

ANALYZING THE EFFECTIVENESS OF EDUCATIONAL STRATEGIES THROUGH KNOWLEDGE MANAGEMENT PRACTICES

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ABSTRACT: The study analyzed knowledge management practices and evaluated the effectiveness of current educational strategies in public senior secondary schools in Obio/Akpor Local Government Area of Rivers State, Nigeria. The instrument used for data collection was the Assessment of Knowledge Management Practices and the Effectiveness of Current Educational Strategies Questionnaire (AKMPQ), developed by the researchers. The instrument was validated by experts in Measurement and Evaluation and Educational Management from Ignatius Ajuru University of Education, Port Harcourt. It comprised four sections, including demographic information and items on knowledge management practices. A reliability coefficient of .810 was obtained, indicating that the instrument was reliable. The population of the study consisted of 1,337 respondents, which included 1,309 teachers and 28 principals from public senior secondary schools. Copies of the questionnaire were administered with the approval and cooperation of the school principals. Data collected were analyzed using frequency counts and percentages. The findings identified key knowledge creation and conversion practices, factors influencing the implementation of knowledge management, its relationship with organizational performance, and challenges affecting its successful adoption. Based on these findings, the study recommended encouraging teachers to adopt innovative teaching methods and share professional knowledge through mentoring and workshops. It also recommended the digitization of instructional resources, linking staff performance evaluation to knowledge management activities, improving ICT and library facilities, and developing policies that promote knowledge sharing as a strategy for enhancing organizational effectiveness and students' academic performance.

Keywords: Assessment, Knowledge Management Practices, Effectiveness, Current Educational Strategies.

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INTRODUCTION

Knowledge management efforts have a long history, including on-the-job discussions, formal apprenticeships, discussion forums, corporate libraries, professional training, and mentoring programs Arop et al. (2019). With increased use of computers in the second half of the 20th century, specific adaptations of technologies such as knowledge bases, expert systems, information repositories, group decision support systems, intranets, and computer-supported cooperative work have been introduced to further enhance such efforts. In 1999, the

term personal knowledge management was introduced; it refers to the management of knowledge at the individual level.

In the enterprise, early collections of case studies recognised the importance of knowledge management dimensions of strategy, process and measurement Arunima and Pakkeerappa (2022). Key lessons learned include people and the cultural norms which influence their behaviors are the most critical resources for successful knowledge creation, dissemination and application; cognitive, social and organisational learning processes are essential to the success of a knowledge management strategy; and measurement, benchmarking and incentives are essential to accelerate the learning process and to drive cultural change. In short, knowledge management programs can yield impressive benefits to individuals and organisations if they are purposeful, concrete and action-orientated. The ISO 9001:2015 quality management standard released in September 2015 introduced a specification for 'organizational knowledge' as a complementary aspect of quality management within an organisation.

The dynamic nature of contemporary society has since made educational institutions knowledge-oriented. This makes its operations, programmes and activities knowledge intensive. The adage that “knowledge is power” applies to all situations. Every institution, organization (formal or informal) needs knowledge for effective operation and goal attainment. Knowledge per se, is the idea, information, understanding and skill that an individual acquires through education, training/development programmes, experiences, common sense and intuition (knowledge from one’s feeling as opposed to existing facts). Santo (Ferreira & Pilatti, 2023) was of the view that knowledge is an essential resource that contributes to the success of the school organization. From the point of view of Nonak and Nonaka & Takeuchi (Jelenic, 2021), knowledge is either tacit or explicit. Tacit knowledge exists in the mind of the organizational staff instead of being found in written or documented forms. Explicit knowledge is the knowledge that is in documented form, intranet and database.

