



Administrators' Intellectual Abilities and Effective Administration of Schools in Nigeria

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Abstract

An administrator oversees administrative tasks and manages facilities and staff in schools, colleges or other educational institutions with intelligent, imaginative people and excellent communication abilities, high levels of adaptability, and the drive to succeed. This paper, therefore, evaluated administrators' intellectual abilities for the effective administration of schools in Nigeria. The paper conceptualized the term administrator and their core roles which include overseeing human, material and financial resources, informing decision-making needs and enhancing and encouraging students' achievement and academic progress in the school, while the administrators' abilities were seen as general mental abilities that include verbal comprehension, perceptual speed, inductive reasoning abilities, deductive reasoning and others. Following a critical evaluation of administrators' intellectual abilities for the effective administration of schools in Nigeria, the paper concluded that administrators' abilities and skills generally represent those physical and intellectual characteristics that are relatively stable over time and that help the effective administration of schools in Nigeria. The paper among others suggested that administrators should maintain intellectual recreation that will stimulate the functioning of their brains while also encouraging keeping memory activities that would enhance the effective administration of schools in Nigeria.

Keywords: Administrators, Intellectual Abilities, Effective Administration, Schools, Nigeria.

Reference to this paper should be made as follows:

Mmom, C. P. C., & Ogona, I. K. (2023). Administrators' intellectual abilities for effective administration of schools in Nigeria. *International Journal of Scientific Research in Education*, 16(3), 237-247.

INTRODUCTION

The effort required to use people, materials and money to achieve a goal is called management. Management can be a discipline that promotes the achievement of goals through the use of human and material resources. School management includes managing all school operations, from creating a safe learning environment to managing school budgets. In order to better define school management, it is necessary to consider the various areas of school management and who carries out these school management activities. They can also be seen as professionals performing these various administrative tasks to keep the school running well. In primary, secondary and higher education, the management of the school is usually the principal (principal, principal or deputy principal). Management is the process of organizing and coordinating the people and resources available to any organization in order to achieve the goals of that organization (Jacob et al., 2020). When used in school systems, the system is called school management or school management.

School Management is the process of bringing people and resources together to carry out effective teaching and school operations. School management focuses on improving teaching and learning. Amadi-Eric in Hamma and Mohammed (2021) defined school management as the process of school leaders planning and collaborating with academics to achieve the goals of education. It is clear that one of the aim of education today is to raise equal individuals who are beneficial to themselves and the society by serving the society by providing them with education according to the necessary standards and results. A society takes into account the laws that govern the behavior of people. Omoregie also defined school management in Nwabueze (2021) as the organization of people, materials and resources available for education to achieve educational goals. He believes that the education policy of the school administration is to use people and existing equipment to use education to achieve educational goals.

Secondary school is the intermediate level of education, an inevitable bridge between primary school and higher institutions. It can only be productive if people and equipment are managed correctly and efficiently. As stated in the National Policy on Education (Federal Republic of Nigeria, 2014), the purpose of secondary education is to prepare individuals for a productive life in society and higher education. Achieving these goals has been difficult for many years. This was reflected in the decline in academic achievement of students in the 2014 Higher Secondary Education Certificate Examination published by the West African Examination Council (WAEC) and the poor performance of students in the Unified Higher Education Entrance Examination (UTME) results. Olowonefa and Ogunode (2021) lamented the creation of secondary schools that fail to benefit people or access universities without the help or deception of parents and (disruptive) teachers. This form of massive cheating is even supported by some parents and school leaders for pecuniary reasons and to evade failure in examinations.

For an organization to achieve its goals, it must have good and effective leadership whose role is to plan, organize, coordinate, control, finance and do more with the efforts of others. In secondary schools, the principal has this responsibility. In Matias (2016), Eya and Leonard viewed leaders (principals or teaching leaders) as individuals with a responsibility to help others improve their teaching. They should be honest, objective, honest and determined. Their charismatic personalities are a great source of inspiration. The principal's skills and professional development are essential to meet the needs of changing schools in an age of international competition. The main responsibility of the administration is to keep all schools running smoothly. Their skills as leaders (although skills and performance in school activities serve other

purposes) are important. It can be a stable and long-lasting phenomenon, such as emotional or physical, or a combination of both. They can think and solve problems with their intelligence.

