



PERCEPTION OF SECONDARY SCHOOL TEACHERS ON THE APPLICATION OF RESEARCH FINDINGS IN CLASSROOM PRACTICES: IMPLICATIONS FOR SUSTAINABLE DEVELOPMENT

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ABSTRACT

The study investigated the problem of secondary school teachers in the application of research findings to classroom practices. A descriptive research design of the survey type was used. The population of the study consisted of all public secondary school teachers from 10 secondary schools in Akoko South West Local Government Area of Ondo State. A self-developed questionnaire of 4 scale rating was used ($r=0.65$). Three research questions were raised and answered with mean and standard deviation, while two hypotheses were formulated and tested at 0.05 level of significance using t-test statistics. Among other findings, the result revealed non-involvement of most secondary school teachers in in-service training programmes. Also, there are no Internet facilities for teachers in rural areas to access research information. Some of the implications of the findings are that most teachers do not have the opportunity to attend conferences, seminars, and capacity-building programmes that will enhance their professional development, especially in the application of research findings to classroom practices. These ultimately have implications for sustainable development. Consequently, some recommendations were made to the government and other stakeholders in the education sector.

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1. Introduction

Education for Sustainable Development (ESD) permits every human being to acquire the knowledge, skills, attitudes, and values needed to shape a sustainable future (UNESCO, 2018a). According to Sterling (2008), the concept of sustainable education refers to a change in culture in the way education and learning can be sustained. It focuses on imparting knowledge and empowering students to become real-world problem solvers. Sustainable education refers to activities or processes for acquiring or sharing knowledge or skills, developing the powers of reasoning, and intellectually preparing oneself or others for life (Thesaurus, 2021). Many of today's problems need a key shift in thought and behaviour to support sustainable living which can be achieved through research. Sustainable development refers to the development that meets the expectations of the present without compromising the ability of future generations to. The role of research in sustainable development is that research will help the decision-making process of the education stakeholders easy.

Classroom practices are the daily activities that go on in the teaching-learning process in the classroom. These activities include classroom management, pedagogy, learning activities as well as students' engagement in learning and the use of instructional time. According to (Darling-Hammond et al., 2020) classroom practices are elements and processes of teaching, with the elements being the goals, objectives, tasks, discourse, and interactions, while the processes are the planning for instruction, implementation of the plan, assessment, and reflection. (Schildkamp, 2020) described classroom practices as a process which involves multiple agents and their interactions within the classroom as a system. The major point in all these studies is that research is finding ways for understanding assessing and improving the quality of classroom practice. Wenglinsky (2001) posited that classroom practices have the greatest contribution to student learning outcomes because the classroom is the place where students and teachers interact and discuss what to do in this place most strongly affects student learning outcomes. (Wolff et al., 2020) argued that classroom practices are those teaching and learning activities and interaction processes within a classroom system that enable contextualization of the content that is taught and learnt. Classroom practices require dynamic interactions influenced by internal and external factors such as research. Teachers play a crucial role in promoting sustainable development. The role of research in sustainable development cannot be overemphasized. Kothari (2004) described research as answers to inquiries and solutions to issues. It is a purposive examination. Research has unique significance in solving several operational, and planning-related problems in education.

Research is an indispensable tool in improving teaching and learning. Research findings leads to improvement of knowledge, planning and development. Research findings are the results obtained from research activities. The only possible way to advance as a nation is for our researchers to engage in the process of finding answers to certain questions needed in national planning and sustainable development. The importance of research in education cannot be overemphasized. Research aids in decision-making. The result obtained from it enables people to make informed decisions in every sector of life, especially in the classroom. Research is an important instrument in finding answers to unsolved problems. Research findings are the result arrived at from data analysis and it denotes the real relationship between or among variables being examined by the researcher. Everyday education stakeholders, Government, parent, guardian, teacher, and student are faced with poor performance in school subjects in various external examinations such as the West African Examination Council (WEAC). This poor performance can be due to poor teaching methods, students' lack of determination, a bad school

environment, and lack of laboratory and so on. Research helps teachers describe what is wrong, how to make students understand better and improve on teaching methods that might be more helpful than others (Moyebi, 2023). The Government of Nigeria have spent several large sums of money in implementing various laudable program to improve students learning outcomes in various examinations, but the reverse is the case. Many workshops, seminars and conferences organized by the Universal Basic Education program to improve the capacity of teachers seem not to yield the desired results because of the lack of application of research findings. This is because the improvement of learning outcomes is gotten from research findings. According to Dimson and Uzoma (2013), research is key for advancing knowledge progress and enabling a man to improve on his activities. The objective of research according to Nwana in Ilogho (2022) is to search for facts, and information to solve the existing identified problems that befall a particular system, especially the education sector. Moyebi (2023) explains that through research various teaching and learning approaches that improve students learning were obtained and recommendations were made. Such approaches are helpful in improving the teaching-learning process to enhance students learning and improve their performance. However, from classroom observations and literature available there is a great discrepancy between research findings and application of such findings in classroom practices. There is a wide gap between the discoveries in research and the application of such findings to solve problems in the classroom.