In the school system, tacit knowledge is the knowledge that an individual teacher carries in his or her mind to discharge assigned responsibilities and deal with challenges. Tacit knowledge is the form of intuition, individual personal belief and experiences. Managing tacit knowledge is directed to share expertise (expert knowledge and skills in a particular subject, activity and job) in the school organization. In other words, it is directed towards making tacit knowledge (individual personal knowledge) available to others throughout the school organization. Explicit knowledge on the other hand is the knowledge in coded and recorded/written forms and can be available in databases, institutional intranets and intellectual property. To further simplify this, explicit knowledge is recorded knowledge of all types, as well as databases that are available to all personnel in the school organization. Knowledge management, therefore, entails the process of creating, acquiring, capturing, sharing and using knowledge wherever it resides to enhance learning and performance in an organization (Nasimi et al., 2023; Mohajan, 2024). Omotayo (2020) reported that knowledge management is the movement from knowledge acquisition, validation/assessment, diffusion, storage, utilization and learning processes. Knowledge management is the process of creating, gathering, organizing, analyzing, sharing and applying knowledge in term of resources, documents, experiences and people skills (Owan et al., 2019). In this context, knowledge management involves securing, sustaining and controlling of the explicit knowledge in printed forms and computer system including the flow of tacit knowledge (transfer of individual personal knowledge from one person to another or from people to a knowledge database). It also entails knowledge acquisition,

creating knowledge, assessing of knowledge, storing of knowledge, sharing /disseminating/transferring of knowledge and utilizing knowledge.

As noted earlier, knowledge is an idea, information, understanding and skill that an individual acquires through education, training/development programmes, experiences, common sense and intuition. It is either tacit knowledge (knowledge that exists in the mind of individuals) or explicit knowledge (documented/written knowledge). In whatever form (tacit or explicit), there is need for effective knowledge management (knowledge acquisition, creation, assessment, storage/preservation, sharing/dissemination/transfer and utilization) for administrative effectiveness in the school system.

There is no doubt that human resources (teachers) are with tacit knowledge in their minds which they have acquired and developed through education, training and development programmes (Arop et al., 2019; Owan et al., 2019). The tacit knowledge, therefore, needs to be transferred and shared with other members of the organization. As part and parcel of human resource management, school principals ensure that teachers are directed to turn their tacit knowledge into explicit knowledge. By so doing, the knowledge is codified, shaped and shared in a form that can be easily accessed, benefited and used by others in the school system. Knowledge management does not only depict managing knowledge as a resource, but it also entails using the resource (knowledge) to manage educational programmes and activities that take place in the school system. With the application of knowledge management in educational institutions, school heads ensure that teachers do not only teach the students but they also share their accumulated tacit knowledge with other staff in the school. The tacit knowledge shared can be documented to make it explicit knowledge that could be stored in a knowledge repository for future use and reference when the need arises.

In a study conducted by Arunima and Pakkeerappa (2022), it was found that all categories of teachers (young and experienced) were positive with regards to knowledge management practices adopted in their respective schools. Ferreira and Pilatti (2023) averred that "enhancing competencies, improving decision making, strengthening the commitment of an organization and establishing sustainable competitive advantage" are the advantages of knowledge management. Knowledge management facilitates service delivery, it safeguards loss of knowledge, it helps in decision making in for the benefit of the school and ensures that knowledge is available to those who need it (Mohajan, 2017). Mohajan (2024) further highlighted the benefits of knowledge management to include; enhancement of productivity and competitiveness, preservation of organizational knowledge, effective management of knowledge resources, improving trust and organizational working relations, enhancement of innovation and teamwork among others. In education, knowledge management increases school effectiveness in such areas as performance in teaching and learning in school.

In Brazil, Ferreira and Pilatti (2023) carried out a study to identify vital components in knowledge management. The study identified human resource management, organizational structure, organizational culture and values, information and communication systems, learning through the environment, strategic factors, the role of senior management, and the measurement of results as the components in knowledge management. Knowledge management is a crucial tool for organizational survival, competitiveness and performance. Knowledge management depends upon such components as people, process and technology (Omotayo, 2020). In a study on the role of knowledge management on the individual, the community and the organization, Sundiman et al (2023) identified among others, that knowledge management helps people in their job performance, help organizational members to keep up to date, provides opportunities to

members to contribute, develop professional skills, enhance effective networking/collaboration, improves the knowledge of the product and services and builds organizational depository.

