



Utilization of Information Communication Technology for the Improvement of Personnel Economics in the Administration of Public Secondary Schools in Rivers State

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Abstract – This study investigated utilization of information communication technology for the improvement of personnel economics in the administration of public secondary schools in Rivers state. The study had two objectives, with corresponding research questions and hypotheses. A descriptive survey design was employed, and the population consisted of 11,258 secondary school teachers from 258 public senior secondary schools in Rivers state, with 4,127 males and 7,131 females. A sample of 383 teachers (163 males and 220 females) was drawn from 15 public senior secondary schools using the Taro Yamane Formula and a two-stage sampling technique of stratified and simple random sampling. Data was collected using a self-structured questionnaire titled "Utilization of Information and Communication Technology and Personnel Economics in Secondary School Administration." The questionnaire underwent face and content validation by three experts and demonstrated good reliability with a Cronbach Alpha coefficient of 0.82. Research questions were answered using mean and standard deviation, while inferential statistics utilized the z-test. The findings indicated a significant difference between male and female teachers in their perceptions of ICT utilization for teachers' supervision and evaluation, highlighting the potential for ICT to improve personnel economics in the administration of public secondary schools in Rivers state. Based on these findings, it can be concluded that implementing various ICT-based strategies such as developmental supervision, contextual supervision, clinical supervision, and collaborative forms of developmental supervision could enhance the effectiveness of teaching staff and overall school productivity in public secondary schools in Rivers state.

Keywords: ICT Utilization, Supervision, Evaluation, Teachers, Personnel Economics.

1. BACKGROUND TO THE STUDY

Personnel economics is the application of economic principles, models, and analysis to the management of human resources in organizations. In the administration of public secondary schools, personnel economics is particularly important in understanding the dynamics of teacher hiring, retention, and compensation (Deneault, 2023; Boyd et al., 2013). One of the major areas of personnel economics in school administration is the labour market for teachers (Deneault, 2023). An analysis of the supply and demand conditions of teachers (Sutcher et al., 2019) can help school administrators identify potential sources of labour, such as nearby universities, or understand potential retention problems such as lack of competition in the labour market (García & Weiss, 2019). Additionally, this analysis can also provide information on how to maximize teacher compensation by understanding the various trade-offs involved, such as between higher wages and better benefits packages (Nguyen et al., 2023).



Another important area of personnel economics in public secondary school administration is the impact of organizational structure on teacher effectiveness. Teachers' history of success has been found to be strongly dependent on the degree of autonomy the job provides, and the extent to which the school's organizational structure and policies are conducive to their performance (Castro, 2023). Understanding how organizational policies impact teacher performance can help school administrators adjust their policies to maximize teachers' effectiveness. Invariably, personnel economics in school administration may serve the interest or need for the identification of the potentials for improving teacher education and training. By understanding the skills that are currently in demand in the teaching profession such as ICT utilization, administrators can provide teachers with on-the-job training that will hone the teachers' skills for competitive service delivery (Isaac-Philips, 2022) and effective career pathing (Tribunalo & Ortizo, 2023). Thus, understanding the long-term career paths of teachers as a function of personnel economics in public secondary schools can also provide insight into potential areas of professional development and growth (Boodhoo, 2022; Oestar, 2022).

Referring to information communication technology (ICT) utilization in this context, ICT has had a significant impact on personnel economics in various educational establishments (Dan, 2019). While ICT has provided various opportunities for improved services and communication in different departments, it has also drastically changed the way personnel economics are managed (Martin, 2020). In particular, ICT has allowed for greater automation of processes such as teacher recruitment, payroll, supervision and evaluation which used to be entirely manual processes requiring a lot of time and resources (Agyei, 2021; Wiyono et al., 2021). Additionally is the issue of teacher autonomy in which ICT can serve to improve it for greater efficiency. The adoption of ICT in saner organisations has also showed that it allowed for faster and more efficient communication between staff and the administration, facilitating smoother and more organized daily operations. As noted by Abubakari et al. (2023), ICT has allowed for greater transparency and communication between staff, administrators and the board of trustees, allowing for the willingness and ability to make more informed decisions. More so, ICT has made it much easier to track data related to personnel economics in most educational establishments. Such data includes employee performance, job satisfaction and recruitment trends (Cahuc et al., 2014), which can be compared and analyzed to understand their impact on economic decisions. ICT has also enabled the use of predictive analytics, which allows for more accurate forecasting of personnel economic trends (Nguyen, 2021).

