EDUCATIONAL CHANGE MANAGEMENT STRATEGY AND EFFECTIVE SCHOOL SUPERVISION IN NIGERIA

Ele, Augustine Augustine; Eja, Michael Asor; Egbonyi, Romanus Cyprian & Ido, David Egwa
Department of Business Management, University of Calabar, Calabar
Department of Educational Administration and Planning, University of Calabar, Calabar
Department of Educational Management, University of Calabar, Calabar
Department of Microbiology, Cross River State College of Nursing, Midwifery and Public Health Sciences, Itigidi
Email: elenoble2000@yahoo.com

ABSTRACT: The study investigated the relationship between educational change management strategy and effective school supervision in the Nigeria secondary school system. The study adopted correlational research design. The population of this research work comprised of 376 respondents. The study adopted census sampling system in selecting 282 teachers. The study utilized Pearson Product Moment of Correlation Coefficient and multiple regression analysis to test the hypotheses. The study revealed that principals' empirical-rational strategy significantly relates to effective school supervision in the Nigeria school system. It also revealed that principals' environmental-adaptive strategy significantly relates to effective school supervision in the Nigeria school system. The study also shown that principals' power-coercive strategy significantly relates with effective supervision of secondary schools in the aspects of instructional delivery, record keeping as well as maintenance of school facilities. The study also revealed that principals' change management strategies such as empirical-rational strategy, environmental-adaptive strategy and power-coercive change management strategy significantly predicts or forecast effective school supervision in the Nigeria secondary school system. It concluded that effective school supervision is enhance through the introduction of educational change management strategies such as empirical-rational strategy, environmental-adaptive strategy as well as power-coercive strategy in the management and administration of the educational system.
Keywords: Change Management strategy, Empirical-rational strategy, Environmental-adaptive strategy, Power-coercive strategy and Effective school supervision.

INTRODUCTION
There is increasing interest in education as an instrument of change especially in developing countries like Nigeria. This has led to the heavy investment in education. The secondary level of education in Nigeria is one of such levels that have received government attention in terms of this investment. For this reason, educational managers responsible for educational institution have important roles and responsibilities to perform to ensure quality outputs. The expectation of government and other stakeholders is that education will help to enhance better manpower, economic, social, cultural, religious and political development of the country. This can be achieved if there is proper supervision.

Nowadays, the emphasis of the public is on academic achievement and employment skills. This requires effective supervision of school by the head, example the principal at the secondary school level. The success or failure of the secondary schools depends largely on the ability of the principal to supervise and maintain a conducive school environment for effective teaching and learning. It is through effective supervision of school that the principal can ensure that standards are not only maintained, but also improved upon to achieve expected objectives. Therefore, this requires that the principals and teachers must work together to effectively utilize both human and material resources to achieve expected goals of the school.

Dubi (2014) stated that the principal who is regarded as the leader, change agent and supervisor must come to grips with the proper management of all affairs related to academic activities, in order to promote quality instructional delivery (teaching and learning) in the school. For instance, this study expects that secondary school principals must exhibit educational change management strategy as predictors that will show that their supervision of school is effective enough. Udoh and Akpan (1990) observed that the role of the principal is both complex and demanding, that is why by his/her action or inaction, the school goals have to be judged. He/she is expected to set clear goals, allocate resources, manage the curriculum, monitor lessons, evaluate teachers, organize and implement plans, formulate policies and programmes that are meant to achieve the school objectives. This is done through effective supervision by the principal, change agent or leader. However, there are complaints, accusations and reports that the present caliber of principals are deficient in school supervision, inefficient and not up to the task of bringing about needed leadership and changes in the school system. This is because they do not respond adequately to standard based on instructional delivery, record keeping and maintenance of school facilities. Secondary schools education in Nigeria, Cross River State and Ikom Educational Zone in particular has for some time now become a source of concern to Cross Riverians and the people of the zone in particular. While some attribute the cause of its decline to grossly poor funding, collapse of infrastructural facilities, poor record keeping, poor salaries for teachers, examination malpractice, cultism; others attribute it to inability of the principal to exert effective change management strategies, direct and supervise activities in their schools.

Change management in organization involves the approaches used in transforming or reshaping individuals and organization for the attainment of educational goal. It is an indispensable factor that boosts leadership. According to Oredein (2006) change management provides a framework for managing the peoples' side of these changes at an organizational level. O'Dovovan (2006) and East (2011) opined that change management plays vital role in strategic planning and design, communicating group vision and maintaining momentum, evaluation and re-adjustment for results and planning for the future. In the opinion of the researcher, change management in secondary school supervision could assist in assessing what teachers' reaction will be to change and how to drift to a change programme that will provide support as teachers go through the process of accepting change. Generally, change management strategy in secondary school supervision implies to cast doubt on the viability of the present state of affairs. This means the ability of the principal who is the change agent and supervisor to attempt to convince people that they are on a burning platform, or can simply try to persuade them that the current state of affairs has a short shelf life. In any case, the story the principal tells has to convince members of the school, not him. Change management strategies that will be examine under this study are empirical-rational strategy, environmental–adaptive strategy and power-coercive strategy. Three areas of principals' effective school supervision that will be examined in this study are instructional delivery, record keeping and maintenance of school facilities.