Assessing knowledge management (KM) in Nigeria through exploration/exploitation, conversion (SECI model), and performance linkage reveals that, while critical for competitiveness, many firms struggle with implementation. Effective KM—integrating knowledge sharing, creation, and application is crucial for organizational performance, particularly in SMEs, banking, and health sector

Successful knowledge management improves organizational effectiveness and competitive advantage as well as helping in the decision making process for the benefit of the organization. It facilitates higher efficiency by way of avoiding duplication of duties, better performance by staff, enhancing new staffs' capacities and good quality decision making (Mohajan, 2024).

Michael et al. (2024) examined an evaluation of the extent of knowledge management practices in public secondary schools in Cross River State. The study was a census because all the 271 principals in the study area participated. Data were collected using an 18-item questionnaire with a Cronbach alpha reliability index of 0.81. Data were analyzed using frequency counts and percentages. It was found that the knowledge creation, acquisition, utilization, storage, sharing and assessment had a strong impact on administrative effectiveness. Another finding showed that inadequate teaching and learning materials, lack of institutional intranet, illequipped library and irregularity in teachers' conferences, seminars and workshops were the challenges of knowledge management. However, strategies to enhance knowledge management include well-equipped libraries; the establishment of institutional intranets; the motivation of teachers to share tacit knowledge; provision of adequate teaching and learning materials for knowledge sharing; regular organization of workshops, seminars and conferences to promote knowledge sharing on a person-to-person basis; recording and storing of shared knowledge; checking of lesson notes before actual instructional delivery, and effective keeping of school records. Among the recommendations was that conducive environment, provision of adequate teaching and learning resources should be given priority in secondary schools to facilitate acquisition, creation, assessment, storage, sharing and utilization of knowledge.

The review of previous studies indicated a paucity of literature in the area of knowledge management and administrative effectiveness of secondary schools. Though knowledge management in the educational system is not relatively new, however, principals' perception of knowledge management and administrative effectiveness has not been found to have been carried out in the previous studies reviewed Owan et al. (2019). Again, all the related studies cited in this work were not conducted in Cross River State. Majority of the related literature in this work were foreign studies. It was as a result of scarcity of research evidence on knowledge management and administrative effectiveness of the secondary school in Cross River State, Nigeria, that motivated the researchers to carry out this study to fill the gaps identified in the literature.

Aim and Objectives of the Study

The aim of this study is to investigate assessment of knowledge management practices evaluating the effectiveness of current educational strategies. The specific objectives of the study are:

- Investigate the relationship between Knowledge Exploration and Exploitation and its effectiveness on current educational strategies in Obio/Akpor local government.
- Investigate the relationship between Knowledge Conversion Processes and its effectiveness on current educational strategies in Obio/Akpor local government.
- Investigate the relationship between Knowledge Management and Performance and its effectiveness on current educational strategies in Obio/Akpor local government.

LITERATURE REVIEW

Concept of Knowledge Management

Knowledge has been identified as the most fundamental and strategic resource for any organization (Arop et al., 2019). In the current competitive environment, knowledge management has become essential for public sector organizations to improve service delivery. Thus, public sector organizations should formulate policies and strategies for effective knowledge management and sharing to enhance service delivery.

Knowledge management (KM) is the systematic process of creating, capturing, organizing, storing, sharing, and utilizing an organization's intellectual assets and expertise Arunima and Pakkeerappa (2022). It bridges the gap between raw information and actionable insight to improve efficiency, innovation, and decision-making. KM involves both explicit (documented) and tacit (employee experience) knowledge.

Knowledge management (KM) refers to a range of processes focused on organizational awareness, learning, collaboration, and innovation. It involves using and sharing knowledge to support an organization's goals.

Courses in business administration, information systems, management, libraries, and information science are all part of knowledge management, a discipline that gained prominence in the 1990s and centered on the "Knowledge Workers" that Peter Drucker first identified in his 1954 book, *The Practice of Management*. Information and media, computer science, public health, and public policy are some of the other disciplines that may contribute to KM research.

Numerous academic institutions provide master's degrees specifically focused on knowledge management Mohajan (2024). As a component of their IT, human resource management, or business strategy departments, many large corporations, government agencies, and nonprofit organizations have resources devoted to internal knowledge management initiatives. These organizations receive KM guidance from a number of consulting firms.