The school is a small organization; therefore, it requires good self-management and good resource management. Management makes the life of school community members safe, productive and truly worthwhile (Udongwo, 2015). The lack of good governance in the school community leads to conflict, conflict, injustice and conflict in schools. Most public schools in Nigeria struggle with poor management in terms of planning, organization, leadership and management. Without these activities, the school cannot function properly. This is evidenced in physical abuse, sexual assault, examination malpractice, illegal registration, incorrect accounting law, violation/destruction of legal documents, fighting, theft, and other work-related crimes. The school is poorly managed. This article evaluates the intellectual capacities of principals for effective management of Nigerian schools against this background.

CONCEPTUAL CLARIFICATION

Administrators

The responsibilities of school principals will vary depending on the size and type of school they work in. But in general, school administrators manage budgets, manage transportation, and make content accessible to everyone in the school (Johnson, 2018). Responsible for providing administrative support to an office or school office; they play an important role in the day-to-day life of the school, supporting the administration to make sure everything goes smoothly. School administrators oversee the administrative functions of a school, college or other institution. They keep the organization running smoothly and manage facilities and staff. They are responsible for coordinating all administrative, budgeting, policy and activities and only dealing with teachers, teacher-student, student-student, teacher-principal conflicts or other issues at school; Student principal and school-society conflict.

As school leaders, they are also professionals with good judgment and good relationships with many people (staff, parents, students, administration and the public) (Adeyemo, 2012). Good school leaders also pay attention to detail and conflict management. School principals usually work in schools. They are responsible for overseeing the management of a school to ensure that the institution operates according to rules and regulations. This requires them to manage the school's people, equipment and money, enabling them to achieve the school's goals. School Administration is seen as the process of coordinating appropriate human and material resources for the school to achieve its intended purpose (Ogunode, 2020).

School management is responsible for the planning and implementation of plans, policies and programs to achieve educational goals. School management uses policies or decisions to achieve the school's goals and manage its day-to-day activities. Education leaders implement administrative processes that help achieve educational goals. School management is also a process that includes the use of methods, principles and practices to create, develop and implement the goals, policies, programs and processes needed to achieve learning goals (Aaron et al., 2022). Methods of school administration are: planning, operations, leadership, coordination, reporting and budgeting.

Nonetheless, effective school administration is important because:

Overseeing human, material and financial resources: School leaders are essential to the success and management of good schools. School leaders should regularly monitor staff performance through effective planning and job performance and make necessary adjustments when things do not go according to plan (Agih, 2015). Allocating learning resources effectively is essential for making full use of these resources. When the right person is in the right position, he can easily use his skills. Not only that; but effective knowledge distribution methods can also use these resources to achieve desired learning goals.

Informed Decision-Making Needs: School leaders are directly responsible for the better and more successful work of staff and students (Devi & Subiyantoro, 2021). Therefore, school leaders must be able to demonstrate the importance of collaboration in times of crisis or change. Unity of purpose is possible when educational leaders collaborate in leadership.

Enhance and Encourage Students' Achievement and Academic Progress: A good leader in any organization has a good heart and is loyal to the people around him. For this reason, the school principal is one of the basic elements that keeps the school alive; should encourage students to do their best and support the success and development of all students (McCray et al., 2021). This will make the school a good environment for current students who need temporary inspiration and will welcome creating a safe and healthy environment for newcomers.

Basis for Evaluation: Learning management provides a framework for evaluating learning. To some extent, the success of any educational program depends on its implementation (Amanchukwu et al., 2015). Since the training department is concerned with the implementation of the training plan, the recommendations from the implementation are used to determine the success or failure of the training plan work.

Agents of Policy Making: Education planners or policy makers are guided by input from education leaders (Hallak & Poisson, 2007). The answers are ideas for planning the next study. Therefore, the government and the education plan should be involved in the planning of education. This provides an opportunity for different stakeholders, such as educational leaders, to contribute their views.