Empirical-rational strategy is structured around people oriented style of administration. This strategy belief that people are rational beings and will follow their self-interest once it is revealed to them. The principal is the change agent who will reveal change and the need for change to the staff and students who will be willing to follow. Environmental- adaptive strategy seeks to shift the burden of change from management and the organization to the people. It exploits their natural adaptive nature and avoids the many complications associated with trying to change people or their culture. In this case, the principal makes clear the reasons for change, shares an attractive vision of what will be different because of the change, develop a change management plan, and specifies the new roles responsibilities and activities for all stakeholders such as staff and students, parents and guardians. Power-coercive strategy – This strategy uses authority, punishment and reward to compel change. Modern school supervision does not emphasize fault – finding

associated with authority and punishment. Therefore, principals in adopting this strategy, Nickols (2010) advised that time should be considered. Three areas of principals' effective school supervision will be examined in this study. There are instructional delivery, record keeping and maintenance of school facilities. Instructional delivery is the actual teaching activities carried out by the teacher. It therefore forms the core basis of the school system. If therefore the basic objectives of the school must be achieved, this area must be well supervised. This will help to improve the effectiveness of teachers through self-grooming, self-evaluation, curriculum development and goal achievement. Record keeping: school records are very many. They tell the history of a school, by serving as historical source of useful information to the principals and others who may be in need of it. They offer a basis for objective evaluation and appraisal by the principals and evaluators. To ensure effective supervision, all school records must be well kept. In the reverse, it indicates inefficiency on the part of the principal if school records are not properly kept and maintain. Maintenance of school facilities: The principal has a duty to maintain in good order the textbooks, records, furniture, equipment, buildings and grounds entrusted to his care. Edem (2008) advised that, maintenance should also include regular repair of furniture, equipment, and fixtures, and the interior and exterior painting of all buildings. He further added that school buildings and compound should be made to look attractive as possible.

Statement of the Problem

The principal is the chief executive of the secondary school. He/she occupies a crucial role in the running of the affairs of the school. For example, he/she is to ensure that the school is result-oriented, there is group work, that effective communication in terms of plan policies and programme stakes place, effective teaching and learning, and proper record keeping and maintenance of school facilities are in required standard. In clear terms, as the leader and supervisor, he/she is responsible for all that happens in the school. However, it has been observed that instructional delivery, record keeping and maintenance of school facilities are treated with less vigor by principals' ineptitude and unwillingness of government educational authorities to adopt good educational change management strategies in the supervision secondary schools in Nigeria. It has been observed that in many secondary schools, academic and instructional activities including record keeping and maintenance of school facilities are not well supervised and taken care of. This can be attributed to some principals' inexperienced and display of various change management agent lapses. It has

also been observed that some of the principals display non-collegial system which breeds informal groups, conflict, cleavages, poor performance in both external and internal examinations, cultism, negative use of social media etc. Problems of loss of sense of direction, mass failure in examinations, examination malpractice, class absenteeism by both teacher and students, non-coverage of syllabus, wastage in human and material resources, teacher incompetence in record keeping, role conflicts, high rate of dropouts etc. as evident in many secondary schools in Nigeria, Cross River State, and Ikom Education Zone in particular, is the absence of change management strategies in the supervision of secondary schools. Therefore, this study seeks to examine the correlation between educational change strategy and effective school supervision in Nigeria.

Objectives of the Study
The general aim of this study was to examine the correlation between educational change management strategy and effective school supervision in Nigeria. The following specific objectives were formulated to direct the study:
1. Empirical-rational strategy relates to effective school supervision in the Nigeria secondary school system.
2. Environmental-adaptive strategy relates to effective school supervision in the Nigeria secondary school system.
3. Power-coercive change management strategy relates to effective school supervision in the Nigeria secondary school system.
4. Principals' change management strategies such as empirical-rational strategy, environmental-adaptive strategy and power-coercive change management strategy predicts effective school supervision in the Nigeria secondary school system.

Research Questions
To guide this study, the following research questions were formulated:
1. To what extent does principals' empirical-rational strategy relates to effective school supervision in the Nigeria secondary school system?
2. To what extent does principals' environmental-adaptive strategy relates to effective school supervision in the Nigeria secondary school system?
3. To what extent does principals' power-coercive change management strategy relates to effective school supervision in the Nigeria secondary school system?

4. To what extent do principals' change management strategies such as empirical-rational strategy, environmental-adaptive strategy and power-coercive change management strategy) predict effective school supervision in the Nigeria secondary school system?

1. **Research Hypotheses**

The following null hypotheses were formulated to guide the study:

1. Principals' empirical-rational strategy does not significantly relate to effective school supervision in the Nigeria secondary school system.

2. Principals' environmental-adaptive strategy does not significantly relate to effective school supervision in the Nigeria secondary school system.

3. Principals' power-coercive change management strategy does not significantly relate to effective school supervision in the Nigeria secondary school system.

4. Principals' change management strategies such as empirical-rational strategy, environmental-adaptive strategy and power-coercive change management strategy do not significantly predicts effective school supervision in the Nigeria secondary school system.

Theoretical Framework

The hypothetical structure of this research work was anchored on Kurt Lewin Theory of Change. Kurt Lewin Theory of Change was developed in 1951. Lewin defined change as a three step procedure. These stages Lewin named them unfreezing, change and refreeze. The simple supposition of this philosophy is that change occurs in three stages. The first stage called unfreezing is the stage where the existing mindset is being dismantled. The second stage, change is where the change occurs. This is characterized by confusion resulting from the new ideas and the transition. The third stage refreeze is the last stage where the new attitude is manifesting as well as one's well-being level is recurring to earlier stages. The implication of this idea to this research work is that it helps school principals to give orientation to new teachers on how to embrace change while on the job and to others how to adjust as policy change. The school organization is a place where the achievements of the school goals are beyond individual effort. Contributions from the teachers, in terms of planned change implementation are very essential. This implies that the principals and the teachers must be actively involved and carried along throughout the transition period. The phases of this theory

therefore provides guidance for the school principal on how to go about getting the teachers to be involved in change implementation, re-assign tasks, how to embrace new policies and put them into practice.
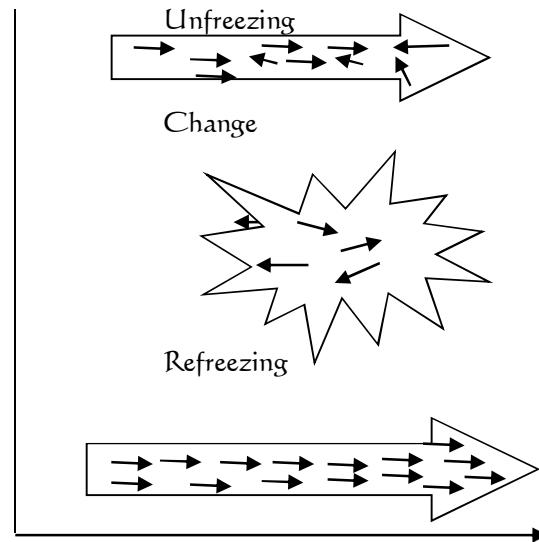

