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Digital Disparity in Secondary School Education Teachers in Telangana State, India: Some Issues

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Abstract
The present study explores the digital disparity in secondary school education teachers in Telangana State, India. This study is based on primary data, collected from selected secondary school education teachers from Ranga Reddy and Mahaboobnagar Districts of Telangana State, India by employing multi-stage stratified sampling method during December 2022 to February 2023. To draw empirical results, relevant simple statistical techniques were employed. The study found that relatively balanced distribution of age among the teachers, and they were young. The majority of teachers have postgraduate (PG) qualifications along with B.Ed. The majority (56.3 per cent) have less than 10 years of experience, indicating a relatively young teaching workforce and 71.9 per cent, have between 1 to 5 years of teaching experience by using ICT tools. But, the majority (31.3 per cent) have 1 to 3 computers and 18.7 per cent with 3 to 6 computers in their school. It seems that the lack of computers in their respective school. Therefore, they could not able to prepare ICT aid usage, such as PPT, Internet, and LCD Projector, among respondents. 71.9 per cent of teachers said that ICT is useful for improving their knowledge. Study suggestions are; emerge to enhance the integration of ICT tools in education within the study area. Firstly, addressing the issue of limited computer access in schools should be a priority, with efforts directed towards increasing the number of computers available to teachers and students. This may involve securing funding or partnerships to establish well-equipped computer labs with internet facilities. The Government should have to allocate more budget to digital education for the secondary education. Encouragingly, the reported interest among teachers in using ICT tools highlights the potential for successful implementation. However, to overcome the cost-related barriers, exploring cost-effective solutions and incentives, such as subsidies or grants or donations, could facilitate broader ICT integration and further improve teachers' knowledge and teaching methods.

Keywords: *Digital Diversity, ICT, Secondary Education, Teachers.*

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I. Introduction

Education in India is of paramount importance as it plays a multifaceted role in individual and national development. It empowers individuals with knowledge and skills, enhancing their employability and contributing to personal growth and social mobility. Moreover, education fosters critical thinking, innovation, and problem-solving abilities, vital for addressing complex societal challenges. At the national level, a well-educated population is the cornerstone of economic growth and global competitiveness, as it attracts investments, drives technological advancements, and promotes social cohesion. Additionally, education in India is instrumental in addressing socio-economic disparities and promoting social equity, offering marginalized communities an avenue to uplift themselves and participate meaningfully in the nation's progress. Thus, education serves as a catalyst for individual empowerment, economic prosperity, and social development in India. Blurton, 1999 defines ICT as a varied collection of technological gear and resources that are used to communicate. These are a diverse set of technological tools and resources used to communicate and create, disseminate, store and manage information. According to Bandele, S. O, 2006 whole ranges of new technology, from radio, television, cell phones and computers to network software/hardware, as well as satellite systems and their application, and services associated with them fall under the purview of ICT. ICT has occupied the whole world in every corner of life. However, its effective usage in the educational sector only can yield greater benefits than others. Particularly at different levels of education, effective teaching can be provided to large masses using ICT. While studying the usage of ICT at

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different education levels, the teachers' level of perception about ICT, and their level of utilization are correlated to enhancing the quality of education. (Venkataraman, S and Manivannan, S. 2021). ICT provides access to resources so that teachers can apply new knowledge and skills they have learnt. Communication technology will be able to develop the capacity of the teacher and teacher educator and at the same time, can strengthen the capacity of the teacher educator, which is the fundamental requirement of effective transactional strategy. The effective integration of ICTs into the educational system is a complex, multifaceted process that involves not only technology indeed, given enough initial capital, getting the technology is the easiest part, but also curriculum and pedagogy, institutional readiness, teacher competencies, and long-term financing among others (Govindarajan, K. 2011; Rahman, H. 2014; Kumar, J., & Pasricha, A. 2014).

