit your work.	Male	100	3.5000	95.25%	.12673	0.165
	Female	102	3.5294	97.14%	.12594	

Table value at 0.05 = 1.97166   df = 200   Significant at > 0.05

Table presents that at 0.05 levels the statistical calculations reveal the t-value stands as 0.165which is less than the table value = 1.97166. Hence, the statement, "You use computerized software to edit your work" is accepted.

Table No. 11*: Response Report on You use speech recognizing soft wares for writing.*

You use speech recognizing softwares for writing.	Mean	% of Total N	N	% of Total Sum
Always	1.2143	6.8%	14	5.5%
Sometimes	1.3556	21.8%	45	19.7%
Hardly	1.4286	10.2%	21	9.7%
Rarely	1.6667	30.6%	63	34.0%
Never	1.5238	30.6%	63	31.1%
Total	1.5000	100.0%	206	100.0%

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Table No.12: *Group Statistics on You use speech recognizing softwares for writing.*

	Gender	N	Mean	Response Percentage	Std. Error Mean	t
You use speech recognizing software for writing.	Male	103	3.2913	98.05%	.13978	3.063
	Female	103	3.8350	98.05%	.11132	

Table value at 0.05 = 1.97166   df = 203   Significant at < 0.05

Table depicts that at 0.05 levels the statistical calculations reveal the t-value is 3.063 which is greater than the table value = 19.7166. Hence, the statement, "you use speech recognizing software for writing" is rejected.

5. Discussion

5.1.1 Digital Writing

The fundamental core question receives a decisive response recorded in the table No. 11. The statistics on the table depict that 46.7% respondents have opted for the second option and agree with the statement. Only 11.1% and 8.8% have disagreed or strongly disagreed respectively. Hence it is safe to believe that majority of the students believe that modern software will change the writing.

5.1.2 Technology for Assessment

Table No.05 on using modern assessment tools shows a mixed response. It shows only 8.7% and 35.9% students strongly agree and agree with the statement. Whereas, 31.9% disagree and 12.1% strongly disagreed with the statement Hence the decision can be drawn on the basis of t test. After the application of t-test it is found that modern assessment tools are getting a positive response and the trend is likely to expand.

2.1.3 Technology for Editing

As the table No. 07 displays a negative tendency on the application of modern tools on editing. 30.9% of the students have selected the option "rarely" and 27.6% "never".

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Comparatively only 5.6% and 23% students have chosen the first and second option. Hence, it is clear that most of the students do not use computer software to edit their work.

5.1.4 Speech Recognizing Tools

As the table No. 09 reveals a tilt towards the disagreement, a negative response is evident on using speech recognizing; with the statement, as 34% of the students have selected the option "rarely" and 31.1% "never". Comparatively only 5.5% and 19.7% students have selected the first and second option i.e. "Always" and "Sometimes". Hence, it is clear that most of the students do not use plagiarism software.

5.2 Findings

The study verifies the significant role of technology in education. Majority of the sample recognizes the vast potentialities of digital tools in future literacies.
Most of the students rely digital technology for reading and writing. They find digital tools more convenient and reliable than the traditional ones. The digital text is more common and acceptable.

Speech recognizing programs and digital editing has failed to attract the students. A rare number of students use them occasionally. Accent and the access to the programs and tools is the common hindrance in this regard.

There are many significant evidences convincing a shift in the orientation of literacy. However, in the context where this study was conducted, the digital tools are quite unruly and need attention and further research on making it more useful and productive.

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