Digital Competence of Male and Female B.Ed Trainees in College of Lakhimpur Kheri, Uttar Pradesh : A Comparative Study

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Abstract

Education takes place under the guidance of instructor and teacher. While learning is the acquisition of knowledge or skills through study, experience or being taught. Learning can occur through education, personal development, schooling, training and experience. Earlier learners have only one option of learning but today we have various options to learn. One of the modern learning is digital learning or online learning education. This research paper is based on a Comparative study of male and female trainees of B.Ed in colleges of Lakhimpur Kheri. In the information and knowledge, technology develops rapidly and penetrate deeply into our lives. After the emergence of COVID-19 and its impact on the education industry the concern about digital competence has reached a new height. The purpose of this paper is to provide current overview of digital competence level in B.Ed students of Lakhimpur Kheri District U.P. Major findings include that the majority of a students possess moderate level of competence.

Keywords

Digital competence, B.Ed trainees, Male trainees, Female trainees.

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1. Introduction

Digital Competence : The so-called digital competences are understood as a concept that has generated several lines of research in light of the new technological advances in the field of ICTs. Its vast significance in the area of its application to Educational Technology, which spectrum of action covers various repercussions, both learning, research, recreational and social, among others. For Marzal and Cruz (2018), the digital competences in the training of citizens will provide perspectives of empowerment with respect to intrinsic social aspects such as politics, economy, employability, as well as aspects of new cultural trends and entertainment in this century. The competences understood from the educational sphere, as manifested by Marza and Cruz (2018), are assumed as very useful instruments that allow the mobilization of attitudes, knowledge, and processes, by which students acquire s to facilitate the transfer of knowledge and create innovation. For their part, Iordache, Mariën, and Baelden (2017) propose that digital competences be assumed as the most practical and measurable results of the training processes with respect to the new digital literacy.

The urgency of developing digital competences may face a dilemma in higher education because these proposals are oriented according to the new labour proposals as, we are facing the inevitable extinction of jobs and professions that are not framed under this new scenario, as they suggestively demand that this issue be resolved under mechanisms of objective digital literacy at university level with a permanent updating scheme. Likewise, Ocaña, Valenzuela, and Garro (2018) confirm a similar scenario by correctly outlining that they assume that digital competences are those required in the current context and that need to be conceived under ICT applications and real-time interactivity platforms.

Perspectives of Digital Competence : The effect of the use of the new technologies has created new mechanisms of interactivity in the society which, by default, are transforming the role and functionality of universities, which relative inertia was characteristic. There is no doubt that this effect has brought and will continue to bring more mechanisms that will revolutionize the classic concepts of interaction approach in the globe. In terms of the perspectives that are continually presented in the technological field with regard to the higher education sector, García and Martín (2016) mentioned that there is currently a consensus that covers vast sectors of the society, by which it is conceived that teachers should already possess a series of necessary digital competences with the purpose of exploiting the greatest amount of pedagogical abilities with respect to the new technologies oriented to professional training, structuring of new curricular approaches, and very new trends in the complex field of learning assessment under this aspect.

The outbreak of the corona virus disease 2019 (COVID-19) pandemic affected every country in the world. To contain the transmission of the disease 'lockdown and staying at home' strategies were implemented by many countries, which resulted in the closure of schools and higher education institutions worldwide (Pokhrel and Chhetri, 2021; Sintema, 2020). About 186 countries closed their educational institutions due to this pandemic, and switched from learning at the institution to remote learning using online tools and resources (UNESCO, 2020). Consequently, the entire academic landscape faced massive disruption due to suspension of physically co-located classes. Nevertheless, in the era of "Living with COVID", many alternatives were developed to replace the old system of knowledge transfer, which was characterized by direct physical class room interactions. Thus, the pandemic situation has triggered higher order reforms in teaching and learning process and paved the way to 'digital education' as a strategy to defy the unprecedented health challenge.

2. Need of the Study

This can be explained from the discussion that after covid-19 many research have done on digital competence on students of school level(pre-primary, primary and secondary), higher education level in different areas of the world. The need of this study is that many study

have done on digital competence of trainees and students but not done in Lakhimpur Kheri district area of Uttar Pradesh.

3. Statement of the Problem

The objectives, hypotheses and delimitation of a comparative study of digital competence of B.Ed students of government and self finance colleges of Lakhimpur Kheri district are as follows :

3·1 Objectives

The main objectives of this study are as follows :

1. To compare Digital competence of Male Trainees and Female Trainees of B.Ed in Government college of Lakhimpur-kheri district.

2. To compare Digital competence of Male trainees and Female trainees of B.Ed in Self-finance college of Lakhimpur-kheri district.