Intellectual Ability

Intelligence refers to the skills needed to think in new or changing situations, make interdisciplinary connections, and solve problems (O'Connell et al., 2014). Memory, creative problem solving and verbal skills also contribute to a person's intellectual ability. While academics disagree on the standard definition of intelligence, most agree that intelligence should include abstract thinking and reasoning, the ability to gain knowledge, and problem solving. Intelligence is the ability to think and solve problems; do things from the heart. It is also a measure of intelligence that involves understanding complex concepts and thinking critically.

Successful schools are built on the shoulders of good decision makers (heads/principals) and strong teachers (Mufua, 2019). Therefore, good leaders are essential in any educational organization. They are responsible for managing the day-to-day running of the school, providing support to staff, and taking bold steps for the future stability and continuity of the school. Therefore, in order to be a school leader, they must have many of the intellectual abilities that a

school leader can have. The school principal works well. Intelligence includes personality traits, verbal comprehension, perceptual speed, inductive reasoning, decision making, and memory.

Effective Administration

Educational management is seen as the process of integrating appropriate people and materials that are available and effective for the school to achieve its planned goals (Fei et al., 2021). The word "management" does not refer to any process or function. It is like an umbrella covering the process of planning, organizing, directing, coordinating, controlling and evaluating work. The same situation is seen in educational administration. Academic administration is the administration of the school. It includes leading students' learning, developing curriculum, making assessments, and managing people and resources to achieve specific goals (Range et al., 2014). It also includes managing school processes to ensure results are achieved.

In Nigeria today, effective management is viewed as a process of improving teacher development, curriculum development, and classroom instruction on the relationship between principals and teachers (Okendu, 2012). According to Peretomode in Udongwo (2015), management is one of the activities that can be classified as planning, planning, control, management and business processes. All this is done to achieve the goals and objectives of the organization as a product of good management. In addition, management is a way of directing, executing and directing a group of employees towards a goal (Ezeocha, 2002). Thus, management in this context refers to the use of resources and resources in an organization to achieve objectives. The school is a unified place, complete with rules and regulations to guide the activities taking place and the objectives of the education in the quality management process.

Administrators' Verbal Comprehension for Effective Administration of Schools

Speech comprehension is the ability to understand spoken words. Relative improvements in language comprehension can be seen early in development when parent-reported and direct measures are used to assess language ability (Bowyer-Crane et al., 2008). Speech comprehension is an important and important skill that enables leaders to understand and use written information and is particularly relevant to all aspects of management, social-emotional and daily interactions (Connor et al., 2014). With an understanding of speech, managers can interpret and use words in instructions and directions and communicate their ideas through speech. Good communication skills can help improve relationships, increase collaboration and productivity, and build trust when working with others. The accuracy of the information will reduce conflict and help solve problems faster when they do occur.

Understanding gives meaning to management. Understanding management happens when the words on the page are thoughts and ideas, not just words. Understanding makes management fun, entertaining and informative. It is necessary for success in school, work and life (Guthrie et al., 2004). Language skills are the ability to understand and use language effectively. It is an important skill in many areas of life, including education, work, and relationships. Strong verbal skills enable people to express themselves clearly, understand complex concepts, and communicate effectively with others. Speaking skill is important in education as it enables students to express their thoughts and ideas effectively. Leaders with strong communication skills will be effective in daily management and will be able to understand complex problems, analyze information and synthesize information (Rouleau & Balogun, 2011).

In addition, language skills are necessary to communicate effectively with administrators, teachers and students, which are indispensable for effective school management. Although there are jobs, language skills are also important at school. This is particularly important in areas such as marketing, public relations and customer service where communication is an essential part of these activities.

Strong communication skills enable staff to communicate effectively with colleagues, parents and students, leading to effective school management. In addition, as a school administrator, language skills are essential for writing clear and concise emails, reports and other office documents. Likewise, with understanding language, leaders have the freedom to express themselves clearly, understand the feelings of others, and engage in meaningful conversations (Krebt, 2017). This skill is especially important in relationships where it promotes better communication and understanding between people. Additionally, understanding strong words can help people impress others, which are especially important during job interviews, relationships, and other jobs.

Fortunately, speech understanding can be improved in several ways. Reading is a great way to improve vocabulary and understanding, while writing can help people organize thoughts and ideas well. Also, taking courses or seminars that focus on communication and public speaking can help people improve their speaking skills for a good education (Schulz, 2008). Finally, practicing listening and interacting with others can help people improve their speaking skills over time.