Overall, ICT has had a reasonable impact on personnel economics in different educational establishments, providing faster and more efficient processing and communication, greater transparency and decision-making and improved data tracking and forecasting. As such, it is imperative for public school administrators hoping to have effective personnel economic decisions to take ICT into account because it takes effective personnel economics for public secondary school to remain competitive and relevant in today's education landscape. Therefore, this study sought to investigate the extent to which ICT can be used to improve personnel economics in the administration of public secondary schools in Rivers state, Nigeria.

Statement of the Problem

The problem of effective personnel economics in the administration of public secondary schools in Rivers state is a pressing issue that needs to be addressed. Administrative inefficiencies have been observed over time in the areas of teacher retention and compensation. This has led to observed inefficiencies on the part of the teachers who attributed it to poor appraisal system and limited teacher autonomy. Moreover, the



failure to utilize ICT has meant that school administrators are not equipped with the tools to make sound financial decisions in an efficient and transparent manner. This has also led to challenges in managing budgeting and forecasting in public secondary schools in Rivers state.

What therefore motivated the researcher is, to ascertain how the utilization of ICT can serve as a strategy for improving personnel economics in the administration in public secondary schools in Rivers state. Since the teaching staff are most affected by ineffective personnel economics, the study intended to know if the utilization of ICT will serve a meaningful purpose for the personnel economics of the male and female teaching staff and how significant are the differences in their responses.

Aim and Objectives

This study was aimed at investigating utilization of information communication technology for the improvement of personnel economics in the administration of public secondary schools in Rivers state. Specifically, the objectives were to:

1. ascertain the extent ICT utilization for the supervision of male and female teachers can improve personnel economics in the administration of public secondary schools in Rivers state.
2. find out the extent ICT utilization for the evaluation of male and female teachers can improve personnel economics in the administration of public secondary schools in Rivers state.

Research Questions

1. What is the extent ICT utilization for teachers' supervision can improve personnel economics in the administration of public secondary schools in Rivers state?
2. What is the extent ICT utilization for teachers' evaluation can improve personnel economics in the administration of public secondary schools in Rivers state?

Hypotheses

The following two (2) hypotheses were tested at 0.05 alpha level.

1. There is no significant difference in the mean responses of the male and female teachers on the extent ICT utilization for supervision of teaching staff can improve personnel economics in the administration of public secondary schools in Rivers state.
2. There is no significant difference in the mean responses of the male and female teachers on the extent ICT utilization for evaluation of teaching staff can improve personnel economics in the administration of public secondary schools in Rivers state.

Conceptual Framework

The concept of this study is anchored on utilization of information communication technology for the improvement of personnel economics in the administration of public secondary schools in Rivers state as diagrammatically represented in figure 1 below.