Figure 1: Kurt Lewin change theory
Source: Rapidbi (2010)

Empirical-Rational Strategy and School Supervision

Empirical-rational strategy assumed that individuals are rational as well as they can be rational with. Hence, the individuals can be influenced. This is why the strategy proffers incentives to enhance successful change implementation. This is to encourage the teachers affected by the change to be fully involved in the change process so that the school principal will achieve the level of buy-in necessary for the change to achieve the desired school objective. This strategy calls for the school principal to create a decent working association with the teachers as well as making sure that avenue for effective communication are available and utilized throughout the transitional period. In this strategy the school head must assess what teachers and students' responses will be as well as draft a change programmed that will deliver support as employees to go by the process of accepting variation. The programme must be executed, distributed all the way through the institute, supervised for efficiency as well as attuned where needed. This strategy anchors on proper communication of information as to ensure collective participation. Gruement (2005) carried out a research work to examine the

correlation among school culture, tutors collaboration, collegial support, professional development, unity of purpose and learning participation. Data were collected from 750 school tutors in 50 secondary schools in Indiana. The data were gathered through 34 items questionnaire. Survey research design was utilized for the research work. Cronbach alpha consistency estimation of the questionnaire stretched from 657 - 901. The data was scrutinized by means of Pearson Product Moment Correlation Scrutiny. The researcher observed that teachers and pupils achievement were positively correlated with a cooperative values that depended on the ability of the leadership of the principals to exhibit good interpersonal communication skill and human relationship. With this, it is clear that for the school principal to successfully implement change as to ensure effective instructional delivery, record keeping and maintenance of school facilities, he/she must communicate the vision of the change to the teacher through any effective possible means.

Dennis and Tegarden (2002) enumerated seven change management procedure models. There are classify possible transformation, scrutinize transformation demand, assess transformation, plan transformation, implement transformation, review change as well as close transformation. Identifying potential change: once there is a demand for transformation or if the organization requires new functionality. An example is the introduction of the Universal Basic Education (UBE) Programme, where the curriculum innovators in Nigeria established the urgent need to make a shift from the 6-3-3-4 to the 9-3-4 system of education. This is a change in the Nigerian educational system, as a way of implementing the 1990 Jumtein (Thailand) declaration of 'Education for All' by the year 2000. Analyzing change is the level of defining the practical viability, cost as well as benefit. Evaluating change is where committee makes strict decision, which is based on the change request. Forecasting change elucidates the degree of the transformation that is the other matters the transformation upsets, and is determined in a transformation effect scrutiny. It helps to create room for implementation of the change. Implementing change is the level that has to be programmed. At this level, the change propagators are exposed to curriculum innovators, representatives from the Ministry of Education, representatives of teachers, and principals. And revising variation is the level at which the application of the transformation in an original structure, announcement is confirmed for the last time, now by the task supervisor; who is the proprietor of the development that modification demand concerns. This calls for sufficient communication to

the public who will be at the receiving end. Closing variation (transformation) is the level at which the transformation sequence is accomplished and can also be reviewed as time goes on. This change system agrees with democratic leadership since it is characterized by collective participation and communication.

Bulach and Pickett (1998) investigated the impact of empirical-rational strategy on the attitude of workers. This sample was made up of 420 respondents drawn from graduate scholars in the scholastic management programme at the University of West Gorgian. Ex-post facto design was utilized for the investigation work. Sound validated structured research instrument was utilized for the data gathering. Data gathered were scrutinized by means of a one way examination of variance. The outcome specifically shown that empirical-rational approach encourages lack of trust and uncaring attitude in the school system, due to teachers' lack of openness in carrying out their primary task in the school. From the individual class level, under the control of a class teacher to the whole school, led by either a head teacher or principal to the school board, there exist the need to improve a thing or the other for the smooth operations and development of the system. Decline in government budget on education; economic recession in the country, increase in the number of educational institutions, staggering inflation coupled with expansion in students enrolment as well as lack of salaries to teachers as at when due have cause a great change in the system. This is to the extent that its stability and growth have been affected. Afonja (2013) observed that the changes have affected the teachers' morale to the extent that they de-taste their statutory duties. For example, teaching and learning, record keeping and maintenance of school facilities. Empirical-rational strategy wants the school principal to seek to enhance good teacher morale and motivation by communicating to them the necessary information that will promote teachers' success in planned change implementation. This means that the school principal must involve the teacher and encourage them to buy-in into the change process. This type of participatory involvement of teachers enhances teachers' motivation and broadens their commitment to actively be part and parcel of the change programme. Through empirical-rational strategy, the school head is able to solicit teachers' feedback, develop a good working relationship and create satisfaction within the teachers thereby motivating them to work as a group. This group collaboratory gesture helps to ease supervision as all the individuals in the group are willingly willing to put in

their best. A research study conducted by Schermerhorn (2010) on empirical rational strategy and the school organization. The researcher adopted a sample size of 640 tutors carefully chosen from 72 colleges in Pakistan, with a survey inferential research design, utilizing Pearson Product Moment Correlation Analysis; he found that empirical-rational strategy uses persuasion and the power of expertise to convince the teachers on the need for change. He stressed that this change strategy concerns with the balance of incentives and risk management. Alimba (2013) explains that in the school system, the exposure of the change agent (principal) on how to adapt to change, forms, behaviour and management patterns, the environment to be changed, personalities to work with, the history and needs of the organization (school) will constitute an important measuring rod in the performance and effectiveness of the change agent. He further explained that the attitude of the change agent should be such that it will be courageous and positive, warming and accommodating. He must be open-minded to people and be fair in his judgment. In the school system, the change agent can be principals, district administrators, teachers, students, consultants, parents, community leaders and or government representatives. Collaborating the views of Alimba (2013) and Afeti (2003) as cited by Alimba (2013), a change manager must be continually motivated through the established idea, must have the correct grouping of knowledge as well as administrative skills to stimulate workers as well as students, the correct attitude, and the intelligent existence to implement the precise actions in the precise way at the accurate time. When a change agent radiates these skills, knowledge and attitudes, then managing change by such a person, whether in the educational system or elsewhere will be an easy task. In the school system therefore when change is carefully implemented by experts, the teachers and students will be willing to accept change easily. Instructional delivery will improve, record keeping will be easy and maintenance of school physical facilities will be well observed.