Interestingly, understanding language is an important skill in all aspects of life, including education, work, and relationships (Kyllonen, 2012). For this reason, school principals with strong verbal skills should prioritize developing their verbal comprehension skills in order to achieve their goals and realize their talents in order to strengthen the management of their schools.

Perceptual Speed Ability for Effective Administration of Schools

Perceptual speed refers to the automaticity and efficiency in which new visual information is processed and accelerated with decision. It is usually measured by a speed test, which requires rapid identification of a specific target from a set of stimuli. Comprehension also refers to the ability to accurately (and completely) compare letters, numbers, objects, pictures or patterns. When tested, these items can be presented simultaneously or sequentially (Romani et al., 2011).

Perceived speed is an important part of cognitive function that allows people to quickly process and respond to new visual stimuli. Perceived Speed indicates automaticity and efficiency with the new perceived speed of information processing and decision making. It is usually measured by a speed test, which requires rapid identification of a specific target from a set of stimuli. In these tests, perceptual speed is calculated as the time it takes to recognize all objects or the number of objects identified each time. Perceived speed is often evaluated in many situations, as it has the ability to predict many real-life events. For example, it is associated with work (Mount et al., 2008) and school performance (Rindermann & Neubauer, 2004) at work and education. Additionally, evidence from meta-analyses has highlighted the importance of accelerating learning, as children and adults with math problems or dyslexia often have a negative impact on speed compared to healthy controls (Kudo et al., 2015; Peng et al., 2018). Thus, individual differences in cognitive speed may have positive effects on learning and academic achievement (Gnambs et al., 2021).

The speed and accuracy allow administrators to quickly focus and process information. The task of understanding speed and accuracy is usually limited to evaluating the number of items in order to process information quickly (Mount et al., 2008). Interestingly, the manager's ability to perceive speed is an important intellectual function that allows people to work well and react quickly to new visual stimuli.

Inductive Reasoning Abilities for Effective Administration of Schools

Inductive reasoning is a skill that involves drawing conclusions based on the facts or situations observed by the manager. Managers use predictive thinking (associating what they see with what they know from experience) to draw conclusions, guide and train performance (Clifton & Harter, 2019). Inductive reasoning is a method of reasoning that involves making generalizations based on certain concepts. Inductive thinking is an important way of thinking that many employers look for in their employees. Inductive reasoning is an example of soft analytical skills. Unlike hard skills that are job-specific and often require training, social skills are about how you interact with people, relationships, and ideas. Schools need leaders who can identify patterns and use inductive reasoning to develop ideas, policies or recommendations based on those patterns. This makes inductive reasoning a valuable skill in school management.

From inductive reasoning, managers make decisions based on observations. These skills are useful for making predictions and making general statements because their conclusions may not be clear but must be robust, based on evidence. School leaders need to be able to tap into the need to evaluate quickly and make important, time-sensitive decisions (Parsons et al., 2013). Inductive reasoning allows people to see clearly the signs that something bigger is going on. Therefore, it should be said that inductive reasoning is a type of thinking that involves forming general information based on knowledge, observation and facts, and using ideas specifically to draw conclusions. To develop inductive thinking, leaders need to develop attention to detail, recognizing patterns and making predictions, memory and intelligence (McAbee et al., 2017).

Deductive Reasoning Abilities for Effective Administration of Schools

Decision making is a way for managers to make decisions based on general ideas (Cramer-Petersen et al., 2019). It allows them to take information from two or more passages and draw good conclusions. Deductive reasoning is a method in which the decision is based on the agreement of several premises that are generally believed to be true. Deductive reasoning is sometimes called top-down logic. Decision making relies on creating context in the field and drawing conclusions around them. Deductive reasoning usually draws conclusions from premises believed to be true. Also known as deductive logic, it uses logical reasoning to draw conclusions. Deductive reasoning is often called top-down reasoning. If one thing is true and the other contradicts the first proposition, the first fact should be applied to the second proposition.