3. To compare Digital competence of Total B.Ed trainees in colleges of Lakhimpur-kheri district.

3·2 Hypotheses

The hypotheses to be tested in the light of empirical evidence are as follows :

1. There will be no significant difference in digital competence of male trainees and female trainees of B.Ed in Government college of Lakhimpur Kheri district.

2. There will be no significant difference in digital competence of Male trainees and Female trainees of B.Ed in self-finance college of Lakhimpur Kheri district.

3. There will be no significant difference in digital competence of total trainees of B.Ed in college of Lakhimpur Kheri district.

3·3 Delimitation

following are the two delimitations of this study :

1. This study will be delimited upto Lakhimpur Kheri district only.

2. This study will be delimited upto B.Ed students only.

4. Research Methodology

This study is descriptive in nature. Survey method is used and random sampling method is done to collect data.

4·1   Population and Sample

The participants in the study are aspirants of B.Ed trainees who are enrolled in a Government college, Self-finance college of Lakhimpur Kheri district. All B.Ed trainees of colleges of Lakhimpur Kheri district is the Population. 102 number of students were the sample size for this study which includes 41 male trainees and 61 female trainees in total.

Sampling in this study is done by two way. First one by random method of selecting the college for data collection. Secondly, by random sampling selection of trainees of B.Ed for collecting data as sample.

4·2   Tools of the study

In this study the researcher used One tool of the digital competence given by Shipra Shrivastava and Kiran Lata Dangwal. This tool consists of 60 items (questions) which are further divided into 4 dimensions :

1. Technological/operational/Instrumental
2. Information Processing and Management
3. Pedagogical/knowledge construction
4. Digital citizenship

4·3   Procedure

After sampling, trainees were provided questionnaire to fill accurately along with personal information. Calculate the score with the help of score table given in booklet/tool of Digital Competence.

4·4   Statistics Used

Mean, Standard deviations and t-test is used to analyze the results of the study.

5.   Results

Results of this study are presented as follows :

Table-1 : Data of Government College of Lakhimpur Kheri District

Groups	N	M	S.D	t-value	Significance
Male	34	33.558	7.6857	0.70	Not significant at 0.05 level
Female	16	32.312	4.7528		

Data contained in the Table-1 on preceding page explains the mean score of male and female trainees of B.Ed on digital competence in Government college of Lakhimpur Kheri, U.P. Mean score of male trainees has been found to be 33.558 and mean score of female trainees has been found to be 32.312. Standard deviations has been calculated of male B.Ed trainees which is 7.6857 and standard deviations of female B.Ed trainees is 4.7528. t-value in the table 1 is 0.70 which is not significant to 0.05 level. Thus the hypothesis 1 i.e *there is no significant difference in digital competence of male and female B.Ed students of Government colleges of Lakhimpur Kheri district* has been accepted.
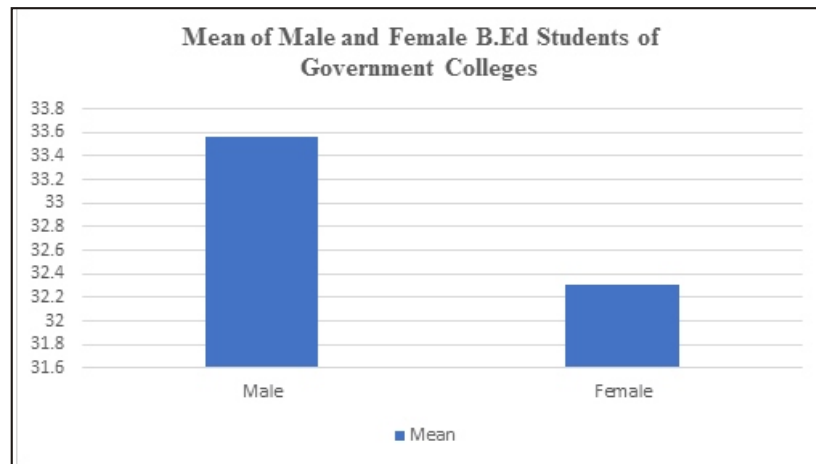

Table-2 : Data of Self-finance College of Lakhimpur Kheri District

Groups	N	M	S.D	t-value	Significance
Male	7	33.857	4.120	1.31	Not significant at 0.05 level
Female	45	31.644	4.185		

