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Challenges of ICT Tools for Managerial Functions in Private Secondary Schools

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ABSTRACT

The study examined the challenges of Information and Communication Technology (ICT) tools for managerial functions among private secondary school administrators in Ilorin metropolis, Kwara State, Nigeria. Both primary and secondary data were used in the paper. Using a standardized questionnaire, the principals of the private secondary schools in the Ilorin Metropolis provided the data. The total population of Private Secondary Schools within Ilorin Metropolis is 141. The entire population was used as a sample for the study. Findings from the study showed that the majority of the respondents strongly disagreed that there is a non-availability of computers in private secondary schools. The respondents disagreed with the unavailability of internet services in the Ilorin metropolis. The majority of the respondents agree that inadequate Information and Communication Technology tools in private secondary schools. The study concluded that fear of technology use among principals, inadequate Information and Communication Technology tools, and power failure are the challenges confronting the effective use of ICT among principals in private secondary schools in the Ilorin metropolis. The paper recommended that the proprietors of private secondary schools in the llorin metropolis should procure more Information and Communication Technology tools. Computer literacy experts should be appointed as the principal. The management should introduce solar energy to save the school from the interrupted power supply.

Keywords: Information Communication Technology, School Administrators, Managerial Tools



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INTRODUCTION

The ongoing evolution of the education system at all levels places increased demands on educational practitioners, such as Principals and other administrators in secondary schools. They try to stay up to date with information technology in the 21st century. Both school administration and the teaching and learning processes need to adjust in response to the world's dynamic changes, where knowledge and information are created quickly. Information and Communication Technology tools play a crucial role as they serve as a means of efficiently disseminating information within and beyond the school community. These tools facilitate communication with stakeholders and assist education planners in effectively attaining educational goals (Agu et al. 2021). According to Agu et al (2021) numerous schools in Nigeria, particularly public primary and secondary schools, still exhibit a low level of application and usage of Information and Communication Technology (ICT). The adept utilization of computers and other ICT tools has become an indispensable aspect of contemporary education. From the perspective of Chris (2015), school administrators who prioritize the incorporation of ICT in their managerial activities are more likely to foster a positive attitude toward utilizing ICT in school management functions. The integration of ICT in school management is crucial, especially for school leaders, to effectively navigate technological changes.

This shift towards Information Communication and Technology necessitates an efficient communication network with staff, students, parents, and stakeholders, as emphasized by Asiabaka (2010). He underscores the significance of employing phones (handsets), email, and WhatsApp to enhance communication. School managers are urged to employ technological tools for personnel management skills and the formulation of school development plans (SDP). For private secondary schools, this means recognizing how ICT tools can complement existing administrative processes. Administrators should conduct a thorough

assessment of their managerial functions and identify areas where ICT tools can enhance efficiency. This involves understanding how these tools can work synergistically with existing processes to achieve better outcomes. There is a vast amount of literature on the use, adoption, application, and implementation of ICT (Seyal et al. 2000). Nonetheless, the majority of previous research has been on the usage of IT generally (Ange and Koh, 1997). Ghavifekr & Rosdy (2015) observes that schools have not widely embraced Information and Communication Technology (ICT) for teaching and learning, and a significant obstacle to its adoption is the scarcity of trained teachers in this skill. The current study looked at the difficulties private secondary school administrators in Ilorin, Kwara State, Nigeria, had when using information and communication technology (ICT) tools for administrative tasks.

METHOD

The paper used descriptive research. The data was collected from the Principals of Private Secondary Schools within Ilorin Metropolis, Nigeria, through the administration of a structured questionnaire and analyzed using descriptive statistics. The Likert scale was used (I = strongly disagree to 5 = strongly agree) for easy analysis using simple percentages. The total population of Private Secondary Schools within Ilorin Metropolis is 141. The entire population was used as a sample for the study. A copy of 141 questionnaires was administered and 126 were retrieved, giving a recuperation rate of 89%. Analysis was carried out using descriptive statistics.