Remigius (2012) investigated a study on "change management strategy on the achievement of school goals. The study area was Akwa Ibom State. 5 research suppositions were enunciated to control the research work. Research survey design was utilized for the research work. The trial size of the research work involved of 200 principals randomly sampled from a populace of 228 principals. This instrument for data gathering was a questionnaire tagged "change management strategy and school goal achievement questionnaire (CMSSGAQ)' for public school principals. Data gathered were scrutinized

utilizing one way examination of variance. Outcome of the discoveries shown that leaders' use of empirical-rational approach, normative re-educative approach, power coercive approach as well as environmental adaptive approach of change management did not significantly influence school achievement in terms of maintenance of school discipline, co-curricular activities and teachers' morale. Based on these findings, it was recommended that government should ensure that principals are regularly and constantly trained through school based workshops, conferences and seminars on effective change management strategy and that principals of schools should not relax the school rules and regulations in order to be nice to teachers or themselves as this impedes the achievement of school goal. Though the findings of Remigius (2012) contradicts the observation of Afeti (2003), it can be clear to assess that when change is not implemented by experts, using the right or positive means in the school, the change agent must fail in his effort. Change is constant and must occur in the school system (Nwakwo, 2009; 2013; 2014). This means, it must be implemented as to achieve the desired school objectives. Nwachukwu (1992) cited by Alimba (2013) had identified obviously where change must set-in in the school system. These areas are culture, society, politics, economics internalization, institutional structures, school calendar, government policy, intervention of international organizations like UNO, AU, school-community relations, teacher and students attitudes, expansion in student enrolment and even parental interest, political instability and increase in the cost of goods and services. Deviating therefore from the findings of Remigius, change needs planning and since it must occur, it becomes obvious that experts are needed to achieve it.

Environmental-Adaptive Strategy and School Supervision

This tactic is a system built on constructing a new organization as well as slowly moving persons from the old to the new one. This tactic is founded on the basis that persons compete against loss as well as disruption but they familiarize willingly to new environments (Nickols, 2010). The basic aim of this strategy is to move the problems associated with change management from supervision as well as the organization to the persons involve. Nickols (2010) posited that the strategy exploits the normal adaptive environment and dodges the various problems connected with demanding to the transformation of persons or their values. In the school system, this tactic tends to explain that new innovations, gradually makes the old policies obsolete. This means, instead of transforming the existing system, one creates original one as well

as gradually moves people from the ancient to the original system. Educational stability and development can be achieved only when change- which is considered a fundamental feature of the system- is conscientiously managed. Alimba (2013) remarked that, the whole process of change is characterized by uncertainties, which are capable of frustrating educational objectives, when underestimated during the process of embarking on change. Herndon (2007) researched on the impact of environmental adaptive strategy and school administration. Data were collected from 230 teachers in 8 secondary schools randomly carefully chosen by means of simple random method in Columbia. The data were gathered through a 34 item questionnaire. Cronbach Alpha Reliability estimate was utilized to determine the consistency level of the instrument, and estimate ranged from 0.65 to 0.87. Survey design was utilized for the research work. The researcher observed that this strategy demands the school principal to be proactive and foresighted. In the college arrangement, the participation of college administrators, teachers, students, parents and other stakeholders must be constant. Through conferences, seminars and workshops, facts about effecting change in the system should be made known to encourage wider participation to sustain change. The motivation to support the process financially and mentally by these groups of people should not be in doubt. The support should be forthcoming, encouraging, and a feedback mechanism should be installed to give room for adjustment in the pattern of operation of the people based on the dictates of the changing situation. Based on the findings of Herndon (2007), school principals who recognizes the worth and needs of the staff and students, using this strategy will be able to sustain the school tempo. With the participation of people (stakeholders) he will be able to overcome the problems of resistance which is a risky exercise for the process. He will be able to identify areas of lapses in instructional delivery, record keeping, such as notes of lesson, registers, diaries and even financial records. He will also identify facilities that are in the state of depreciation, then find ways of putting them back in shape.

Huysman (2008) carried out a survey to find out the impact of environmental adaptive strategy on teachers motivation. 1450 respondents were randomly nominated utilizing stratifies random sampling method from 225 schools in Florida. The consistency of instrument was determined through pilot testing using test-retest technique, with the reliability coefficients of 0.79 to 0.92. Descriptive investigation design was utilized for this investigation work. Analysis of Variance (ANOVA) was adopted to test the hypotheses

articulated at 0.05 level of significance. This finding revealed that the strategy does not under value the efforts of the teachers; rather it recognizes and involves them in the leadership activities of the school system. The exercise of Huysman (2008) proves that when teachers are well motivated, they will be willing to put in their best to ensure the realization of the school objectives. This motivation could be inform of provision of teaching and learning aids, room for active participation in decision-making on matters that affect them, regular payment of salaries as well as promotions. Provision of incentives such as transport and recreational facilities, free medical services, provision of all necessary school facilities and equipment which will reduce frequent strike actions. Teachers must be seen as capable of self-direction, capable of assuming responsibilities and be seen as capable of being creative, having worth and dignity and possessing potentials for growth in ability. Principals need to encourage teachers to see teaching as satisfying. Aquinas (2005) had classified the above as positive reward or motivation. He also explained motivation to be negative. Negative motivation according to him is built on potency or fright. Here, fright causes an individual to perform in a definite manner for the reason of the consequences. However, the imposition of frequent punishment may result into frustration among those punished. It may also create hostile state of mind and unfavourable attitude to the job. When applying environmental-adaptive strategy, negative motivation should be used with caution whenever it becomes necessary for principals to use it. To create a conducive atmosphere for teachers to work, and to ensure effective supervision, administrators who intend to use the environmental-adaptive strategy which encourages motivation. Makes staff to voluntarily continue to perform their work well; as the best remedy for resistance to changes; encourage selective behaviour; promote sense of belonging among teachers and students; make workers see that the organization belongs to them; makes teachers to sustain behaviour (Dare, 2009).