Importance of ICT in Education

Information and Communication Technology (ICT) in education holds immense significance in India. It revolutionizes the learning process by providing access to a vast array of information and resources, levelling educational inequalities across urban and rural areas. ICT enhances the quality of education through interactive and multimedia content, making learning engaging and effective. Furthermore, it equips students with digital literacy skills, crucial in the modern job market, and aligns education with the demands of a technology-driven world. ICT also enables efficient administrative and management processes in educational institutions. In a diverse and vast country like India, ICT bridges geographical barriers facilitates personalized learning, and fosters innovation in teaching methodologies, ultimately contributing to the country's educational advancement and socio-economic development. *Prof. S. Ramachandram,* former vice chancellor of Osmania University said, that "The government is now talking of Digital India. It should start from the school level itself if the digital divide has to be filled between the digital haves and have-nots. and there was a huge gap between private and public schools in terms of ICT knowledge and their applications at the beginning level. As per *UDISE, 2020-21 report* said that there are 42,917 schools in Telangana. Out of these schools, only 24 per cent have functional computers and 8 per cent have internet connections which is much less compared to the national (40 per cent of schools have functional computers and 24 per cent have internet facilities). To improve ICT tools at the school level, an increasing number of governments in emerging markets are implementing technology solutions in schools aimed at improving teaching effectiveness and student learning outcomes. The Government of Telangana launched an initiative called Telangana State Computer Literacy and Skills in Schools (TS-CLASS) to promote the digitization of education in government high schools. According to Taylor 1987 and Glavin 2002, stated that behavioral issues may arise as a result of pupils learning incorrect abilities, learning at inopportune times, and having limited learning options available to them. Teachers do not generally want to give control to their students. They are instructed that the mark of a good teacher is the teacher who controls the class. Typically, educators are hesitant to relinquish control to their students, as they are often guided by the belief that being an effective teacher entails maintaining control over the classroom.

Gaps in Earlier Studies

The research on digital diversity, which encompasses the variations in digital access, usage patterns, and online experiences among individuals and communities, has made significant strides in recent years. However, a critical research gap exists in understanding the nuanced intersections of digital diversity with socio-economic factors, cultural contexts, and geographic locations. While existing studies have explored aspects of children/students, there is a need for more comprehensive investigations that delve into the evolving dynamics of digital diversity in a rapidly changing technological landscape on teachers. Furthermore, there is a dearth of research that explores the potential implications of digital diversity on broader societal issue, such as education disparities. education is one of the benchmarks for all the aspects. Bridging this gap in the literature would provide valuable insights for policymakers, educators, and technology developers to address the digital divide and promote equitable access and participation in the digital era. Therefore, the present study, explore the digital disparity in secondary school education teachers of Ranga Reddy and Mahaboobnagar Districts in Telangana State, India.

II. Methodology:

The present study mainly depends upon primary data. The primary data has been collected from selected secondary school teachers from Ranga Reddy and Mahaboobnagar Districts of Telangana State, India. To collect the sample from the school, a multi-stage stratified random sampling method was used. In Telangana State, two districts were selected. From each district, two mandals were selected. From each mandal, two schools (one from Government, another from private) were selected and from each school, two teachers were selected randomly for the study. Therefore, the total sample size is 32. For the present study, the data has been collected during the time spanning from December 2022 to February 2023. To study the objective, a simple questionnaire has been used by using 3-point and 5-point Likert scale. For data analysis, relevant simple statistical techniques were employed.

III. Results and Analysis

Table 1: Basic information about teachers

Variable		Frequency	Per cent
District	Ranga Reddy	16	50
	Mahaboobnagar	16	50
Mandal	Kandukur	8	25
	Ibhrahimpatnam	8	25
	Achampet	8	25
	Amrabad	8	25
Gender	Male	16	50
	Female	16	50
Type of School	Govt. School	16	50
	Private School	16	50
Class Teacher	8th Standard	12	37.5
	9th Standard	11	34.4
	10th Standard	9	28.1
Medium of Teaching	English	25	78.1
	Telugu	7	21.9
Type of Job	Govt	17	53.1
	Private	15	46.9

Source: Primary data

Table: 1, shows the basic information about the sample respondents in the study area. The analysis presents data on two districts, Ranga Reddy and Mahaboobnagar, with an equal distribution of 16 occurrences each, representing 50 per cent of the total. concerning mandals, gender, and type of school also have an equal distribution of a sample. In this present study, the distribution of students' class teachers who are class in charge across three standard levels: 8th, 9th, and 10th. Among these standards, 8th standard has the highest representation with 12, constituting 37.5 per cent of the total. The 9th standard follows closely with 11, representing 34.4 per cent, while the 10th standard has the lowest representation, comprising 9 (8.1 per cent). The analysis provides insights into the medium of teaching and job types among a group of individuals. Regarding the medium of teaching, the majority of individuals, constituting 78.1 per cent, are taught in English, while a smaller proportion, 21.9 per cent, are taught in Telugu. In terms of job types, 53.1 per cent of individuals have government jobs, while 46.9 per cent are employed in private schools. It shows a significant preference for English as the medium of instruction.