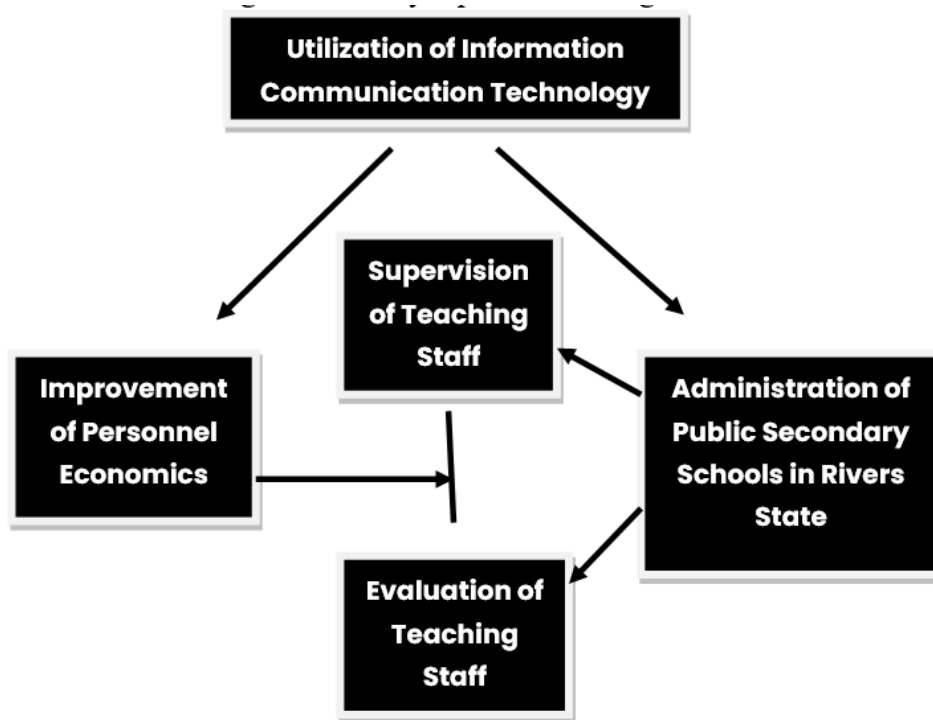


Fig –1: Source: Researchers' conceptualization (2023)

2. LITERATURE REVIEW

Information Communication Technology and Secondary School Administration

Information Communication Technology (ICT) is an expansive umbrella term encompassing almost anytype of technology used to facilitate communication between people, machines, and organizations. According to Abubakari et al. (2023), it includes a wide range of activities — from automating basic tasks, to connecting systems and people to enable powerful, interactive collaboration. In the field of secondary school administration, the utilization of ICT has allowed for a greater level of efficiency and communication between those who manage and teach in the school. This goes in line with Ejimofo and Okonkwo (2022) that with ICT, the organization and communication of certain tasks, such as student scheduling, course registration, attendance tracking and communication between staff, students, and parents have been significantly improved. Recent research (Emmanuel, 2021; Lateef & Muniru, 2020; Mohamoud, 2020; Dauda, 2019; Oyier et al., 2015) highlighted the positive impact that ICT can have on school administration. It has helped to reduce paperwork and administrative burden, as well as increase collaboration efficiency between staff and students. Furthermore, ICT has enhanced opportunities for personalized learning and data-driven instruction. Recent studies of teachers have also highlighted the impact of ICT on secondary school administration. It has enabled them to better plan and manages tasks, as well as easily track and monitor student progress (Kuboja, 2019). Teachers were able to allocate more time and energy to teaching, as ICT allowed them to automate certain administrative tasks. Furthermore, ICT also allowed teachers to increase their engagement with students (Rabah, 2015), developing stronger connections and fostering a



more positive and collaborative learning environment. More so, ICT in secondary school administration has enabled greater collaboration and efficiency between staff, students, and parents (Zenda & Dlamini, 2023), and has allowed for more personalized learning opportunities, as well as increased student engagement. ICT has truly revolutionized the educational landscape and has made secondary school administration more efficient and collaborative than ever before.

Personnel Economics and Secondary School Administration

Personnel economics is a field of economics that focuses on the efficient utilization of human resources within an organization (Ehrenberg et al., 2021). It encompasses a variety of topics, including labour supply, employee motivation, job performance, wages and benefits, and employee retention (Ehrenberg et al., 2021). In recent decades, personnel economics has been applied to the administration of secondary schools, examining the impact of policy on human resource management and school performance (Lemos et al., 2021; Khamidovna & Zulfizar, 2020). Researchers have highlighted the importance of incentives for motivating staff and the need for performance-based pay systems that reward high-performing staff members (Ogada Sr et al., 2020). They have also called for the introduction of clear policies and procedures to ensure compliance with laws, regulations, and standards (Tien & Manh, 2021). Additionally, research has found that factors such as teacher salaries, class size, and school resources have a significant impact on teacher and student outcomes (Barrera-Osorio & Raju, 2017; Mathis, 2017; Hanushek & Woessmann, 2017). Thus, personnel economics is an important part of the administration of secondary schools. It provides critical insight into the impact of policy on human resource management and helps school administrators determine the best strategies to maximize student performance.