Organizational goals including enhanced performance, competitive advantage, innovation, sharing of lessons learned, integration, and ongoing organizational improvement are usually the focus of knowledge management initiatives Jelenic (2021). These initiatives are similar to organizational learning, but they can be differentiated by their increased emphasis on knowledge management as a strategic asset and information sharing. Organizational learning is facilitated by knowledge management.

The setting of supply chain may be the most challenging situation for knowledge management since it involves several businesses without a hierarchy or ownership tie; some authors refer to this type of knowledge as transorganizational or interorganizational knowledge. Industry 4.0 (or 4th industrial revolution) and digital transformation also add to that complexity, as new issues arise from the volume and speed of information flows and knowledge generation.

Knowledge acquisition/generation: Is the possession ideas, skills and understanding through education, training/development programmes, experiences, common sense and intuition. Knowledge acquired or created adds to the already existing knowledge bank and this subsequently improves and facilitates the decision-making process in the school system.

Knowledge creation: Knowledge can be created through findings from report writing and researches conducted. Such knowledge facilitates decision making in the school. Besides, preparation of lesson notes is part and parcel of knowledge creation in the school system.

Knowledge assessment: This is part of knowledge management that entails evaluating the extent of significant of explicit knowledge before such knowledge is shared, transferred and kept in the knowledge repositories Nasimi et al (2023). Completed written reports and researches are always being subjected to thorough editing, review and assessment before being disseminated to aid decision making. School principals evaluate and assess teachers' lesson notes before the actual lesson delivery. Assessment of knowledge is carried out to ensure that before knowledge is transferred, shared and utilized, such knowledge meets the required and minimum standard.

Knowledge Storage: As knowledge management process, this has to do with knowledge preservation in an institutional database, intranet and libraries (knowledge repositories) for easy access and retrieval Owan et al. (2019). Storing of knowledge enhances the re-use and security of explicit knowledge. Therefore, an existing body of knowledge has to be maintained and held firm to the advantage of the school.

Knowledge sharing: Effective dissemination and transfer of knowledge in the school system is knowledge sharing. The sharing of knowledge enhances the development, improvement sustainability of teaching and learning as well as enhancing decision making. It equips individual with the requisite skills, abilities and competence Omotayo (2020). It takes the forms of teaching and learning, classroom discussion, staff meeting, in-service-training, seminars, workshops and conferences to mention a few. To improve school effectiveness, knowledge must be transferred from the teachers who have it to the students' needs it. Knowledge is also needed to be transferred from one teacher to another and from principals to teachers and vice versa

Knowledge Utilisation: This involves retrieving and making use of both tacit and explicit knowledge. Proper use of expert knowledge enhances problem-solving in educational organization. When teachers are involved in the decision-making process, their wealth of experience is brought to bear.

COMPONENTS OF KNOWLEDGE MANAGEMENT PRACTICES FOR THE STUDY

Knowledge Exploration and Exploitation

Knowledge exploitation is refining and extending existing competencies, technologies, and paradigms, leading to positive, near, and predictable returns. At the same time, exploration is the experimentation of new alternatives, with returns far away from time, uncertain, and usually negative (Sundiman et al., 2023). March (1991), in his seminal article, looks at organizational learning from an organizational learning point of view and argues that there is a relationship between exploration and exploitation in the adaptive process in organizations. Exploration refers to the actions and activities related to research, search, risk, experimentation, playing, flexibility, discovery, and innovation. Exploitation refers to refinement, choice, production, efficiency, selection, implementation, and execution (March 1991: Wilden et al., 2018). Exploration and

exploitation require significantly different structures, processes, strategies, capacities and cultures. In general, exploration is associated with an organic structure, systems that are not rigid, improvisation, and autonomy. Conversely, exploitation is related to mechanical structures, more rigid systems, routine, control, and bureaucracy (Mohajan, 2024). Balancing the search for new knowledge (exploration) with using existing knowledge (exploitation) is vital.