Table 2: Age of the teachers

Age of the Teacher	Frequency	Per cent
below 25	1	3.1
25 to 35	10	31.3
35 to 45	10	31.3
Above 45	11	34.4
Total	32	100.0

Source: Primary data

In the table:2, shows the age of the secondary education school teachers. Age also plays a significant role in the application and use of ICT tools in the school. The analysis presents the distribution of teachers' ages across four categories. It indicates a relatively balanced age distribution among the teachers, with 31.3 per cent falling into the age categories of both 25 to 35 and 35 to 45, while 34.4 per cent are above 45. The smallest group, representing 3.1 per cent, consists of teachers below the age of 25. Overall, the present study tells us teaching workforce has a diverse age profile, with a significant presence of teachers.

Table 3: Highest Education level of the teacher

Education level	Frequency	Per cent
Up to Intermediate	1	3.1
Degree	4	12.5
PG	6	18.8
B.Ed	13	40.6
PG with B.Ed	7	21.9
Others	1	3.1
Total	32	100.0

Source: Primary data

The table:3 shows the educational level of teachers. It presents the distribution of teachers' highest education levels/qualifications, revealing a diverse range of qualifications within the group. The majority of teachers, constituting 40.6 per cent, have completed a Bachelor of Education (B.Ed), while 18.8 per cent have postgraduate (PG) qualifications. It seems that most of them have teaching experience in their B.Ed practical sessions. Additionally, 21.9 per cent have both PG and B.Ed degrees, indicating a combination of advanced subject knowledge and pedagogical training, which will be more beneficial to the students. Four teachers (12.5 per cent) hold a bachelor's degree, and only one teacher (3.1 per cent) has education up to the intermediate level. This data reflects a varied educational background among teachers, with a substantial portion possessing specialized teaching qualifications (B.Ed and PG with B.Ed), which can potentially contribute to diverse teaching approaches and expertise in the educational setting.

Table 4: Experience of the Teacher

Experience of the Teacher	Frequency	Per cent
below 10 years	18	56.3
10 to 20 years	5	15.6
20 to 30 years	8	25.0
Above 30 years	1	3.1
Total	32	100.0

Source: Primary data

Table: 4 shows the teachers' experience. It shows a diverse distribution within the sample. The majority, constituting 56.3 per cent, have less than 10 years of experience, indicating a relatively young teaching workforce. A smaller percentage, 15.6 per cent, falls within the 10 to 20 years of experience category, while 25.0 per cent have accumulated 20 to 30 years of experience, suggesting a substantial mid-career group. A mere 3.1 per cent of teachers possess more than 30 years of experience, indicating a limited number of highly seasoned educators in the study area. This distribution highlights the varying levels of professional experience among teachers, potentially contributing to a mix of teaching styles, expertise, and perspectives in the educational framework.

Table 5: Experience of the Teacher by using ICT Tools

Experience of the Teacher in ICT	Frequency	Per cent
No experience	6	18.8
1 to 5 years	23	71.9
5 to 10 years	2	6.3
Above 10 years	1	3.1
Total	32	100.0

Source: Primary data

Table: 5 provides insights into the experience of teachers by using ICT. The majority of teachers, comprising 71.9 per cent, have between 1 to 5 years of experience in ICT, suggesting a relatively high adoption of ICT skills within the teaching profession. A smaller portion, 18.8 per cent, have no experience in ICT, while only 6.3 per cent have gained 5 to 10 years of ICT experience. There is also a minor representation of 3.1 per cent who possess over 10 years of ICT experience. This distribution underscores the prevalence of ICT skills among the teaching workforce, with most teachers having some level of familiarity with technology, potentially influencing their teaching methods and ability to integrate technology into the classroom.