Supervision of Teaching Staff and Secondary School Administration

Supervision of teaching staff is an important factor in the successful management and administration of secondary schools. Researchers have widely studied the task of supervisory teaching staff in secondary school administration, noting that the role is multi-faceted and includes the responsibility of managing multiple components, such as making sure that teaching staff are performing in line with the school's aims and objectives, assessing staff performance and providing coaching and feedback to staff members (Wagbara, 2023; Comfort et al., 2017; Kotirde et al., 2014). In addition, studies showed that school administrators in supervisory positions need to possess certain skills and competencies in order to be successful, such as effective communication, problem solving, and the ability to work with diverse teams of people (Kotirde & Yunos, 2015)). Also, school administrators have also highlighted the importance of establishing a strong support network for teachers, noting that this is necessary for the successful implementation of teaching staff supervision initiatives (Esterhazy et al., 2023; Kemmis et al., 2014). Similarly, Iskandar et al. (2023) identified teaching staff supervision as an important role in the successful management of secondary schools. In order to effectively execute this role, Akporehe and Asiyai (2023) added that supervisors in secondary schools in Nigeria need to possess certain skills, such as effective communication and problem-solving, while providing support to teachers and staff members. With this knowledge in place, Nigerian school administrators can better understand the importance of teaching staff supervision and how to facilitate it in their schools.

Evaluation of Teaching Staff and Secondary School Administration



Evaluation of teaching staff and secondary school administration is an important part of improving the quality of education (Musah et al., 2023; Tuytens et al., 2023). This process involves assessing educators and administrators on various aspects of job performance, including teaching methods, classroom management, organization, and professionalism (Daing & Mustapha, 2023). Recent studies have highlighted the importance of this process in increasing student satisfaction and performance. According to Hallinger et al. (2014), teacher evaluations must be conducted in order to ensure quality education, providing administrators with valuable insights in order to improve the learning environment. In more recent studies, teachers and school administrators in Asian countries have discussed the importance of evaluation in improving the learning outcomes of students. According to the study by Mohan (2023), teacher evaluations allow educators to identify areas where improvement is needed and modify teaching methods accordingly. More so, administrators can use the feedback from teacher evaluation to develop initiatives that lead to higher educational standards. Evaluation process, as suggested by different authors (Firestone, 2014; Harris et al., 2014) that it could be used to create a system of 'rewards and recognition' for high-achieving teachers.

In Nigeria, evaluation of teaching staff and personnel economics as a function of secondary school administration is essential to ensure the best quality of education for students. For example, research by Oguguo et al. (2021) and Bichi (2017) has highlighted the importance of teacher evaluation in contributing to improved student outcomes in Nigeria. Through their evaluation processes, administrators can identify areas for improvement, such as inadequate pupil-teacher ratios, insufficient subject knowledge among teaching staff, and outdated teaching practices. It is also important to note that personnel economics can provide important guidance on issues such as salary and career development incentives for teachers, which can be instrumental in attracting and retaining the best talent. For instance, Wellington et al. (2023) as well as Rhinesmith et al. (2023) have highlighted the importance of offering competitive salaries and incentives in order to attract and retain the best teaching staff in both urban and rural areas.

3. THEORETICAL FRAMEWORK

Lazear Theory of Personnel Economics

The theory of personnel economics was reinvigorated by Professor Edward Paul Lazear in 1995. According to Professor Lazear, personnel economics is the study of the workings of the labour market and the determinants of the labour force (Lazear, 1995). The theory takes into account economic concepts such as wages, working hours and job performance and uses them to evaluate the efficiency of personnel (Lazear, 2000; Lazear, 1995). Personnel economics states that personnel decisions should be based on the assessments of job performance (Lazear & Shaw, 2007; Lazear, 1995). This means that employers should consider factors such as an employee's skill set, work experience and work ethic when making hiring and promotion decisions (Lazear, 1995; Lazear, 1991). Additionally, personnel economics states that incentives, such as bonuses and pay raises, should be used to motivate employees to perform better (Lazear, 1995). The theory of personnel economics applies to this study because it looked at the effectiveness of teachers as well. This is because teachers, like all employees to their organizations productivity, are central to this study and the theory on personnel economics demands that they also need to be assessed on the basis of their performance. Therefore, educational institutions are expected to use the principles of personnel economics to evaluate their teachers with the aim of improving their performance. Professor Lazear averred that the utilization of the principles of personnel economics should go hand-in-glove with best

practices and also take into consideration the need for incentives, such as bonuses, which at the end of the day will lead to improved productivity (Lazear & Gibbs, 2014; Lazear, 1995).