A research work carried out by Kulkarni (2011) on the effect of Environment Approach on the Organization Behaviour. The population of the research work consisted of 600 tutors randomly carefully chosen, using random sampling technique from 40 sampled secondary schools in Ibadan, Oyo State. A validated instrument titled Influence of Environment Approach on Organization Behaviour Questionnaire (IEAOBQ) was utilized to gather data for the research work. One Method scrutiny of Variance (ANOVA) system was applied for the scrutiny of data collected. This study findings

indicated that a school principal who used this strategy must be able to facilitate the identification of organizational goal. He must be able to initiate the development of a vision of what the school organization is about. He controls, arranges and does things right. He sets the vision so that the teachers do the right thing. This study puts this strategy as "seeing beforehand". In other words, it will advise school principals to visualize beforehand, what a particular circumstance or event may likely manifest to if not properly managed or checked. Some school locations are lucrative for minor domestic business to strive. Some teachers see this as opportunity to involve in domestic trade. Sometime, the location encourages farming or agriculture, teachers uses the opportunity to engage in such. This strategy therefore demands that first instance of such experiences, the principal should devise a means of trying to nib it on the board. When such situations are allowed to escalate, it will turn the teachers away from their expected statutory obligations. Alimba (2013) suggests that, when a situation of such occurs, individuals expected to be affected through the transformation process should be educated and supported to reduce the effect of the change in them.

Power-Coercive Strategy and School Supervision

This strategy uses authority, punishment and reward to compel change. Nickols (2010) advised that in adopting this strategy, time should be considered. According to Nickols (2010), the basic assumption of this strategy is that individuals are fundamentally complaint as they will commonly do whatever they are communicated or can be prepared to do. Effective change is built on the exercise of power as well as the imposition of prohibitions. The authority now requires iron hands to handle situations. This means everybody in the school organization must be prepared to submit to the dictates and the will of the school principal or be prepared to face the stiff neck penalties or punishment for non-compliance and disobedience. The main trust of this strategy is to decrease the peoples other options to the set rules and regulations of the organization. As said earlier, time and treat are the factors that fertilize this strategy. These two factors comes to play because in a bureaucratic organization where some staff are given some bit of autonomy, they by changing the programme irrespective of high handedness involved. In this case, the organization suffers resentment. The culture of treat, time and punishment makes this strategy suitable for school administration. Affirming the experiences of McGregor (1960) in his book "The Human Side of Enterprise", he observed that the normal people: Has an inborn hate job, also

will dodge it if probable as a consequence. Workers must be compelled, well-ordered, engaged as well as endangered with penalty to catch them to put forth sufficient energy in the direction of attaining organizational goals. These normal people desires to be engaged, demands to dodge duty, has comparatively tiny determination, but needs safety or security (Peretomode, 2008).

These factors that are inherent in the human person underscore and support the employment of power coercive strategy in the implementation of planned change in order to achieve school objectives of instructional delivery, record keeping and maintenance of school facilities. An investigation by Barnes and Kriger (2009) on Power Coercive Approach and the school organization, sample population of 720 teachers was drawn from 55 secondary schools in Ekpoma, using a random sampling method. A 42 items four-point Likert scale research instrument was adopted for facts gathering. One Way scrutiny of Variance was utilized to test the hypotheses. They suggested that, autocratic leadership style works very well in the maintenance of school aims as well as purposes. They elucidated that autocratic leadership style works positively by commanding the group on how to go about the goal (mission) of the organization and lead the organization to success. Jolly (1995) cited in Remigius (2012) carried out a research work which sought to find out the correlation among power-coercive approach and teachers motivation. The sample size of 350 teachers was selected from a population of 35 colleges in Cairo. Review inferential research design was used. These data gathered was scrutinized adopting Pearson Product Moment Correlation Examination. The finding of the research work shown that human relations as well as interpersonal skills are proficiencies required for effective leadership. It was also discovered that when it comes to human relations, motivation and teachers' morale, there is need to decline the usage of undesirable motivation as well as a rise in utilizing of constructive motivation. Considering Nickols (2010) advice on the use of time in implementing power-coercive strategy, a school principal who adopts this strategy must take into consideration the followings. The disposition to be innovative and creative; possession of a teaching style that is uniquely a combination of different methods appropriated for particular lessons and tasks; the degree of interaction with and or isolation from professional peers; how rich or poor is the teaching environment? How cosmopolitan or local is the orientation of the agent? What is the nature of the agents' motivation to work? What are his/her

sources of satisfaction from work? How willing is he/she to take risk (risk capital)? What are the sources of information regarding the institution, profession and the community? In the secondary schools, the principal as the change agent should be mindful of people's strength and weaknesses. Not everyone in the organization welcomes change. The principal as a change agent needs to understand the people he or she is dealing with, and understand how and why they feel like they do, before taking actions, else transformation is likely to be very aching, and the best individuals may be missing in the process if care is not taken. A close examination of power coercive strategy of change management reveals that it does not follow the above guidelines. Therefore, it is logically admissive that the strategy does not encourage and promote teachers morale.