While the termination decision is considered a reliable test, it is important to know that it can sometimes lead to false results. This often happens when one of the first impressions of language is wrong. It is possible to arrive at true facts even if one or both of the general premises are false. However, using existing decision-making skills in the decision-making process will help managers make more choices in the workplace (Vettorello et al., 2022). Managers seek and find employment, hire employees, manage employees, work with clients, and make various business or operational decisions.

Memory Abilities of Administrators for Effective Administration of Schools

Memory is our ability to encode, store, store and recall information and experiences in the human brain (Bauer et al., 2010). In general, it can be thought of as using information to influence or influence current behavior, whether shortly after processing information or many years in the future. Memory is everything we remember, giving us the ability to learn, adapt, and form relationships from past experiences. The ability to recall past experiences and the ability or process of recalling previously learned facts, information, thoughts, skills, and attitudes. It is the accumulation of what is learned and retained through our activities or experiences, evidenced by changing patterns or behaviors or by returning and realized experience (Fink, 2013).

Memory Development Not only brings leaders back to meaningful experiences (Bauer et al., 2010), but also imagines and develops skills for speaking and knowing, planning, following directions, problem solving, thinking, management, and service (Román-González et al., 2017). There are three types of memory: working memory, short-term memory, and long-term memory. Working memory and short-term memory allow administrators to temporarily store and use information, while long-term memory stores memories that will last a lifetime.

For leaders, mastering memory means completing their work, training, and relationships. A well-trained memory is a must for today's management professionals (Bennis & Goldsmith, 2010). The ability to remember names and faces, directions and numerical information is the most important thing in their work or professional life as well as in their life. Therefore, it should be added that memory is a cognitive process that allows administrators to collect and store information, important for schools, learning new methods, procedures and responsibilities, and managing good schools. Having a strong memory also helps leaders adapt to new situations.

Intellectual Abilities for Effective Administration of Schools

The definition of intelligence is the ability to think, plan, solve problems, think abstractly, understand and learn complex ideas (Colom et al., 2022). Intelligence is measured by standardized tests that demonstrate reliability and validity. Abilities and skills often represent physical and intellectual characteristics that are stable over time and help determine an employee's performance. Recognizing these is important for understanding organizational behavior because they often limit employees' ability to do their jobs. The talent of the leader is important because it causes, disperses and motivates the employees to work hard and be selfless (Jakobsen et al., 2023). Skills are important because leaders empower their employees to do their jobs well and meet desired goals.

CONCLUSION

Convincingly, intelligence has mental abilities such as excellent memory, understanding language, reasoning, analysis, and problem solving, which are key components of the intelligence of school administrators, staff, and students. School principals must have the intellectual ability to run the school well because they are "the creation of the brains of diverse ideas that enable principals to support their staff by teaching them and encourage them to do a good job to achieve their goals." their ultimate goal. Therefore, the ability of managers to transfer their experience in production seems to be the most needed skills, which is the principle of intelligence. School leaders need skills such as memory, thinking, speed of learning, spatial

thinking, exploration and problem-solving ability, ability to manage abstract ideas and connections, etc.

Suggestions

Drawing for the paper, the following suggestions were made among others:

- Administrators should maintain intellectual recreation that will stimulate the functioning of their brains,
- Administrators should be encouraged to keep doing memory activities, to enhance their reasoning and language skills,
- Continued education should be administrators' basic routine
- Administrators should keep having perception & genetics, memory, vocabulary, and fluid & crystalized intelligence.