RESULTS AND DISCUSSION

Table 1. Demographic Data of the Respondents

Sex	Frequency	Percent
Male	88	69.8
Female	38	30.2
Total	126	100
Qualification	Frequency	Percent
NCE/ND/DIPLOMA BA/BSC/HND Master Total	8 98 20 126	6.6 7.7 5.8 100

Table 2 shows the challenge of Information and Communication Technology on managerial functions among private secondary school administrators in Ilorin metropolis, Kwara State, Nigeria.

Table 2. Challenges of Information Computer Technology (ICT) on Managerial Functions

	Items	Strongly	Disagree	Undecided	Agree	Strongly	Total	Remark
S/N		Disagree				Agree		
I	Non-availability of	55	45	5	21	Nil	126	Strongly
	computers in	43.7(%)	35.7(%)	4(%)	16.7(%)			Disagree
	private						100(%)	
	secondary schools.							
2	Unavailability of	30	36	16	29	15	126	Disagree
	Internet Services.	23.8(%)	28.6(%)	12.7(%)	33(%)	11.9(%)	100(%)	
3	Inadequate	16	16	9	60	25	126	Agree
	Information	12.7(%)	12.7(%)	7.1(%)	47.6(%)	19.8(%)		•
	Computer	` ,	. ,	` '	` ,	` ,	100(%)	
	Technology tools						. ,	
	in private							
	secondary schools.							
4	Insufficient of	19	34	25	47	I	126	Agree
	Information	15.1(%)	27(%)	19.8(%)	27.3(%)	8(%)	100(%)	
	Computer							
	Technology pundits							
	in the school							
	system.							

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5	Fear of Technology Use among Principals.	20 15,9(%)	37 29.4(%)	18 14.3(%)	44 34.9(%)	7 5.6(%)	126 100(%)	Agree
6	Power failure damages Information Computer Technology tools.	16 12.7(%)	27 21.4(%)	13 10.3(%)	53 42.1(%)	17 13.5(%)	126 100(%)	Agree

Table 2 shows that the majority of the respondents strongly disagree that there is non-availability of computers in private secondary schools. The finding is similar to a previous study by Crossley and McNamara (2016) stated that the scarcity of computers in educational institutions is a pressing concern. This shortage poses a significant hurdle in providing students with essential technological resources for their academic development." On the other hand, one of the biggest obstacles to integrating technology in the classroom was a lack of computers (Albirini, 2006). The respondents disagreed with the unavailability of internet services in the llorin metropolis. The result is similar to Barrett et al. (2019) posited that the absence of reliable internet services in educational institutions and the lack of access to a robust internet infrastructure poses a significant challenge, impeding students' ability to leverage online resources for academic enrichment." Becta (2004) asserts that the lack of hardware, software, or other ICT assets within the school is not always the only reason why ICT resources are inaccessible. It could be caused by several things, including improper software, low-quality technology, poorly organized resources, or a lack of direct access for educators (Becta, 2004). Ghavifekr (2016) found that having no access to the Internet during the school day and a lack of hardware were hampering technology integration in schools.

The majority of the respondents agree that inadequate Information Computer Technology tools in private secondary schools. The result is in line with Fu (2013) stated that the absence of computers in various educational institutions remains a significant challenge in addressing the technological needs of students." Ghavifekr et al. (2016) indicated that lack of access to resources, including home access, is another complex challenge that prevents teachers from integrating new technologies into education Emor (2016) stated that lack of access is the largest barrier and that different challenges to using ICT in teaching were reported by teachers, for example, a lack of computers and a lack of adequate material. Fu (2013) admitted that there is a lack of appropriate hardware, software, and materials.