Dimson and Nzoma (2013) pointed out that most of the research findings are not available and accessible to the classroom teachers not to talk of teachers applying such findings in the classroom. Most of the discoveries are hidden under conference proceedings and journals where they were published. Research is the key to driving innovation and improvements and is used by the education system to drive change in various areas including classroom practice. Research is of no use unless it gets to the people who need to use it (Moyebi, 2023). The gap is how these research findings get to the right people for application. Hence there is a need to find out how research findings are disseminated and their application in the classroom practice.

Different research has shown reasons why research findings are not used in the classroom setting among secondary school teachers. Njoku (2004) and Onyegebu (2004) conclude from their studies reasons for non-application of research findings to include, lack of conference and seminar attendance, poor knowledge to access journals where the research findings are published and discussed, Njoku (2004) further stressed that non-application of research findings is a challenge and its due to overcrowded classrooms, poor teachers knowledge, lack of learning facilities, poor teaching strategies, lack of information Technology facilities, poor internet

access among secondary school teachers. This called for the need to understand the challenges secondary school teachers encounter for effective application of research findings become inevitable. This is because adequate knowledge of the research findings will enable the teachers to apply such to the classroom environment. Hence, this study will be useful to guide the teachers to apply the research findings in the teaching-learning process in the classroom.

2. Research Questions

The following research questions were raised to guide the study:

1. What is the level of involvement of secondary school teachers in research activities?
2. What is the level of accessibility of research findings among secondary school teachers?
3. What are the challenges militating against the application of research findings in secondary school?

3. Research Hypotheses

1. There is no significant difference in the application of research findings based on the gender of the teacher.
2. There is no significant difference in the application of research findings based on the location of the school.

4. Methodology

The study adopted a descriptive survey design. The population consist of all secondary school teachers in the Akoko South-West Local Government Area. The sample consists of two hundred (200) secondary school teachers using a stratified random sampling technique based on the location of schools. The instrument used for the study is a self-structured questionnaire on a four-point Likert scale. It has two sections A and B. Section A is made up of demographic variables while the section consists of 18 items divided into three subsections.

The instrument was face and content validated by experts in Test and Measurement in the Department of Guidance and Counselling, Adekunle Ajasin University, Akungba-Akoko. The reliability was established using the test-retest method. The instrument was administered to teachers outside the target population, and two sets of data were obtained after two-week intervals. The data was subjected to Pearson Product Moment Correlation and yielded a correlation coefficient of 0.82. The instrument was administered to the respondents with the aid of two research assistants' All questionnaires were retrieved within a day. Mean was used to

answer the research questions, while a t-test of significance was used to analyse the hypotheses. A grand mean of 2.50 was used for the decision. Any item with a mean above 2.5 and above is considered high while any item below 2.5 is considered low.

Table 1: Mean responses on attendance at conferences, seminars, and other research-related activities

S/N	ITEMS	\bar{x}	VC	DECISION
1.	Teachers always attend conferences in my school	1.45	2.50	LOW
2.	Teacher used to attend seminars in my school	1.69	2.50	LOW
3	Teachers attend workshops in my school	2.0	2.50	LOW
4	There is always training on teaching in my school	1.75	2.50	LOW
5.	I attend other research related programs in my school	1.85	2.50	LOW

The results from Table 1 revealed that the mean responses of teachers' conference attendance is 1.45, seminar attendance is 1.69, workshop attendance is 2.0, training attendance is 1.75 and research-related activities is 1.85. This implies all items about teachers' attendance are below the criterion mean of 2.50. This means teachers of secondary schools are not really involved in conferences, seminars, workshops and training attendance.

TABLE 2: Teacher's responses on accessibility of research materials

S/N	ITEMS	\bar{x}	VC	DECISION
6	Teacher has their own journal	1.50	2.50	LOW
7	Journal and other research materials are available in the school	1.60	2.50	LOW
8.	There is impressed to buy research materials	1.85	2.50	LOW
9	My school has library with journals, projects and others	1.70	2.50	LOW
10	My school subscribe to journals and conference proceedings	1.55	2.50	LOW

Table 2 revealed a low mean cluster in all the items. This implies teachers do not have access to conference materials and proceedings. The library in the school too is not equipped with research materials.

Table 3: Mean Response of Secondary School Teachers on the Problem of Research Finding Application in Classroom Practices

S/N	ITEM	\bar{x}	VC	DECISION
11	There is no enough training for research	3.00	2.50	High
12	No development of self through Government sponsorship	3.52	2.50	High
13	No motivation to attend conferences	3.19	2.50	High
14	No extra pay for additional qualification	2.64	2.50	High
15	Misunderstanding of the concept of research	2.96	2.50	High
16	No computer to access internet, research findings	3.08	2.50	High
17	Lack of knowledge of the need for research findings	3.45	2.50	High
18	No electricity / lack of funds	3.0	2.50	High

Table 3 showed all items means are above the criterion mean which indicates that there are problems among secondary school teachers in the application of research findings.