REFERENCES

- Aaron, T. S., Meyers, C. V., Hitt, D. H., & VanGronigen, B. A. (2022). Principals' perspectives on the shift to short-cycle school improvement planning. *Educational Management Administration & Leadership*, 17(2), 521-530.
- Adeyemo, S. A. (2012). The relationship between effective classroom management and students' academic achievement. *European Journal of Educational Studies*, 4(3), 367-381.
- Agih, A. A. (2015). Effective school management and supervision: Imperative for quality education service delivery. *African Research Review*, 9(3), 62-74.
- Amanchukwu, R. N., Stanley, G. J., & Ololube, N. P. (2015). A review of leadership theories, principles and styles and their relevance to educational management. *Management*, 5(1), 6-14.
- Bauer, P. J., Larkina, M., & Deocampo, J. (2010). Early memory development. *The Wiley-Blackwell Handbook of Childhood Cognitive Development*, 153-179.
- Bennis, W. G., & Goldsmith, J. (2010). *Learning to lead: A workbook on becoming a leader*. Basic Books.
- Bowyer-Crane, C., Snowling, M. J., Duff, F. J., Fieldsend, E., Carroll, J. M., Miles, J., ... & Hulme, C. (2008). Improving early language and literacy skills: Differential effects of an oral language versus a phonology with reading intervention. *Journal of Child Psychology and Psychiatry*, 49(4), 422-432.
- Clifton, J., & Harter, J. K. (2019). *It's the Manager: Gallup finds the quality of managers and team leaders is the single biggest factor in your organization's long-term success*. Gallup Press.
- Colom, R., Karama, S., Jung, R. E., & Haier, R. J. (2022). Human intelligence and brain networks. *Dialogues in Clinical Neuroscience*.
- Connor, C. M., Phillips, B. M., Kaschak, M., Apel, K., Kim, Y. S., Al Otaiba, S., ... & Lonigan, C. J. (2014). Comprehension tools for teachers: Reading for understanding from prekindergarten through fourth grade. *Educational Psychology Review*, 26, 379-401.
- Cramer-Petersen, C. L., Christensen, B. T., & Ahmed-Kristensen, S. (2019). Empirically analysing design reasoning patterns: Abductive-deductive reasoning patterns dominate design idea generation. *Design Studies*, 60, 39-70.

- Devi, A. D., & Subiyantoro, S. (2021). Implementation of democratic leadership style and transformational head of madrasah in improving the quality. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 6(1), 14-26.
- Ezeocha, P. A. (2002). *Education administration and planning*. Optimal Computer Solution.
- Federal Republic of Nigeria (2014). *National policy on education*. NERDC.
- Fei, W., Opoku, A., Agyekum, K., Oppon, J. A., Ahmed, V., Chen, C., & Lok, K. L. (2021). The critical role of the construction industry in achieving the sustainable development goals (SDGs): Delivering projects for the common good. *Sustainability*, 13(16), 9112.
- Fink, L. D. (2013). *Creating significant learning experiences: An integrated approach to designing college courses*. John Wiley & Sons.
- Gnambs, T., Scharl, A., & Rohm, T. (2021). Comparing perceptual speed between educational contexts: The case of students with special educational needs. *Psychological Test Adaptation and Development*, 12(2), 829-937.
- Guthrie, J. T., Wigfield, A., Barbosa, P., Perencevich, K. C., Taboada, A., Davis, M. H., ... & Tonks, S. (2004). Increasing reading comprehension and engagement through concept-oriented reading instruction. *Journal of Educational Psychology*, 96(3), 403.
- Hallak, J., & Poisson, M. (2007). Corrupt schools, corrupt universities: What can be done? *International Institute for Education Planning*.
- Hamma, H. M., & Mohammed, U. (2021). Application of information and communication technology (ICT) for effective administration in Nigerian secondary schools. *International NGO Journal*, 4(5).
- Jacob, O. N., Pajo, W., & Akhmedov, D. (2020). Educational administration in Nigerian: challenges and the ways forward. *European Journal of Molecular & Clinical Medicine*, 7(3), 470-484.
- Jakobsen, M. L., Kjeldsen, A. M., & Pallesen, T. (2023). Distributed leadership and performance-related employee outcomes in public sector organizations. *Public Administration*, 101(2), 500-521.
- Johnson, P. (2018). *Fundamentals of collection development and management*. American Library Association.
- Krebt, D. M. (2017). The effectiveness of role-play techniques in teaching speaking for EFL college students. *Journal of Language Teaching and Research*, 8(5), 863.
- Kudo, M. F., Lussier, C. M., & Swanson, H. L. (2015). Reading disabilities in children: A selective meta-analysis of the cognitive literature. *Research in Developmental Disabilities*, 40, 51–62, <http://www.doi.10.1016/j.ridd.2015.01.002>
- Kyllonen, P. C. (2012, May). Measurement of 21st-century skills within the common core state standards. *In Invitational Research Symposium on Technology Enhanced Assessments* (pp. 7-8).
- Matias, C. E. (2016). Why do you make me hate myself? Re-teaching whiteness, abuse, and love in urban teacher education. *Teaching Education*, 27(2), 194-211.
- McAbee, S. T., Landis, R. S., & Burke, M. I. (2017). Inductive reasoning: The promise of big data. *Human Resource Management Review*, 27(2), 277-290.
- McCray, C. R., Beachum, F. D., & Reggio, P. F. (2021). School leadership in a diverse society: Helping schools prepare all students for success. *IAP*.
- Mount, M. K., Oh, I.-S., & Burns, M. (2008). Incremental validity of perceptual speed and accuracy over general mental ability. *Personnel Psychology*, 61(1), 113–139. <http://www.doi.10.1111/j.1744-6570.2008.00107.x>