A study by Blumberg and Greenfield (2010) on school climate and teachers' motivation cited in Kulkarni (2011), sample size of 650 school tutors carefully chosen from 68 secondary schools in Ghana was used. Ex-post facto investigation design was utilized for the investigation work. Sound validated organized research instrument titled School Climate and Teachers' Motivation Questionnaire (SCTMQ) was utilized for data gathering. Data gathered was scrutinized by means of One Way Analysis of Variance. This research work outcome shown that teachers work was not motivated by bureaucratic mandate or directives from superiors, but by much care need to be taken by the school principal in the exercise of authority with the staff. Ways in which an organization can maintain its state of equilibrium can be either through the removal of those whose motives are not consonant with organizational goals, or by sharing the organization benefits, both material and social, with its members. Members of organization agree to accept inducement from the organization in exchange for the contributions they make and will continue to make as long as they receive inducement which are either greater than or commensurate with their contributions. The solvency of the organization, consequently, depends on the ability of the organization to make sufficient inducements available in return for the contributions desired (Edem, 2009). The above suggest that teachers' effort should be recognized and motivated by the school principal to enhance effective participation of teachers in instructional delivery, record keeping and maintenance of school facilities. School structures as well as fixtures offer the bodily surroundings for teaching and book learning. These physical facilities are important resources that are demanded for the actual or efficient process of the entire school system. The

school principal is therefore expected to show innovative leadership practices and appropriate change management strategy in taking care of these facilities entrusted to his/her care.

Ndu (2009) stated that several factors are responsible for the depreciation of physical facilities and equipment in outlook. These include constant usage, effect of weather, age and carelessness, or negligence. Therefore, apart from maintaining the school plant through repairs and replacement, cleaners should be employed to sweep the compound, trim the flowers and wash the toilets regularly. The principals should also ensure that students help in keeping their environment clean by sweeping their classes, hostels, cutting the grass around their hostels and fields. Dubi (2014) therefore stated that, the maintenance of clean environment to staff and students reflects their personal cleanliness. This means that if the surroundings are dirty, there is a constructive relationship among the dirty environment as well as our personal cleanliness. He further stated that the general appearance of a school is one of the major criteria by which students, teachers and the principals are assessed by the society at large. Mbon (2018) observed that the benefits of effective record keeping in a school is very imperative. This is because management from this perspective ensures good reporting system that is effective communication and openness in administration. Records can only be useful if they are available, accurate, complete, reliable and honest. He therefore recommends that an innovative principal should arrange for modern facilities like computers and film services which are lacking in almost all the schools in Nigeria. These facilities help in the reduction of reduction of record volumes and retrieval of records. They also reduce drastically the space which would have occupied by records kept in files, cabinets and note books. Constant requests by school heads are not attended to and the absence of such facilities is another source of frustration to the management of the colleges in Nigeria.

METHODOLOGY

The study adopted correlational research design. The population of this research work comprised of 376 teachers, 42 of which are principals over the 94 public colleges in Ikom Education Zone, Cross River State, Nigeria (Planning, Research and Statistics Department, Secondary Education Board, Calabar, 2018); and two hundred and eighty two (282) teachers from the ninety four (94) schools. This study adopted census sampling system in selecting the ninety four (94) principals and the two hundred and eighty two (282) teachers.

This method was adopted since the populace of the leaders (principals) was too small for randomization. Census sampling method was also used because it allowed adequate representation for the population to be generalized. The study adopted Pearson Product Moment of Correlation Coefficient and multiple regression analysis to test the hypotheses and drawn conclusion thereof.

DISCUSSION OF FINDINGS

The study revealed that principals' empirical-rational strategy significantly relates to effective school supervision in the Nigeria school system. This means that when principals' empirical-rational strategy arises as it will bring about a rise in supervision of secondary schools in the parts of instructional delivery, record keeping as well as maintenance of school facilities. That is, empirical-rational strategy relates to supervisory effectiveness of school principals.

TABLE 1: Pearson Product Moment Correlation scrutiny of the correlation among principals' empirical-rational strategy as well as effective school supervision $(N = 282)$. There is no substantial correlation among the mean scores of principals' empirical-rational strategy and effective school supervision in Nigeria School system.

Variables	X	SD	Rxy	Sig.
Principals' empirical-rational strategy (X)	15.04	1.93		
Instructional delivery (Y1)	14.78	1.78	0.633[*]	.000
Records keeping (Y2)	15.12	2.05	0.540[*]	.000
Maintenance of school facilities (Y3)	14.87	1.91	0.644[*]	.000

[*] p<.05; df = 280; critical r = .113

This finding is in agreement with Afonja (2013) who observed that certain changes affect the teachers' morale to the extent that they de-taste their statutory duties. This means that the school principal must involve the

teachers and encourage them to buy-in into the change process. Schermerhorn (2010) also revealed that empirical-rational change management strategy applies persuasion and the power of the expertise to convince the teachers on the need for change. This implies that for a school principal who supervises the school with this type of strategy, he/she must be positive, warming and accommodating to succeed. Remigius (2012) also revealed that principals' use of empirical-rational strategy of change management did not significantly influence school achievement in terms of maintenance of school discipline, co-curricular activities and teachers' morale. Iyaji (2018) reported that an effective leader who uses empirical-rational strategy supervises well. He/she does not blow trumpet and does not classify minor issues to mean things of great relevance to him/her. This means that school principal who adopts this strategy in supervising his school does not allow trivial issues to pose as a challenge to his administration. The study also revealed that principals' environmental-adaptive strategy significantly relates to effective school supervision in the Nigeria school system. This is to say that principals' environmental-adaptive strategy significantly relate with supervision of schools in the parts of instructional delivery, record keeping as well as maintenance of school facilities. The result also shows that correlation coefficients are positive. In line with the above result, when the principals' environmental-adaptive strategy rises as it will bring about a rise in supervision of secondary schools.

TABLE 2: Pearson Product Moment Correlation examination of the correlation among principals' environmental-adaptive strategy as well as effective school supervision ($N = 282$). There is no substantial correlation among the mean scores of principals' environmental-adaptive strategy and effective school supervision in the Nigeria school system.