4. METHODOLOGY

The descriptive survey design was adopted for this study. The population for the study comprised all the 11258 secondary school teachers in the 258 public senior secondary schools in Rivers State. Out of these 11258 teachers, 4,127 are males and 7,131 are females. (Source: Planning, Research and Statistics Department, Rivers State Senior Secondary Schools Board, Newly Upgraded 2021). A sample of 383 teachers was drawn from the population. This was determined by the Taro Yamane Formula which gave a minimum sample size of 383 secondary school teachers from the population. The respondents were made up of 163 male and 220 female teachers respectively. The simple random sampling technique was used to select 15 public senior secondary schools where the sample was drawn. A self-structured questionnaire titled, 'Utilization of Information and Communication Technology and Personnel Economics in Secondary School Administration Questionnaire (UICT-PESSAQ)' was used for data collection. Face and content validation was ensured by three experts. The UICT-PESSAQ consists of ten (10) items of two (2) sections. This was coded in the four-point Likert type scale of: Very High Extent (VHE), High Extent (HE), Low Extent (LE), and Very Low Extent (VLE) and weighted as 4, 3, 2, and 1 respectively which resulted into a mean criterion of 2.5. The instrument (UICT-PESSAQ) yielded reliability coefficients of 0.82 with the use of Cronbach Alpha reliability method. Mean and standard deviation was used in answering research questions while z-test was used in testing the null hypotheses at 0.05 alpha level. After the administration of the respective copies of questionnaire to the respondents, 147 of the copies were completely filled and retrieved from the male teachers representing 90.18% return rate while 181 of the copies were completely filled and retrieved from the female teachers representing 82.27% return rate. In all, a total of 328 copies of the instrument were retrieved from the respondents representing a total of 85.64% return rate.

5. RESULTS

Answer to Research Questions

Research Question 1: What is the extent ICT utilization for teachers' supervision can improve personnel economics in the administration of public secondary schools in Rivers state?

Table-1: Mean and Standard Deviation scores on the extent ICT utilization for teachers' supervision can improve personnel economics in the administration of public secondary schools in Rivers state.

S/N	ICT utilization for teachers' supervision can improve personnel economics as follows:	Male Teachers (n=147)		Female Teachers (n=181)		Mean Set	Remarks
		\bar{x}	sd	\bar{x}	sd	xx	
1	Increase the effectiveness of teachers who are inept through directive assistance using ICT-based developmental supervision.	2.78	1.67	2.91	1.71	2.85	High Extent

2	Disincentivize teachers from moonlighting through ICT-based clinical supervision.	2.61	1.62	2.75	1.66	2.68	High Extent
3	Provide additional resources for teachers to provide seamless instruction through ICT-based contextual supervision.	2.92	1.71	2.50	1.58	2.71	High Extent
4	Assist on in-service training activities through ICT-based differentiated supervision.	2.90	1.70	2.58	1.61	2.74	High Extent
5	Encourage teachers to effectively combat fatigue through ICT-based collaborative form of developmental supervision.	2.68	1.64	2.61	1.62	2.65	High Extent
	Cluster Mean	2.78	1.67	2.67	1.63	2.73	High Extent

Results in Table 1 showed the weighted Mean values for the male and female teachers on the extent ICT utilization for teachers' supervision can improve personnel economics in the administration of public secondary schools in Rivers state. All the items were remarked as high extent by the respondents ($\bar{x} > 2.5$) as the extent ICT utilization for teachers' supervision can improve personnel economics in the administration of public secondary schools in Rivers state. Thus, the cluster mean set value of 2.73 for all the items implies that when properly implemented, ICT utilization for teachers' supervision will serve as a means of improving personnel economics in the administration of public secondary schools in Rivers state, Nigeria.