The majority of the respondents agreed that there are insufficient Information Computer Technology pundits in the school system. The results are consistent with those of Ghavifekr et al. (2016), who stated that the main problems and difficulties that teachers encountered when utilizing ICT tools were: restricted network connectivity and accessibility; low technical support; inadequate training; time constraints; and insufficient teacher competency. According to primary and secondary teachers, one of the biggest obstacles to ICT use in the classroom, according to Pelgrum (2001), is a lack of technical support. Technical difficulties made it difficult for the lesson to be taught smoothly or for the classroom activity to go naturally (Sicilia, 2005). Frederick et al. (2012) observed that there are insufficient skills for managing teaching materials. Balanskat et al. (2006) in Ghavifekr et al. (2016) said that lack of teacher competence may be one of the strong barriers to the integration of technology into education. It may also be one of the factors involved in resistance to change.

Gomes (2005) researched a variety of subjects and concluded that barriers to implementing new technologies in the classroom included a lack of training in digital literacy, a lack of didactic and pedagogical knowledge about how to use ICT in the classroom, and a lack of training on the use of technology in particular subject areas. Fu (2016) cited Honan (2008) who admitted that the limited knowledge and experience of ICT in teaching contexts is also a factor as well as the weakness of teacher training in the use of computers, the use of a "delivery" teaching style instead of investment in modern technology as stated by Ghavifekr et al. (2016). Nevertheless, according to Balanskat et al. (2006), little or incorrect training leaves instructors unprepared and unconfident about implementing comprehensive ICT integration in the classroom. Newhouse (2002) stated, "Teachers need to not only be computer literate but they also need to develop skills in integrating computer use into their teaching/learning programs". According to Newhouse's (2002) research, a large number of teachers lacked computer literacy and were disinterested in the modifications and integration of extracurricular learning that came with integrating computers into the classroom. One major obstacle to their acceptance and implementation of ICT is their lack of technological proficiency (Pelgrum, 2001; Al-Oteawi, 2002).

The respondents also agree that fear of Technology use among principals. The results are consistent with Sicilia's (2005) observation that teachers faced significant obstacles due to technical issues. These technical obstacles included having to wait for webpages to load, being unable to connect to the Internet, having printers stop printing, having computers break, and having teachers. Teachers cannot be expected to overcome the barriers stopping them from adopting ICT without both competent technical support in the classroom and resources available to the entire school (Lewis, 2003). Frederick et al. (2012) observed

that there are insufficient skills for managing teaching materials. According to Becta's (2004) survey, teachers may be deterred from utilizing ICT in the classroom by technical issues if they are concerned about their equipment malfunctioning in the middle of a lesson. According to Sicilia (2005), technical issues create obstacles to instructors' ability to deliver lessons smoothly, regardless of the level of technical support and access they have, regardless of their experience level—from twenty years into the job to recent hires. Most responders concurred that information computer technology tools are harmed by power outages. According to Becta (2004), "technical maintenance will probably not be carried out routinely in a school if there is a shortage of technical help available, which will result in a higher risk of technical breakdowns." However, according to Korte and Hüsing (2007), cited by Ghavifekr et al. (2016), ICT support or maintenance contracts in schools enable teachers to use ICT for instruction without having to spend time troubleshooting hardware and software issues.

CONCLUSION

The study examines how private secondary school administrators in Ilorin, Kwara State, dealt with the obstacles presented by information and communication technology (ICT) instruments for administrative duties. It concluded that fear of technology use among principals, inadequate Information Computer Technology tools, and power failure damages Information Computer Technology tools are the challenges confronting effective use of ICT among principals in private secondary schools in Ilorin metropolis. The paper recommended that the proprietors of private secondary schools in Ilorin metropolis should procure more Information Computer Technology tools. A computer literacy expert should be appointed as the principal. The principals should undergo computer training and re-training programs such as applications and the internet (Microsoft Word, Excel, and CorelDraw). The management should introduce solar energy to save the school from the interrupted power supply.