Variables	X	SD	Rxy	Sig.
Principals' environmental-adaptive strategy (X)	14.63	2.04		
Instructional delivery (Y1)	14.78	1.78	0.501*	.000
Records keeping (Y2)	15.12	2.05	0.464*	.000

| Maintenance of school facilities (Y₃) | 14.87 | 1.91 | 0.490* | .000 |

---

*p<.05; df = 280; critical r = .113

Herndon (2007) revealed that this strategy demands the school principal to be proactive and foresighted in his supervisory effectiveness. Huysman (2008) also revealed that environmental-adaptive strategy does not under-value the efforts of the teachers; rather, it recognizes and involves them in the leadership activities of the school system. This implies that teachers are motivated to work for the success of the school if they are involved in the leadership of the school. This is also in line with Aquinas (2005) who advised that, to create a conducive atmosphere for teachers to work, and to ensure effective supervision, administrators who intend to use the environmental-adaptive strategy, which encourages motivation to promote sense of belonging among teachers and students in the secondary schools. Kulkarni (2011) also revealed that a school principal who uses this approach or strategy will be able to facilitate organizational goals. This study puts this strategy as seeing beforehand. This means that school principals are advised to visualize beforehand, what a particular circumstance or event may likely be checked or managed. This also agreed with the observation and advise of Stephenson (2015) which says that any principal who sees his teacher and students derailing from their statutory school obligations, need to use this strategy to nib their character on the board. The above also agrees with the suggestions of Alimba (2013) that when a situation occurs, that will cause change in the system, persons expected to be affected by means of the change process need to be educated and supported to reduce the effect of the change in them by using environmental-adaptive strategy to supervise the school. This also means that the use of environmental-adaptive strategy relates to effective school supervision.

The study also shown that principals' power-coercive strategy significantly relates with effective supervision of secondary schools in the aspects of instructional delivery, record keeping as well as maintenance of school facilities. The result also show additional signal that the significant correlation or relationship coefficients are positive. The constructive coefficients are optimistic displaying constructive correlation among the independent variable as well as the dependent variables; implying that rise in the independent variable will take approximately a rise in the dependent variable. This means that when the principal power-coercive strategy

increases, it will bring about a rise in supervision of secondary schools in the parts instructional delivery, record keeping and maintenance of school facilities.

TABLE 3: Pearson Product Moment Correlation examination of the correlation amongst principals' power-coercive strategy as well as effective school supervision (N = 282). There is no substantial correlation among the mean scores of principals' power-coercive strategy as well as effective school supervision in the Nigeria school system.

Variables	X	SD	Rxy	Sig.
Principals' power-coercive strategy (X)	14.94	1.75		
Instructional delivery (Y1)	14.78	1.78	0.726^*	.000
Records keeping (Y2)	15.12	2.05	0.636^*	.000
Maintenance of school facilities (Y3)	14.87	1.91	0.724^*	.000

$^*p < .05$; df = 280; critical r = .113

Barnes and Kriger (2009) revealed that autocratic leadership style works very well in the maintenance of school aims as well as goals. They further elucidated that this power-coercive strategy works positively by commanding the group on how to go about the goal (mission) of the organization and lead the organization to success. Jolly (1995) also revealed that human relations as well as interpersonal skills are major proficiencies or capabilities required for effective leadership. This means that when a coercive strategy is adopted in leadership with positive motivation, the school principal will achieve desired results. Blumberg and Greenfield (2010) also revealed that teachers' work was not motivated by bureaucratic mandate or directives from superiors, but by much care needed to be taken by the school principal in the exercise of authority with the staff. In line with the above, Edem (2009) suggested that teachers' effort should be recognized and motivated by the school principal to enhance effective participation of teachers in instructional delivery, record keeping and maintenance of school facilities. Ndu (2009) stated that several factors are

responsible for the depreciation of physical facilities and equipment in outlook. These include constant usage, effect of weather, age and carelessness or negligence. He therefore recommended power-coercive strategy in the supervision of secondary schools. Dubi (2014) stated that the general appearance of a school is one the major criteria by which students, teachers and the principal are assessed by the society at large. Therefore to achieve a positive assessment, Fadipe (1997) had also suggested the employment of power-coercive strategy to be used in the supervision of colleges in the parts of instructional delivery, record keeping as well as the maintenance of school facilities. The study also revealed that principals' change management strategies such as empirical-rational strategy, environmental-adaptive strategy and power-coercive change management strategy significantly predicts or forecast effective school supervision in the Nigeria secondary school system.

TABLE 4: Multiple regression scrutiny of the joint effect of principals' change management strategies on effective school supervision (N=282)

Model	R	R²	Adjusted R²	Std error of estimate	
1	.775	.601	.597	2.341	
Source of variation	SS	Df	MS	F-ratio	p-level
Regression	2289.560	3	763.187	139.205	.000
Residual	1518.645	279	5.482		
Total	3808.205	282			
Variables	Unstandardized coefficients		Standardized coefficients		
	B	Std error	Beta	t	p-level
(Constant)	7.233	.529		13.668	.000
Principals' empirical-rational approach	.217	.035	.309	6.181	.000
Principals' environmental-adaptive approach	.309	.031	.535	9.912	.000
Principals' power-coercive approach	.104	.033	.115	3.124	.001

*Significant at .05 level

Managerial Implications of the Study

To school principals, this study will help them to change and adopt their leadership behaviour to suit different situations or systems. This research work will also aid the principals to view their areas of supervisory weaknesses

where they need to improve upon. The study will also aid parents and guardians to know the supervisory inadequacies of school principals that hinder effective performance of their children and wards in the secondary schools. It will also guide them to make informed choice of school for their children. The study will also help education authorities and education boards to adopt good educational change management strategies such as empirical-rational strategy, environmental-adaptive strategy and power-coercive strategy, which could also aid them in assessing the extent to which principals are complying with government directives on how their schools can be run. It may also help them to evaluate and appraise the level at which standard is maintained. More so, the study may help education authorities and education boards during transfers and posting of principals and teachers.