Research Question 2: What is the extent ICT utilization for teachers' evaluation can improve personnel economics in the administration of public secondary schools in Rivers state?

Table-2: Mean and Standard Deviation scores on the extent ICT utilization for teachers' evaluation can improve personnel economics in the administration of public secondary schools in Rivers state.

S/N	ICT utilization for teachers' evaluation can improve personnel economics as follows:	Male Teachers (n=147)		Female Teachers (n=181)		Mean Set xx	Remarks
		\bar{x}	sd	\bar{x}	sd		
6	Assist in the improvement of teaching methods through the use of ICT for real-time constructive feedback.	2.84	1.69	2.83	1.68	2.84	High Extent
7	Acknowledge the teaching of excellence through the use of ICT-based outcomes-based evaluations.	2.80	1.67	2.99	1.73	2.90	High Extent
8	Increase the value of teaching through the use of ICT in reporting learners' achievement to different stakeholders through electronic reporting systems.	2.67	1.63	2.55	1.60	2.61	High Extent

9.	Assist teachers in prioritizing student success through test-creation applications.	2.82	1.68	2.60	1.61	2.71	High Extent
10	Establish a professional development plan for teachers through the use of ICT-based surveys.	2.59	1.61	2.55	1.60	2.57	High Extent
	Cluster Mean	2.74	1.66	2.70	1.64	2.72	High Extent

Results in Table 2 showed the weighted Mean values for the male and female teachers on the extent ICT utilization for teachers' evaluation can improve personnel economics in the administration of public secondary schools in Rivers state. All the items were remarked as high extent by the respondents ($\bar{x} > 2.5$) as the extent ICT utilization for teachers' evaluation can improve personnel economics in the administration of public secondary schools in Rivers state. Thus, the cluster mean set value of 2.72 for all the items implies that when properly implemented, there will be a high extent of ICT utilization for teachers' evaluation in the improvement of personnel economics in the administration of public secondary schools in Rivers state.

Test of Hypotheses

Hypothesis 1: There is no significant difference in the mean responses of the male and female teachers on the extent ICT utilization for supervision of teaching staff can improve personnel economics in the administration of public secondary schools in Rivers state.

Table-3: z-test analysis on the mean difference between the responses of the male and female teachers on the extent ICT utilization for supervision of teaching staff can improve personnel economics in the administration of public secondary schools in Rivers state.

Status	N	\bar{x}	sd	Df	z-cal	z-crit value	Level of significance	Decision
Male Teachers	147	2.78	1.67	326	6.01	1.96	0.05	Significant difference
Female Teachers	181	2.67	1.63					

Results in Table 3 showed that the male and female teachers have mean and standard deviation scores of 2.78 and 1.67 as well as 2.67 and 1.63 respectively. With a degree of freedom of 326, the z-calculated value of 6.01 was higher than the critical z-test value of 1.96. Therefore, the null hypothesis was not retained. By implication, there was a significant difference between the mean responses of the male and female teachers on the extent ICT utilization for supervision of teaching staff can improve personnel economics in the administration of public secondary schools in Rivers state.

Hypothesis 2: There is no significant difference in the mean responses of the male and female teachers on the extent ICT utilization for evaluation of teaching staff can improve personnel economics in the administration of public secondary schools in Rivers state.

Table-4: z-test analysis on the mean difference between the responses of the male and female teachers on the extent ICT utilization for evaluation of teaching staff can improve personnel economics in the administration of public secondary schools in Rivers state.

Status	N	\bar{x}	sd	Df	z-cal	z-crit value	Level of significance	Decision
Male Teachers	147	2.74	1.66	326	3.29	1.96	0.05	Significant difference
Female Teachers	181	2.70	1.64					

Results in Table 4 showed that the male and female teachers have mean and standard deviation scores of 2.74 and 1.66 as well as 2.70 and 1.64 respectively. With a degree of freedom of 326, the z-calculated value of 3.29 was higher than the critical z-test value of 1.96. Therefore, the null hypothesis was not retained. By implication, there was a significant difference between the mean responses of the male and female teachers on the extent ICT utilization for evaluation of teaching staff can improve personnel economics in the administration of public secondary schools in Rivers state.