Knowledge Conversion Processes

Knowledge management (KM) can be viewed as a system that integrates people, processes, and technology to achieve long-term and sustainable results by increasing performance through learning (Jelenic, 2021). Arunima and Pakkeerappa (2022) point out that the most widely cited aspect of the model is the continuously expanding cycle of four processes that create knowledge by converting tacit knowledge into explicit knowledge (the socialization-externalization-combination-internalization or SECI model). An organization creates knowledge through the interactions between explicit knowledge and tacit knowledge. During this knowledge conversion process, explicit and tacit knowledge grows in quality and quantity. The transformation between tacit (individual experience) and explicit (documented) knowledge is key, often facilitated by technology and training.

Knowledge Management and Performance

Knowledge is a critical asset for any organization. Understanding how knowledge is created, integrated, shared, and utilized throughout the organization is necessary to streamline processes and improve organizational efficiency and quality. Moreover, an organization's competitive advantage and operational success largely depend on its ability to successfully identify, integrate, and utilize knowledge effectively. The successful implementation of knowledge management requires both technological tools and a supportive organizational culture that encourages learning and collaboration (Alavi & Leidner, 2001).

Knowledge management (KM) practices in Nigerian institutions, including educational institutions, are increasingly recognized as critical for improving organizational performance. Studies have shown that systematic knowledge acquisition, sharing, storage, and application significantly enhance operational efficiency, innovation, and institutional effectiveness. Key elements include leveraging tacit knowledge, fostering a culture of knowledge sharing, and integrating information and communication technologies, although challenges such as knowledge hoarding, inadequate ICT infrastructure, and limited management support continue to hinder effective KM implementation (Ololube, 2017; Omotayo, 2020).

Current Educational Strategies

Current educational strategies prioritize student-centered and active learning approaches that foster critical thinking, collaboration, creativity, and learner engagement. Contemporary instructional practices include differentiated instruction, project-based learning, flipped classrooms, inquiry-based learning, competency-based education, and technology integration through digital platforms, gamification, artificial intelligence, and adaptive learning systems (Tomlinson, 2014; Hattie, 2009).

These pedagogical approaches shift the focus from traditional teacher-centered instruction toward personalized, experiential, and skills-based learning environments that actively engage students in constructing knowledge. Rather than emphasizing rote memorization, these strategies promote deeper conceptual understanding, long-term retention, problem-solving abilities, and the practical application of knowledge in real-world contexts (Bransford et al., 2000; OECD, 2018).

ASSESSMENT OF KNOWLEDGE MANAGEMENT PRACTICES: EVALUATING THE EFFECTIVENESS OF CURRENT EDUCATIONAL STRATEGIES

Based on research assessments, Knowledge Management (KM) practices in Nigeria are increasingly recognized as vital for organizational performance, particularly in IT, banking, and construction sectors, though many organizations are still at infancy or developing stage. While there is high awareness and positive perception of KM's importance, actual implementation often faces significant barriers. The following are the assessment of knowledge management practices in Nigeria.

Current State of Adoption

- **Sector-Specific Maturity:** While large firms and multinational corporations in Nigeria may have formal structures, many small and medium-sized enterprises (SMEs) and public sector organizations are just beginning to adopt KM.
- **High-Level Adoption (IT/Services):** In Lagos, IT firms and MSMEs in the South-West have shown a higher, more strategic adoption of KM to improve competitiveness and customer relations.
- **Low-Level Adoption (Construction/Public):** The Nigerian construction industry and public sector are noted to be in the "infancy" stage of KM, often relying on informal, person-to-person knowledge sharing rather than structured, technology-driven systems.

Common Knowledge Management Practices in Nigerian Organizations

- **Information Technology (IT) & Internet:** Increasing use of digital platforms to store and share information.
- **Mentoring & Coaching:** Heavy reliance on face-to-face interaction, mentoring, and apprenticeship, particularly to transfer tacit knowledge (experience-based).
- **Documenting Expertise:** Efforts to capture employee knowledge through reports, seminars, and workshop, though this is often inconsistently applied.
- **Knowledge Repositories:** Use of databases for storing project data or client information, especially in the banking sector.

Barriers to Effective Knowledge Management

- **Funding and Financial Constraints:** Inadequate budget for purchasing and maintaining IT infrastructure is the highest-ranked barrier in construction and other sectors.
- **Cultural Resistance:** A strong culture of hoarding knowledge, lack of trust among employees, and resistance to sharing, often due to a fear of losing job security.