Table 6: Availability of computers in the school

No. of computers	**Frequency**	**Per cent**
1-3	10	31.3
3-6	6	18.7
6-9	0	0
9-12	8	25
12-15	7	21.9
15-18	1	3.1
Total	32	100

Source: Primary data

Table 6 represents the availability of computers in the school. Out of a total of 32 observations, the majority (31.3 per cent) have 1 to 3 computers, followed by 18.7 per cent with 3 to 6 computers, 25 per cent with 9 to 12 computers, and 21.9 per cent with 12 to 15 computers. Interestingly, no observations fall within the 6 to 9

computer range, and only a small proportion (3.1 per cent) have 15 to 18 computers. This distribution provides insights into the distribution of computers within the sample and may be useful for further analysis or decision-making related to computer usage.

Table 7: Basic ICT information in the school

Variable	Response	Frequency	Per cent
well-equipped computer lab with internet facility	yes	9	28.1
	no	23	71.9
ICT Use for	Teaching purpose	5	15.6
	Administrative Purpose	12	37.5
	Both	15	46.9
How frequently do you use various ICT aids (PPT/Internet/LCD Projector etc,.)	Every Time	2	6.3
	Occasionally	13	40.6
	Rarely	13	40.6
	Never	4	12.5
facing Problems with ICT	yes	18	56.3
	no	14	43.8
What Kind of problem do you face with the ICT	operational	10	31.3
	maintenance	19	59.4
	other	3	9.4
The usage of ICT in day-to-day teaching helps enhance	yes	22	68.8
	no	10	31.3

Source: Primary data

Table 7 shows the basic ICT information in the school. It shows the pertains to the availability of a well-equipped computer lab with internet facilities, revealing that a majority of the respondents, accounting for 71.9 per cent, do not have access to such a resource, while the remaining 28.1 per cent affirm the presence of a well-equipped computer lab with internet facilities. This distribution highlights a significant digital divide among the respondents, with a substantial majority lacking access to essential technological resources, which could potentially impact their ability to utilize technology effectively in their educational activities.

And, the purposes for which ICT is employed in the educational context. Among the respondents, 15.6 per cent use ICT primarily for teaching purposes, while 37.5 per cent utilize it for administrative purposes. A significant proportion, constituting 46.9 per cent, employ ICT for both teaching and administrative purposes. This distribution underscores the multifaceted role of ICT in education, with nearly half of the respondents using it for a combination of instructional and administrative tasks, indicating its versatility and importance in managing various aspects of the educational environment. ICT aid usage, such as PPT, Internet, and LCD Projector, among respondents. A small proportion, 6.3 per cent, reported using these aids every time, while a substantial portion, 40.6 per cent, use them occasionally and rarely. Additionally, 12.5 per cent of respondents admitted to never using these ICT aids. This distribution suggests a varied level of comfort and familiarity with ICT tools in the teaching process, with a significant number of educators employing them intermittently or infrequently, potentially reflecting varying levels of technological integration in their instructional practices. The data analysis examines whether respondents encounter problems with ICT usage. A majority of respondents, comprising 56.3 per cent, reported facing problems with ICT, while 43.8 per cent indicated not experiencing any issues in their respective schools. This distribution highlights that a significant portion of educators encounter challenges when using ICT, which may encompass technical difficulties, lack of training, or other barriers that impede their effective utilization of technology in their teaching practices. Addressing these challenges could be crucial for enhancing the integration of ICT in education and improving digital literacy among educators. The table also examines the types of problems faced by teachers concerning ICT. A majority of respondents, representing 59.4 per cent, reported experiencing maintenance-related issues with ICT, possibly encompassing hardware or software upkeep challenges. Additionally, 31.3 per cent cited operational problems, which could include difficulties in effectively using ICT tools for teaching or administrative purposes. This distribution underscores that maintenance-related challenges pose a significant obstacle to effective ICT utilization in educational settings, while operational issues also play a notable role in hindering the seamless integration of technology into teaching and administrative tasks. At the end, the table explores the perception of the helpfulness of ICT usage in day-to-day teaching. A substantial majority of respondents, comprising 68.8 per cent, believe that incorporating ICT into their daily teaching practices is beneficial for enhancing the educational experience. Conversely, 31.3 per cent of respondents

expressed the opposite view, indicating that they do not find ICT usage in their day-to-day teaching to be helpful. This distribution underscores a divided perspective among educators regarding the advantages of ICT integration in teaching, emphasizing the importance of addressing concerns and providing appropriate support and training to optimize its impact on the educational process.