6. DISCUSSION OF FINDINGS

The findings of this study are discussed under the following subheadings:

The Extent ICT Utilization for Teachers' Supervision can Improve Personnel Economics in the Administration of Public Secondary Schools in Rivers State

It was found that there was significant difference between male and female teachers in their responses on the extent ICT utilization for teachers' supervision can improve personnel economics in the administration of public secondary schools in Rivers state. Also, ICT utilization for teachers' supervision can, to a high extent, increase the effectiveness of teachers who are inept through directive assistance using ICT-based developmental supervision and assist on in-service training activities through ICT-based differentiated supervision. Others are: provide additional resources for teachers to provide seamless instruction through ICT-based contextual supervision, disincentivize teachers from moonlighting through ICT-based clinical supervision and encourage teachers to effectively combat fatigue through ICT-based collaborative form of developmental supervision. The foregoing is in tandem with recent studies in which researchers have found evidence to support the notion that there is a significant difference between male and female teachers in their responses to the extent of ICT utilization for teachers' supervision (Okah-Tim, 2023; Ategwu et al., 2022). This discovery suggests that gender differences can influence attitudes towards technology adoption. However, contradicting the foregoing, Danko et al conducted a similar study in 2020 and found no significant difference between male and female teachers in their responses to ICT utilization for supervision. Danko et al argue that while gender may play a role in individual technology preferences, it does not necessarily affect the effectiveness of ICT-based supervision.

Furthermore, Maher and Zollman (2021) argue that ICT utilization for teachers' supervision can enhance the effectiveness of struggling teachers through guided support using ICT platforms. However, Adarkwah (2021) presents a contrasting viewpoint, suggesting that ICT-based supervision may not be effective for all



teachers. Adarkwah's study among experienced teachers found that some responded positively to differentiated supervision through ICT, while others preferred more traditional forms of support. Adarkwah emphasizes the importance of tailoring supervision approaches to individual teachers' needs and preferences rather than solely relying on ICT-based methods.

The Extent ICT Utilization for Teachers' Evaluation can Improve Personnel Economics in the Administration of Public Secondary Schools in Rivers State

It was found that there was significant difference between male and female teachers in their responses on the extent ICT utilization for teachers' evaluation can improve personnel economics in the administration of public secondary schools in Rivers state. Also, ICT utilization for teachers' evaluation can, to a high extent, improve personnel economics by acknowledging the teaching of excellence through the use of ICT-based outcomes-based evaluations and assisting in the improvement of teaching methods through the use of ICT for real-time constructive feedback.. Others are: assisting teachers in prioritizing student success through test-creation applications, Increasing the value of teaching through the use of ICT in reporting learners' achievement to different stakeholders through electronic reporting systems and establishing a professional development plan for teachers through the use of ICT-based surveys. This finding resonates with the findings of Hatlevik (2017) that there is a significant difference between male and female teachers in their responses to the extent they embrace ICT utilization for teachers' evaluation. This finding contradicts the notion that there is a significant difference between male and female teachers in their responses to ICT utilization for evaluation. On the other hand, a study by Teo et al. (2015) found that only a minor statistical significance difference exist between male and female teachers in their responses to ICT utilization for teachers' evaluation. They argued that the gender of the teacher does not really play a significant role in their willingness to embrace ICT-based evaluation methods. In addition to the gender differences, several studies have supported the finding that ICT utilization for teachers' evaluation can improve personnel economics. For example, Magtolis (2021) found that utilizing ICT-based outcomes-based evaluations can acknowledge teaching excellence.

7. CONCLUSION AND RECOMMENDATION

Based on the findings of this study, it can be concluded that there is a need for public secondary schools in Rivers State to prioritize teaching excellence and utilize ICT for personnel economics improvement. Employing various ICT-based strategies, such as developmental supervision, contextual supervision, clinical supervision, and collaborative forms of developmental supervision, can enhance the effectiveness of teaching staff and overall school productivity. Implementing a professional development plan that integrates ICT-based outcomes-based evaluations, real-time constructive feedback, test-creation applications, electronic reporting systems, and surveys can improve teaching methods and prioritize student success. By discouraging moonlighting and providing increased support for teachers, schools can foster an environment that promotes growth and improvement.

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