REFERENCES

- Agu, P. C., Okeke, F. C., Diara, C. F., Nwafor, B. N., & Nwankwo, P. P. (2021). Information Communication Technology (ICT) and Public Primary School Management in Enugu State, Nigeria. The Educational Psychologist, 14(1), 215-227.
- Albirini, A. (2006). Teachers' Attitudes Toward Information and Communication Technologies: The Case of Syrian EFL Teachers. Computers & Education, 47(4), 373-398.
- Al-Oteawi, S. M. (2002). The Perceptions of Administrators and Teachers in Utilizing Information Technology in Instruction, Administrative Work, Technology Planning and Staff Development in Saudi Arabia (pp. 1-373). Ohio University.
- Ang, J., & Koh, S. (1997). Exploring the relationships between user information satisfaction and job satisfaction. International Journal of Information Management, 17(3), 169-177.
- Asiabaka, I. P. (2010). Access and Use of Information and Communication Technology (ICT) For Administrative Purposes by Principals of Government Secondary Schools in Nigeria. The researcher, 2(1), 43-50.
- Barrett, P., Treves, A., Shmis, T., & Ambasz, D. (2019). The Impact of School Infrastructure on Learning: A Synthesis of The Evidence. International Development in Focus. World Bank. Doi:10.1596/978-1-4648-1378-8
- Becta, B. (2004). What the Research Says About Using ICT In Geography. Coventry, Becta.
- Chris, L. A. (2015). Barriers Hindering Implementation, Innovation and Adoption of ICT In Primary Schools in Kenya. International Journal of Innovative Research and Development, 4(2), 2278-0211.
- Crossley, S. A., & McNamara, D. S. (Eds.). (2016). Adaptive Educational Technologies for Literacy Instruction. Routledge.
- Emor, T. N. S. (2016). Benchmarking Access and Use of ICT In European Schools 2006: Final Report from Head Teacher and Classroom Teacher Surveys in 27 European countries.
- Frederick, G. R., Schweizer, H., & Lowe, R. (2012). After the In-Service Course: Challenges of Technology Integration. In Type II Uses of Technology in Education (pp. 73-84). Routledge.
- Fu, J. (2013). Complexity of ICT in education: A Critical Literature Review and Its Implications. International Journal of Education and Development using ICT, 9(1), 112-125.

- Ghavifekr, S., & Rosdy, W. A. W. (2015). Teaching and learning with Technology: Effectiveness of ICT Integration in Schools. International Journal of Research in Education and Science, 1(2), 175-191.
- Ghavifekr, S., Kunjappan, T., Ramasamy, L., & Anthony, A. (2016). Teaching and Learning with ICT Tools: Issues and Challenges from Teachers' Perceptions. Malaysian Online Journal of Educational Technology, 4(2), 38-57.
- Gomes, C. (2005). Integration of ICT in Science Teaching: A Study Performed in Azores, Portugal. Recent Research Developments in Learning Technologies, 13(3), 63-71.
- Lewis, S. (2003). Enhancing Teaching and Learning of Science Through Use of ICT: Methods and Materials. School Science Review, 84(309), 41-51.
- Newhouse, P. (2002). Literature Review: The Impact of ICT On Learning and Teaching. Perth, Western Australia: Department of Education, 45, 53-57.
- Pelgrum, W. J. (2001). Obstacles to The Integration of ICT In Education: Results from A Worldwide Educational Assessment. Computers & Education, 37(2), 163-178.
- Seyal, A. H., Rahim, M. M., & Rahman, M. N. A. (2000). An Empirical Investigation of Use of Information Technology Among Small and Medium Business Organizations: A Bruneian scenario. The Electronic Journal of Information Systems in Developing Countries, 2(1), 1-17.
- Sicilia, C. (2005). The Challenges and Benefits to Teachers' Practices in Constructivist Learning: Environments Supported by Technology. Unpublished Master's Thesis, McGill University, Montreal.

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