Table 8: Teachers' perceptions towards to ICT in the school

Perceptions	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Strongly agree	21.9	46.9	18.8	15.6	15.6	6.3	6.3	6.3
Agree	71.9	50	65.6	68.8	68.8	75	65.6	71.9
Neutral (or) undecided	6.3	3.1	15.6	15.6	15.6	12.5	15.6	9.4
Disagree	0	0	0	0	0	6.3	12.5	12.5
Strongly Disagree	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100

Note: 1. ICT is useful in improving the knowledge Teacher's Perception towards ICT
2. ICT improves my teaching skills and make my presentation interesting
3.Computer made my work more interesting
4. ICT improves the presentation of material in my lessons
5. I get more job satisfaction due to use of ICT in my teaching
6. ICT has given me more confidence to extend my knowledge and make my session more interesting
7. CAI (Computer aided instruction) is interesting than traditional method of instruction
8. CAI provides a student with better opportunity to learn than traditional method of instruction

Source: Primary data

Table 8 delves teachers' perceptions towards to ICT in the school. regarding the utility of ICT in enhancing their knowledge. A significant majority of respondents, representing 71.9 per cent, agree that ICT is useful for improving their knowledge, while 21.9 per cent strongly agree with this notion. A small per centage, 6.3 per cent, remains neutral or undecided on the matter. This distribution indicates a generally positive perception among educators regarding the role of ICT in knowledge enhancement, with the majority acknowledging its value as a tool for professional development and learning, which may encourage further integration of technology into educational practices. Concerning to teachers' perspectives on the impact of ICT on their teaching skills and presentation quality. The majority of respondents, comprising 50.0 per cent, agree that ICT enhances their teaching skills and makes their presentations more interesting, while an even larger percentage, 46.9 per cent, strongly agrees with this statement. Only a minimal percentage, 3.1 per cent, remains neutral or undecided on the matter. This distribution reflects a highly positive perception among educators, suggesting that they believe ICT plays a crucial role in improving their teaching effectiveness and engaging students through more captivating presentations, reinforcing the value of technology in the modern educational landscape. Concerning to teachers' views on how computers impact the interestingness of their work. A substantial majority of respondents, comprising 65.6 per cent, agree that computers make their work more interesting, while 18.8 per cent strongly agree with this statement. Additionally, 15.6 per cent remain neutral or undecided on the matter. This distribution suggests a generally positive perspective among educators regarding the influence of computers on their job satisfaction and engagement, with most acknowledging that computer technology enhances the appeal and engagement of their work, potentially contributing to increased motivation and effectiveness in their roles within the educational context. Concerning to teachers' perceptions of how ICT impacts the presentation of material in their lessons. A significant majority of respondents, comprising 68.8 per cent, agree that ICT enhances the presentation of material in their lessons, while 15.6 per cent strongly agree with this statement. Additionally, another 15.6 per cent remain neutral or undecided on the matter. This distribution underscores a predominantly positive perspective among educators, suggesting that they recognize the value of ICT in improving the delivery and engagement of instructional content, potentially contributing to more effective and engaging teaching methods in the modern educational era. Concerning to teachers' perceptions regarding the impact of ICT on their job satisfaction. A significant majority of respondents, constituting 68.8 per cent, agree that they experience increased job satisfaction due to the use of ICT in their teaching, while 15.6 per cent strongly agree with this statement. Another 15.6 per cent remain neutral or undecided on the matter. This distribution highlights a predominantly positive perspective among educators, suggesting that they believe ICT plays a vital role in enhancing their job satisfaction by potentially contributing to more engaging and effective teaching practices, demonstrating the importance of technology in bolstering teacher motivation and well-being within the educational institution/schools. Concerning to teachers' perceptions regarding the impact of ICT on their confidence levels and teaching approach. A significant majority of respondents, comprising 75.0 per cent, agree that ICT has given them more confidence to extend their knowledge and make their classes more interesting, while a smaller percentage, 6.3 per cent, strongly agrees with this statement. Additionally, 12.5 per cent remain neutral or undecided, and another 6.3 per cent disagree with the statement. This distribution underscores a predominantly positive perspective among educators, suggesting that they feel empowered by ICT to enhance their teaching methods, expand their knowledge, and create more engaging learning experiences, highlighting the role of