- Lack of Top Management Support: Insufficient commitment from leadership to implement formal KM policies, training, and incentives.
- Lack of Structured Processes: Many firms lack a formal strategy or dedicated staff for capturing and managing knowledge.
- Poor Infrastructure: Technological limitations and unreliable power or internet services.

Impact on Organizational Performance

- Improved Competitiveness: Effective KM has a positive, significant impact on the performance of SMEs, particularly regarding innovation and efficiency.
- Reduced "Reinventing the Wheel": Where KM is implemented, it reduces the repetition of mistakes and improves the speed of project delivery.
- Succession Planning: Poor KM practices are directly linked to high turnover rates and the loss of critical, experienced staff, which threatens business continuity, especially in family-owned businesses.

EVALUATING THE EFFECTIVENESS OF CURRENT EDUCATIONAL STRATEGIES OF KNOWLEDGE MANAGEMENT PRACTICES IN NIGERIA

Knowledge management (KM) practices in Nigeria, particularly in education, show a significant positive impact on institutional efficiency, academic performance, and innovation, yet are hindered by heavy reliance on informal, tacit, and person-to-person knowledge sharing rather than structured, technology-enabled systems. Effective strategies include well-equipped libraries, institutional intranets, regular training, and knowledge-sharing workshops.

Key Findings on Effectiveness and Strategies

- Positive Impact: Knowledge management is a critical factor in the success of public universities, fostering better decision-making, operational adaptability, and service quality.
- Prevalent Approaches: Current practices lean heavily on informal methods, such as personal memory and verbal communication. However, successful, more modern approaches in some sectors involve digital repositories, collaborative workspaces, and structured knowledge sharing.
- Institutional Effectiveness: In Nigerian universities, systematic knowledge acquisition and sharing directly boost institutional performance and administrative efficiency.
- Teacher Application: In secondary schools, teachers are applying KM techniques, but the effectiveness is limited by a lack of formal training and insufficient technological resources.

Factors Inhibiting Effectiveness

- Underutilization of Technology: Many institutions lack dedicated, centralized, and digitized systems for capturing and storing knowledge.
- Lack of Structure: There is a high reliance on individual, tacit knowledge rather than systematic, organizational knowledge management.

- Infrastructure Deficits: Poor ICT facilities and limited budgetary allocations hinder the implementation of KM projects.
- Culture: A lack of incentives to share knowledge often limits collaboration across departments.

METHODOLOGY

This study adopted a descriptive survey design. This design was considered appropriate for this study because descriptive research has to do with the collection of data that describe situations and opinions held (Asim et al., 2017). Again, adopted of descriptive survey design in this study is also justified by the fact that the researcher(s) could not control the variables of the study but only reported the situation as it was at the time of the study. The title of the instrument was Assessment of knowledge management practices evaluating the effectiveness of current educational strategies Questionnaire (AKMPQ) was the instrument used for data collection. The instrument was designed by the researchers and was subjected to face and content validity by three experts in measurement and evaluation as well as other three experts in educational management in Faculty of Education, IAUE Port Harcourt. The instrument had four (4) sections; A, B, C and D. Section A was designed to obtained data regarding demographic variables (age and sex) of the principals. Section B had six (6) items 1-6 with respond options strong impact, moderate impact and weak impact. It was designed to collect data with respect to principals' perception of the impact of knowledge management on administrative effectiveness.

The reliability index was .810 which made the instrument to be considered as appropriate for data collection. The study was conducted in public secondary schools in Obio/Akpor Local Government Area River State, Nigeria. All The population for this study consists of a total of 1337, from 1,309 teachers and 28 principals of public schools in public public senior secondary schools in Obio/Akpor Local Government Area of Rivers State. The researchers and the research assistants requested the permission and co-operation of the Principals before copies of the questionnaire were administered to the respondents. The data supplied on the retrieved copies of the questionnaire were coded and analyzed using frequency counts and percentages.