The above table explains the mean score of male and female trainees of B.Ed on digital competence in self-finance college of Lakhimpur Kheri, U.P. Mean score of male trainees has been found to be 33.857 and mean score of female trainees has been found to be 31.644. Standard deviations of male trainees is 4.120 and female is 4.185. t-value in the table-2 is 1.31 which is not significant to 0.05 level. Thus the hypothesis 2 i.e *there is no significant difference in digital competence of male and female B.Ed students of Self-finance colleges of Lakhimpur Kheri district* has been accepted.
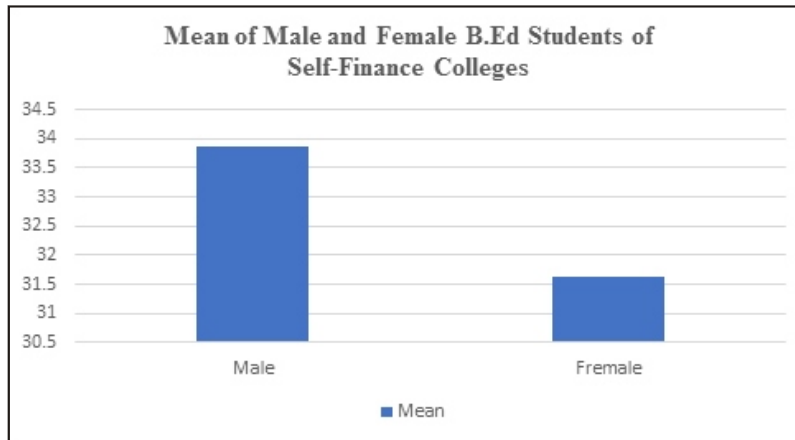
Mean of Male and Female B.Ed Students of Self-Finance Colleges

Table-3 : Data of B.Ed Total Trainees in Colleges of Lakhimpur Kheri District

Groups	N	M	S.D	t-value	Significance
Government	50	33.836	5.080	2.03	Significant at 0.05 level
Self-finance	52	31.942	4.244		

The above table explains the mean score of B.Ed trainees of Government and Self-finance college of Lakhimpur Kheri, U.P. Mean score of Government college has been found to be 33.836 and mean score of Self-finance college has been found to be 31.942. Standard deviations of Government college of Lakhimpur Kheri is 5.080 and standard deviations of Self-finance college is 4.244. t-value in the table 3 is 2.03 which is significant to 0.05 level. Thus the hypothesis 3 i.e *there is significant difference in digital competence of B.Ed trainees of Government and Self-finance colleges of Lakhimpur Kheri district* has been rejected.

Mean of B.Ed Students of Government and Self-Finance Colleges
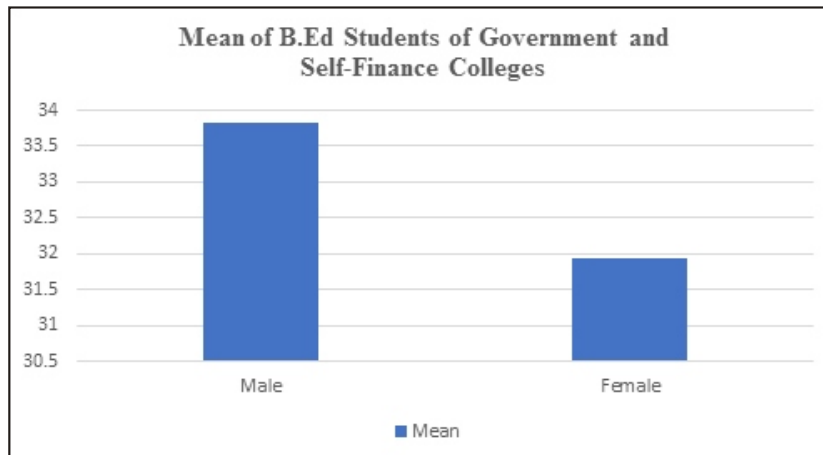
6. Discussion

The survey results highlighted the students of digital competence were average or intermediate level, not lacking in a number of areas which involved technological skills, information processing skills, digitalization. Interestingly, none of the students perceived themselves as experts or advanced level in any of the digital competence areas but there were several reported as intermediate level. According to Chen.W. et al 2010 , the study showed that the students are comfortable with digital tools and techniques but not very efficiently and are less comfortable with specialised technologies. According to Deivam. M. 2016, there is no difference in the mean score of computer literacy and the findings were similar to this study that B.Ed students had moderate level of computer literacy which resembles to the present study .

The results of this study indicate that the development of digital competence of students is linked with their previous experience in the everyday life digital environment. The higher the digital competence level of students on the basis of dealing with everyday life digital tasks, the more likely they were to also develop high competence in other areas related to how they have digital tools, how they identified digital information.