technology in boosting educators' self-assurance and teaching effectiveness within the educational landscape. Concerning to teachers' perceptions of the relative interest value between Computer-Aided Instruction (CAI) and traditional instructional methods. A significant majority of respondents, comprising 65.6 per cent, agree that CAI is more interesting than traditional methods of instruction, with 6.3 per cent strongly agreeing with this statement. Conversely, 12.5 per cent disagree, and 15.6 per cent remain neutral or undecided on the matter. This distribution underscores a generally positive perspective among educators regarding the appeal and engagement factor of CAI, suggesting that a substantial majority perceive it as a more captivating and stimulating approach to teaching compared to traditional methods, highlighting the potential benefits of technology in making learning experiences more engaging and effective in the study area. Concerning to teachers' perceptions regarding the effectiveness of Computer-Aided Instruction (CAI) compared to traditional instructional methods in providing students with better learning opportunities. A substantial majority of respondents, comprising 71.9 per cent, agree that CAI offers students better opportunities to learn, with 6.3 per cent strongly agreeing with this statement. In contrast, 12.5 per cent disagree, and 9.4 per cent remain neutral or undecided on the matter. This distribution underscores a predominantly positive perspective among educators, suggesting that they see CAI as a valuable tool for enhancing the learning experience by providing students with improved opportunities to acquire knowledge and skills compared to traditional methods, emphasizing the potential benefits of technology in the secondary education.

Table 9: Teachers' perceptions towards to Cost of ICT tools in the school

Perceptions	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Very high	9.4	9.4	18.8	15.6	9.4	9.4	12.5
High	25	25	50	28.1	34.4	56.3	31.3
Average	56.3	59.4	18.8	46.9	50	28.1	40.6
Low	6.3	6.3	12.5	6.3	6.3	6.3	15.6
Very Low	3.1	0	0	3.1	0	0	0
Total	100	100	100	100	100	100	100

Note: 1. *Installing cost* *2. Operating cost* *3. Maintenance cost* *4. Overdated software*
5. Outdated hardware and software systems cost 6. Lack of technical support for maintenance 7. Other problems

Source: Primary data

Table 9 explores the perceived levels towards to various aspects of ICT implementation in education. Respondents rated the severity of issues related to installing, operating, maintaining, and using overdated software, as well as problems arising from outdated hardware and software systems, a lack of technical support for maintenance, and other miscellaneous issues. It shows that a significant majority of respondents, comprising 59.4 per cent, consider the challenges in operating ICT tools as average, indicating that they perceive the process to have some degree of difficulty but not overly problematic. A notable minority, 25.0 per cent, rate the challenges as high, suggesting a substantial level of complexity or issues during operation. In contrast, 9.4 per cent find the operating challenges to be very high, indicating a particularly challenging experience. A smaller per centage, 6.3 per cent, consider them low, suggesting that they encounter fewer hurdles during operation. However, no respondents rated the challenges as very low. This distribution highlights that while many educators face moderate operational challenges, a significant proportion experiences more considerable difficulties, underscoring the importance of addressing these issues to ensure the effective use of ICT tools in education.

Concerning to maintenance ICT tools in the school. A notable portion of respondents, comprising 50.0 per cent, considers the challenges in maintaining ICT tools as high, suggesting a substantial level of complexity or issues during the maintenance process. Additionally, 18.8 per cent find the maintenance challenges to be at a very high level, indicating particularly challenging experiences. A smaller per centage, 18.8 per cent, rate the challenges as average, suggesting that they perceive a moderate level of difficulty in maintenance, while 12.5 per cent consider them low, indicating fewer hurdles in this aspect. Interestingly, no respondents rated the maintenance challenges as very low. This distribution underscores that many educators encounter significant maintenance challenges, emphasizing the importance of addressing these issues to ensure the continued functionality and effectiveness of ICT tools in education.