ANALYSIS OF DATA

Table 1 provides an overview of the Knowledge Exploration and Exploitation ,Knowledge Conversion Processes and Knowledge Management and Performance .helping to understand the nature and variability of each variable before further analysis. Table 2 Reliability Test No Variables No of Items Cronbach's Alpha 1 Knowledge Management Practices 12 .900 2 Knowledge Creation & Conversion 14 .906 3 Knowledge Sharing 6 .857 4 Strategy 6 .829 5 Information Communication Technology (ICT) 4 .856 6 Culture 8 .813 7 Human Resource Management 6 .856 8 Leadership 9 .883 9 Performance (Outcomes) 6 .90

Table 1: Model Fit Measures for knowledge management Practices

Measure	Estimate	Threshold	Interpretation
X2	116.074	--	--
DF	31	--	--
CMIN/DF	3.744	Between 1 and 3	Acceptable
CFI	0.976	>0.95	Excellent
SRMR	0.037	<0.08	Excellent
RMSEA	0.060	<0.06	Acceptable
PClose	0.069	>0.05	Excellent

Knowledge-Sharing Practices

Knowledge-sharing practices in this research are treated as an independent construct. Therefore, all the statistical procedures are performed independently. An exploratory factor analysis followed by a confirmatory factor analysis was conducted to test the items' dimensionality and establish the construct's validity and reliability. The knowledge management and Bartlett's tests showed a value of .829 at a significance level of .000. This depicted that the degree of common variance among the variables was relatively high; therefore, factor analysis could be conducted.

Table 2: Model Validity Measures for Knowledge Conversion Practices

	CR	AVE	MS V	MaxR(H)	1	2	3	4
Externalization	0.85 7	0.60 1	0.54 6	0.864	0.775			
Combination	0.82 0	0.60 2	0.42 8	0.820	0.655** *	0.776		
Socialization	0.76 0	0.61 9	0.54 6	0.769	0.739** *	0.632** *	0.787	
Internalization	0.82 9	0.61 8	0.47 9	0.838	0.692** *	0.589** *	0.648** *	0.78 6

An exploratory factor analysis (EFA) with principal component factoring and varimax rotation was performed to identify the underlying dimension and factor structure of contextual factors related to knowledge management. Before the actual EFA, some preliminary investigations were conducted to check the factorability of the data. Thus, the knowledge management of sampling adequacy and Bartlett's test of Sphericity were analyzed, and the result confirmed the factorability of the data with knowledge management .929 and an approximate Chi-square value of 10116.141 at a (0.000) significance level

Table 3: Model Fit Measures for knowledge management and Performance

Measure	Estimate	Threshold	Interpretation
CMIN	276.807	--	--
DF	96	--	--
CMIN/DF	2.883	Between 1 and 3	Excellent
CFI	0.972	>0.95	Excellent
SRMR	0.041	<0.08	Excellent
RMSEA	0.050	<0.06	Excellent
PClose	0.493	>0.05	Excellent

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Based on studies examining Knowledge Management (KM) in public senior secondary schools in Obio/Akpor LGA, Rivers State, and similar contexts, the following table evaluates the effectiveness of knowledge management practices using knowledge exploration, exploitation, and conversion processes.

The population in this context consists of approximately 1,297-1,337 teachers and 21-28 principals across public senior secondary schools in the area.

Table 4: Assessment of Knowledge Management Practices in Obio/Akpor Public Schools

KM Construct	Sub-Dimensions/Processes	Evaluation of Effectiveness in Obio/Akpor Schools
Knowledge Exploration (Creation & Acquisition)	New idea generation, Research, Training, Brainstorming	Moderate to Low: While teachers show positive attitudes toward professional development, the overall capacity to generate <i>new</i> knowledge is hindered by limited, outdated resources and poor infrastructure.
Knowledge Conversion (SECI Model)	Socialization (Tacit-Tacit), Externalization (Tacit-Explicit), Combination (Explicit-Explicit), Internalization (Explicit-Tacit)	Moderate: High reliance on social interaction (informal sharing) among staff. However, formalized conversion (documenting, codifying) is weak due to inadequate administrative support and digital resources.
Knowledge Exploitation (Application & Usage)	Utilizing existing knowledge, Record-keeping, Implementation of pedagogy	Low to Moderate: Effective classroom management and record-keeping are high, but the utilization of shared knowledge to improve pedagogical outcomes is hampered by poor school facilities and, in some cases, low morale.
KM Practices (Overall)	Knowledge Sharing, Mapping, Utilization	Moderate: A significant positive relationship exists between, knowledge sharing, and teacher performance. However, there is a lack of