The findings of the study from first two tables include that there is no significant difference between male B.Ed students and female B.Ed students in Government college and Self finance college which is related to the findings of Pandey, K. And Kumar, N. 2021 that the students of aided college and Self-finance college have similar web competence and similar male and female possess equal web competencies. In the last table conclusion derives that there is difference between B.Ed trainees in Government and Self-finance colleges in Lakhimpur Kheri district, U.P. As Government B Ed trainees have high mean score and high standards deviations as compared to Self-finance B.Ed trainees.

7. Conclusion

As regards the first objective, this study reveals that there is no significant difference in digital competence of male and female B.Ed trainees of Government colleges of Lakhimpur Kheri district. There is a positive impact on digital competence of male B.Ed trainees of Government colleges of Lakhimpur Kheri district. There is a positive

impact on Digital competence of female B.Ed trainees of government colleges of Lakhimpur Kheri district. There is a positive impact on digital competence of male and female B.Ed trainees of Government college of Lakhimpur Kheri district. It means that male and female B.Ed students have both similar kind of Digital Competence. Thus our first hypothesis that *"there will be no significant difference in digital competence of male trainees and female trainees of B.Ed in Government college of Lakhimpur Kheri district"* stands validated in the light of empirical evidence collected for this study.

Regarding the second objective, this study shows that there is no significant difference in digital competence of male and female B.Ed trainees of self-finance colleges of Lakhimpur Kheri district. There is a positive impact on digital competence of female B.Ed trainees of self-finance colleges of Lakhimpur-Kheri district. There is a positive impact on Digital competence of male B.Ed trainees of Self finance colleges of Lakhimpur Kheri district. It means that Male and female B.Ed trainees have both similar kind of digital competence. Thus our second hypothesis that *"there will be no significant difference in digital competence of Male trainees and Female trainees of B.Ed in self-finance college of Lakhimpur Kheri district"* also stands validated in the light of empirical evidence collected for this study.

Data collected in this study on the third objective reveals that there is significant difference in Digital competence of B.Ed Trainees of Government and Self-finance colleges of Lakhimpur Kheri district. There is a impact on digital competence of B.Ed trainees of Government colleges of Lakhimpur Kheri district. There is a impact on Digital competence of B.Ed trainees of Self-finance colleges of Lakhimpur Kheri district. It means that B.Ed students have some different kind of digital competence. Thus, our third hypothesis that *"there will be no significant difference in digital competence of total trainees of B.Ed in college of Lakhimpur Kheri district"* is validated in the light of empirical evidence collected for this study.

8.   Educational Implications of the Study

With this study the researcher describes that the findings of the study which indicate that there is no significant difference between male students and female students of B.Ed in Digital competence. There is no difference in male students of Government and self-finance college of Lakhimpur Kheri district in Digital competence

and vice versa with the female students of Government and self-finance college of Lakhimpur Kheri district in Digital competence. They have moderate or intermediate level of digital competence in this area. In general way the researcher can indicate that the B.Ed students of Government and self-finance colleges have moderate level of digital competence but cannot be generalized for the whole area of Lakhimpur Kheri district.

References

Garcia, A. & Martin, M., "Analisis de Las competencias digitales de Los graduados entitulaciones de maestro", *Revista Latinoamericana de Tecnología Educativa - RELATEC*, 15(2), 2016, 155-168, Doi: http://doi.org/10.17398/1695-288X.15.2.155.

Iordache, C. Marien, I. & Baelden, D., "Developing Digital skills and competences : A Quickscan Analysis of 13 Digital Literacy Models", *Italian Journal of Sociology of Education*, 9(1), 2017, 6-30. Doi: http://doi.org/10.14658/pupj-ijse-2017-1-2

Marza, M., & Cruz, E., "Gaming como Instrumento Educativo para una Educacion en Competencias Digitales desde Los Academic Skills Centres", *Revista General de Informacion y Documentacion*, 28(2), 2018, 489-506. Doi: http://dx.doi.org/10.5209/RGID.60805

Ocana- Fernandez, Y., Valenzuela-Fernandez, L., y Garro-Aburto, L., "Inteligencia artificial y sus implicaciones en la education superior", *Prospositos y Representaciones*, 7(2), 2019, 17. Doi: http://dx.doi.org/10.20511/pyr2019.v7n2.274

Pokhrel, S. & Chhetri, R., "A literature review on impact of COVID19 pandemic on teaching and learning", **Higher Education for the Future**, 8, 2021, Article 234763112098348, Doi: http://doi.org/10.1177/2347631120983481

Sintema, E. J., "Effect of COVID19 on the performance of grade 12 students: Implications for STEM education", *Eurasia Journal of Mathematics, Science and Technology Education*, 16, 2020, Doi: http://doi.org/10.29333/ejmste/7893

UNESCO. *COVID-19 Impact on Education*. 2020. https://en.unseco.org/covid19/educationresponse ★