Hypothesis 1: There is no significant difference between male and female teachers in their perception of the application of research findings in classroom practices.

Table4 T-test analysis of mean of female and male teachers' perception of the application of research findings in classroom practices.

Group	N	MEAN	SD	df	t-cal	t-crit	Decision
Male	80	18.93	3.85	198	1.91	1.96	Accept
Female	120	18.26	3.28				

Table 4 showed that the mean scores of male and female teachers are 18.93 And 18.26 respectively. When t-test analysis was employed to compare these scores a calculated t-value of 1.91 was obtained. This means that there is no significant difference between male and female teachers' perceptions of the application of research findings.

Hypothesis 2: There is no significant difference between urban and rural school teachers in their perception of the application of research findings in the classroom.

Table 5: T-test analysis of the mean of urban and rural teachers on their perception of application research findings in classroom practice

Group	N	MEAN	SD	Df	t-cal	t-crit	Decision
Urban	100	65.3	10.99	198	6.84	1.96	Reject
Rural	100	74.01	6.3				

Table 5: shows that the calculated t-test is more than the tabulated one, therefore the null hypothesis is rejected. The result of the test reveals the difference between the mean scores of urban and rural teachers on their perception of application research findings in classroom practices.

5. Discussion

From the results in Table 1, most of the secondary school teachers do not participate in conferences, seminars, workshops, and research-related activities. This implies that the teachers do not apply research findings. If the teachers do not attend how possibly would they apply research findings in classroom practices? How useful is research if does not get to the hands of the users to solve problems? This finding is in line with (Dimson & Uzoma, 2013) who stressed that primary school teachers should be involved in the attendance of conferences, seminars, workshops, and research-related activities to be able to apply the research findings in classroom practice.

The findings of Table 2 revealed that teachers do not have access to research findings. This implies teachers do not have access to conference materials and proceedings. The school libraries are not well equipped with research materials. The schools are not buying research proceedings, how would the teachers have access to the solutions provided through research activities to sustain development? Findings from Table 3 showed some of the challenges that make it difficult for teachers to attend conferences, seminars, workshops, and other research-related activities are lack of funds in the school, no motivation from the schools to teachers, no remuneration for additional qualifications, misunderstanding the concept of research, lack of computer and internet facilities to access online research materials. Teachers seem dormant, with no capacity-building training (Moyebi, 2023). No teacher can give out what he does not have, so this called for more collaboration with the government to provide ways to enhance

teacher's attendance and access to research findings. These findings agree with Nwosu (2004), (Dimson & Uzoma, 2013); Moyebi (2023).

The findings in Table 4 revealed that there is no significant difference in the perception of male and female teachers in the application of research findings in classroom practice. Most teachers seem not to attend conferences, workshops, seminars, and other research-related activities and do not have access to these research findings because of no motivation, no internet facilities and so on. This is in line with Ilogho (2022). Further findings in Table 5 showed that there is a significant difference in the perception of teachers in rural and urban schools. This could be a result of the fact that most conferences, workshops, seminars, and trainings are done in the urban areas which gives more opportunities to urban teachers to attend and have access than rural teachers. This implies the challenges of the application of research findings are more in rural schools than urban ones.

6. Conclusion

The findings revealed that most teachers in secondary schools do not attend conferences, seminars, workshops, and other research-related activities, especially in rural schools. They do not also have access to the research findings from conferences organized. The problems of application of research findings in classroom practices are due to, no training in research activities, no remuneration for additional qualification, no motivation from authorities and Government, no internet facilities, and no sponsorship for attendance. Research is a vital tool in sustainable development. Research findings are indispensable tools for improving teaching-teaching-learning process in classroom practice. To sustain development, there is a need to make research attendance compulsory once a term or year to make access for teachers to research findings and improve their classroom practices. Results revealed the non-involvement of most secondary school teachers in in-service training programmes. Also, there are no Internet facilities for teachers in rural areas to access research information.

7. Implication for Sustainable Development

The relationship between research and sustainable development is crucial. There will be no sustainable development if teachers and stakeholders are not involved in research and talk less about applying the research findings in classroom practice. Some of the implications of the findings suggest that most teachers do not have the opportunity to attend conferences, seminars,

and capacity-building programmes that will enhance their professional development, especially in the application of research findings to classroom practices. These ultimately have implications for sustainable development and therefore something must be done to curb the problems of the application of research findings in the classroom by government, education stakeholders, and principals so that the application of research findings will be improved for sustainable development.

8. Recommendations

Based on the findings of the study the following recommendations were made:

1. The government should sponsor research activities in public secondary schools.
2. All schools should encourage teachers to engage in research activities by providing an enabling environment to enhance the application of research findings in classroom practice.
3. Rural schools should be provided with facilities to give teachers access to research findings.
4. Researchers should donate research materials to schools to enable teachers to have access to research findings and apply such innovations in classroom practice.

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