Performance (Outcomes)	Teachers' Job Performance, Students' Academic Results	institutionalized, structured KM, relying more on personal, informal initiatives. Mixed/Declining: Despite high teacher engagement, student performance in external exams has seen a dramatic drop, indicating a gap in effective knowledge transfer and application.
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DISCUSSION OF FINDINGS

Qualitative data analysis was performed to identify the major challenges that hinder the effective implementation of knowledge management practices. Open-ended questions are provided in the questionnaire to elicit responses from the respondents. These responses are coded using qualitative analysis software, and a thematic analysis was done to identify the factors that affect the effective utilization of knowledge in Ethiopian public sector organizations. The qualitative data analysis results identified personal, organizational, and environmental themes. In general, the following are found to be the major challenges of knowledge management in obio/akpor public sector organizations:

- Lack of trust in sharing and transferring knowledge;
- Lack of ICT infrastructures (database management systems);
- Reward and motivation systems;
- Knowledge management strategy;
- Lack of knowledge-based culture that promotes teamwork and knowledge sharing/transfer;
- Failure to measure the contribution of knowledge to organizational performance;
- Lack of sufficient support from the top management (leadership).

This assessment is based on research studies conducted on public senior secondary schools in the Obio/Akpor Local Government Area of Rivers State, including analyses of teacher and principal engagement with KM processes

CONCLUSION

Based on the investigation of assessment of knowledge management practices : evaluating the effectiveness of current educational strategies . Knowledge has been identified as the primary source of competitiveness in the current globalized economy and continually changing environment, characterized by technological innovations and increasing customer demand. Based on this premise, this study explored in public senior secondary schools in Obio/Akpor LGA, Rivers State current knowledge management practices. The research also investigated the effect of knowledge management on organizational performance and the major challenges that affect the effective use of knowledge in the public sector. The major objective of this study was to investigate knowledge management practices in public senior secondary schools in Obio/Akpor LGA, Rivers State,. With this major objective, the study also identified knowledge creation and conversion practices, the major contextual issues that affect the effective implementation of knowledge management, the relationship between knowledge management

and organizational performance, and the major challenges that hinder the implementation of knowledge management in the public sector.

Recommendations

Based on the conclusions from this research, the following recommendations are:

- Knowledge Exploration & Exploitation by encouraging teachers to adopt modern, research-based teaching techniques and actively share tacit, experience-based knowledge with colleagues through workshops and peer mentoring.
- Knowledge Conversion Processes in implementing systems that digitize lesson notes, capture tacit knowledge, and facilitate the conversion of individual insights into school-wide, actionable, and retrievable documents.
- Knowledge Management and Performance by linking teacher rewards and performance evaluations directly to their contribution to KM activities, such as contributing to school resource banks or attending professional development sessions.
- Infrastructure Support, prioritizing the creation of well-equipped libraries and functioning ICT facilities to enable effective knowledge storage, retrieval, and utilization.
- Policy Focus: The Rivers State Ministry of Education should develop policies that incentivize knowledge sharing, ensuring that knowledge management is treated as a strategic tool to improve student academic performance in Obio/Akpor.
- And generally Conducive environment, provision of adequate teaching and learning resources should be given priority in secondary schools to facilitate acquisition, creation, assessment, storage, sharing and utilization of knowledge.
- Management of secondary school system should consider as utmost important the installation and funding of intranet as a knowledge repository in secondary schools. This will be very useful in timely information dissemination and retrieval for decision making.
- Libraries in public secondary schools should be well equipped with current textbooks, newspapers and magazines to promote knowledge acquisition and dissemination.
- Those who custody library materials should be qualified librarians with experience and passion.
- Teachers should be motivated to share their tactic knowledge with their counterparts.

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