Concerning to the overdated software in the school. The distribution underscores that a considerable number of educators perceive using overdated software as a significant challenge, emphasizing the importance of promoting the use of licensed and legally compliant software in educational institution. It seems that lack proper budget allocation, they might have considered the unauthorizes software's. Concerning to outdated hardware and software systems in the schools. A notable proportion of respondents, comprising 50.0 per cent, consider the

challenges associated with outdated systems as average, indicating a moderate level of concern regarding this issue. Additionally, 34.4 per cent view these challenges as high, suggesting a substantial level of complexity or issues associated with outdated technology. A smaller per centage, 9.4 per cent, rates the challenges as very high, signifying particularly challenging experiences. Only 6.3 per cent consider the challenges to be low, indicating fewer concerns in this aspect. Interestingly, no respondents rated the challenges as very low. This distribution highlights that many educators perceive outdated hardware and software systems as a significant obstacle, emphasizing the importance of investing in technology upgrades and maintenance to ensure a more effective and up-to-date educational environment. Concerning to the lack of technical support for maintenance in an educational context. A substantial majority of respondents, comprising 56.3 per cent, view the challenges associated with the absence of technical support as high, indicating a significant level of concern regarding this issue. Additionally, 28.1 per cent perceive these challenges as average, suggesting a moderate level of complexity or issues associated with the lack of technical assistance. A smaller proportion, 9.4 per cent, rate the challenges as very high, signifying particularly challenging experiences, while only 6.3 per cent consider the challenges to be low. This distribution tells us, the critical importance of adequate technical support in educational institutions, as many educators perceive the lack of support as a significant obstacle to effective ICT maintenance.

Table 10: Teachers' perceptions towards to overall cost of ICT in the school

Perceptions	Frequency	Per cent
Very high	6	18.8
High	14	43.8
Average	9	28.1
Low	3	9.4
Very Low	0	0
Total	32	100.0

Source: Primary data

Table 10 shows the teachers' perceptions towards to overall cost of ICT in the school. A significant proportion of respondents, comprising 43.8 per cent, consider the cost of ICT tools to be high, while 28.1 per cent perceive it as average. A smaller per centage, 18.8 per cent, believe the cost is very high, while 9.4 per cent view it as low. Notably, there were no respondents who considered the cost to be very low. This distribution underscores that a substantial majority of educators acknowledge that the cost of ICT tools can be a significant challenge for schools, potentially hindering their adoption and implementation. Addressing these cost-related concerns could be crucial for promoting wider ICT integration in secondary education schools.

IV. Conclusion and Suggestions

The present study concludes that relatively balanced age distribution of age among the teachers, and they were young. The majority of teachers have postgraduate (PG) qualifications along with B.Ed. The majority (56.3 per cent) have less than 10 years of experience, indicating a relatively young teaching workforce and 71.9 per cent, have between 1 to 5 years of teaching experience by using ICT tools. But, the majority (31.3 per cent) have 1 to 3 computers and 18.7 per cent with 3 to 6 computers in their school. It seems that the lack of computers in their respective school. They may not utilize the ICT tools and those who have access to computers, they do not have access in the case of well-equipped computer lab with internet facilities. Therefore, they could not able to prepare ICT aid usage, such as PPT, Internet, and LCD Projector, among respondents. Only small proportion (6.3 per cent), reported using these aids every time, while a substantial portion, 40.6 per cent, use them occasionally and rarely. The Teachers are having more interesting to use the ICT tools. 71.9 per cent of teachers said that ICT is useful for improving their knowledge. Though, the teachers are interesting to use ICT tools in their schools, the cost of installing, operation and maintenance charges are hindering in the study area. Based on the findings of the study, several key suggestions emerge to enhance the integration of ICT tools in education within the study area. Firstly, addressing the issue of limited computer access in schools should be a priority, with efforts directed towards increasing the number of computers available to teachers and students. This may involve securing funding or partnerships to establish well-equipped computer labs with internet facilities. The Government should have to allocate more budget to digital education for the secondary education. Additionally, providing training and support for teachers to effectively utilize ICT aids such as PowerPoint, Internet resources, and LCD projectors is essential. Encouragingly, the reported interest among teachers in using ICT tools highlights the potential for successful implementation. However, to overcome the cost-related barriers, exploring cost-effective solutions and incentives, such as subsidies or grants, donors, could facilitate broader ICT integration and further improve teachers' knowledge and teaching methods.

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