- Mufua, N. G. (2019). Instructional supervision by principals: an appraisal from the perspective of teachers' job performance in some selected secondary schools in Boyo Division. *International Journal of Trend in Scientific Research and Development*, 3(6), 810-834.
- Nwabueze, I. E. (2021). Personnel accounting and administration of secondary schools in Nigeria in an era of economic recession. *European Journal of Education Studies*, 8(3).
- O'Connell, J., Gardner, G., & Coyer, F. (2014). Beyond competencies: using a capability framework in developing practice standards for advanced practice nursing. *Journal of Advanced Nursing*, 70(12), 2728-2735.
- Ogunode, J. N. (2020). Administration of primary school education in Nigeria: challenges and the ways forward. *Intercathedra*, 45(4).
- Okendu, J. N. (2012). The impact of school administrative structure and adequate supervision on the improvement of instructional processes. *Academic Research International*, 2(3), 497-503.
- Olowonefa, G. S., & Ogunode, N. J. (2021). Quality assurance programme in public secondary schools in Nigeria: Problems and the way forward. *Middle European Scientific Bulletin*, 19, 46-58.
- Parsons, J., Hewson, K., Adrian, L., & Day, N. (2013). Engaging in action research: A practical guide to teacher-conducted research for educators and school leaders. *Brush Education*.
- Peng, P., Wang, C., & Namkung, J. (2018). Understanding the cognition related to mathematics difficulties: A meta-analysis on the cognitive deficit profiles and the bottleneck theory. *Review of Educational Research*, 88(3), 434-476. <http://www.dio.10.3102/0034654317753350>
- Range, B. G., McKim, C., Mette, I. M., & Hvidston, D. J. (2014). Aspiring principals' perspectives about teacher supervision and evaluation: Insights for educational leadership preparation programs. *Education Leadership Review*, 15(1), 1-17.
- Rindermann, H., & Neubauer, A. (2004). Processing speed, intelligence, creativity, and school performance: Testing of causal hypotheses using structural equation models. *Intelligence*, 32(6), 573-589. <http://www.doi.10.1016/j.intell.2004.06.005>.
- Román-González, M., Pérez-González, J. C., & Jiménez-Fernández, C. (2017). Which cognitive abilities underlie computational thinking? Criterion validity of the Computational Thinking Test. *Computers in Human Behaviour*, 72, 678-691.
- Romani, C., Tsouknida, E., di Betta, A. M., & Olson, A. (2011). Reduced attentional capacity, but normal processing speed and shifting of attention in developmental dyslexia: Evidence from a serial task. *Cortex*, 47(6), 715-733.
- Rouleau, L., & Balogun, J. (2011). Middle managers, strategic sense-making, and discursive competence. *Journal of Management Studies*, 48(5), 953-983.
- Schulz, B. (2008). The importance of soft skills: Education beyond academic knowledge. *Nawa Journal of Communication*, 2(1), 146-154.
- The Federal Republic of Nigeria (2014). *National Policy on Education*. NERDC.
- Udongwo, G. E. (2015). Effective school administration and resource management capability among male and female principals in Akwa Ibom State. *International Journal of Advancement in Education, Management, Science and Technology*, 4(3), 73-83.
- Vettorello, M., Eisenbart, B., & Ranscombe, C. (2022). The innovation system roadmap: A novel approach to instil futures-oriented reasoning in strategic decision making. *Creativity and Innovation Management*, 31(1), 5-18.