CONCLUSION

With the rapid expansion of the Nigeria school system, effective school supervision is enhance through the adoption or introduction of educational change management strategies such as empirical-rational strategy, environmental-adaptive strategy as well as power-coercive strategy in the management and administration of the educational system. Educational change management strategies such as empirical-rational strategy, environmental-adaptive strategy and power-coercive strategy has a significant relationship with effective supervision of the Nigeria secondary schools systems. These strategies can also be used to forecasts or predicts effective school supervision. Change management strategies can be used as an internal technique or tactic in restructuring the Nigeria secondary school system in adopting various strategies such as empirical-rational strategy, environmental-adaptive strategy and power-coercive strategy alongside with principals' innovative leadership practices such as authentic, cultural and balanced leadership practices.

RECOMMENDATIONS

Based on the findings, the following recommendations were made:

i. Principals should adopt empirical-rational strategy, environmental-adaptive strategy and power-coercive strategy in order to enhance effective supervision in the secondary schools system steadily.

ii. Educational tours should be arranged regularly for principals to enable them visit good schools in some states to learn from the experiences and practices of others.

iii. Principals should keep abreast of new changes and developments in education in order to introduce them to their staff.

iv. Principals should develop various motivational techniques such as praise, involving staff in decision making, delegation of responsibilities to staff, operating open door policy etc.

v. Principals should ensure that instructional materials, school records, sports and building facilities provided to schools are well kept and utilized for the promotion of teaching and learning effectiveness.

vi. School physical facilities should be regularly maintained to attract and encourage regular attendance and enhance teaching and learning system in schools. This means that principals should ensure that a well-planned time-table should be maintained to give access to all members of the school to use scarce physical facilities available in the school.

REFERNCES

Afeti, O. (2003). The effect of change management on students' academic achievement in secondary schools. *Journal of Educational Management*, 2(1), 101-110.

Afonja, M. A. (2013). *Effective leadership behaviour of school principals in West Georgia*.Retrieved from cbulach@comcast.net.

Alimba, A. A. (2013). *Research methodology and statistics*. Ile-Ife: University of Ife Press.

Aquinas, P. G. (2005).*Principles of management foundations and realities.* New Delhi: Amol Publications PVT Limited.

Barnes, B &Kriger, K. (2009).*Organizational leadership.* Retrieved from http://www.change-management-coach.com/adkar.html.

Bulach, B. & Picket, L. (2010). *Empirical-rational strategy and organization.* Retrieved from http://www/change-managment-coach.com/adkar.html

Planning research and statistics department (2018). *Cross River State Secondary Education Board.*

Dare, M. O. (2009). *Theories and concept of educational administration, planning and supervision for tertiary institutions in Nigeria.* Kano: Afomat Print.

Dennis, W., &Tegarden, A. (2010).*Educational reform and social change.* In G. A. Swanson (ed) readings in social psychology. New York: Henry Holt 37-49.

Dubi, N. E. (2014). *Evaluation of instructional leadership practices of principals in Nigerian secondary schools.* Unpublished Ph.D Thesis,

Department of Educational Foundations and Curriculum, Faculty of Education, Ahmadu Bello University, Zaria.

East, N. (2011). *Implementing an effective change management.* Australia: Ark Group Ply Ltd.

Edem, D. A. (2008).*Introduction to education administration in Nigeria.* Ibadan: Spectrum Books.

Fadipe, J.O. (1997). Statistical needs for effective educational administration and planning in Nigeria. *Studies in Educational Planning and Administration,* 1(1), 240-255.

Gruement, L. (2005). *Analysis of the leadership behaviour of school principals.* West Georgia: Blose State University Press.

Herndon, B. (2007). *Three change management strategies: An analysis.* A dissertation presented to the Faculty of Graduate School. Columbia. University of Missouri.

Huysman, L. (2008).*A model of change in business community.* ProsciResearch.Dol 1930885504.

Kulkani, A. (2011). *What is participative management?* Retrieved from buzzel.com

MacGregor D. (1960).*The human side of enterprise.* New York: McGraw-Hill Books Company.

Mbon, U. F. (2018). *Record keeping and management in school.* In Chike-Okoli, A. (2009). *Leadership for organizational effectiveness.* In J. B. Babalola & A. O. Ayeni (Eds). Educational management: Theories and tasks. Lagos: Macmillan Publishers.

Ndu, A. N. (2009). Personal policy and teaching effectiveness. Onitsha: Orient Publishers.

Nickolas, F. (2010).*Four change management strategies.*Retrieved from www.nickols.com

Nwankwo, A. B. (2013). *Managing change in organization.* Retrieved from http://www/change-managemnt-coach.com/adkar.html. June 20.

Nwankwo, O. A. (2009). *School administration and supervision.* Ibadan: Hulbalk Publishers Limited.

Nwankwo, I. J. (2014).*Educational planning: Theory and methods in Nigeria.* Pakistan: Izbarsons Publishers.

O'Dovovan, G. (2006). *Corporate culture and change re-defined for 21st Century.* Hongkong: CGP Publishers.

Oredein, A. O. (2009). *Change management*. In J. B. Babalola& A. O. Ayeni (Eds). Educational Management: theories and tasks. Lagos Macmillan Publishers.

Rapidbi, L. K. (2010). *Kurt Lewin three steps change theory*. Retrieved from PG-format (DVD) 8/5/16.

Remigius, B. U. (2012). *Change management strategy and school goal achievement in Akwa Ibom State*. Unpublished M. Ed Thesis in the Department of Educational Administrational Planning, University of Calabar, Calabar.

Schemerhorn, D. (2010). *The strategies for change.*Retrieved: http://gauesha.org/wos/managing.htm.

Stephenson, D. C. (2014).The making of secondary school principals. *Journal of International Studies in Educational Administration*, 31(2), 35-53.

Udoh, S.U. &Akpa, G.O. (1990).*Educational administration in Nigeria: Theory and Practice*. Lagos: Ichejum Publications.