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4Es Model as Catalyst for Attitudinal Change among Teachers in Bauchi State, Nigeria

[1]Usman, Babangida Usman; [2]Ishaku, Yusuf Aliyu; [3]Maibege, Masaratu; [4]Gana, Ummi Asheik; [5]Prof. A. Y. Dutse

[1]Ph. D. Researcher, Postgraduate Studies, Nigerian Defence Academy, Kaduna State-Nigeria.
[2]Ph. D. Researcher, School of Postgraduate Studies, Abubakar Tafawa Balewa University, Bauchi-Nigeria.
[3]Lecturer, Department of Early Childhood Education and Care, School of Early Childhood Education and Care/Primary Education, College of Education Billiri, Gombe State-Nigeria.
[4]M.Ed. Researcher (Measurement and Evaluation), College of Postgraduate Studies, University of Maiduguri-Nigeria.
[5]Faculty of Management Sciences, Abubakar Tafawa Balewa University, Bauchi-Nigeria.

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Abstract

The consequences of poor attitude in an organization are enormous as Teachers are assets for national development. The study was aimed to assessed the 4Es Model as catalyst for attitudinal change among Teachers in Bauchi State, Nigeria. Through the following objectives: to assess if 4Es model serve as catalyst for attitudinal change among Teachers in Bauchi State, and to determine the processes of implementing 4E's model among Teachers in Bauchi State. The study was quantitative research design that sought primary information from teachers as the respondents of the study in Bauchi State. The primary data collected was collected through the used of questionnaire administered with aid of research assistants and was analyzed using descriptive method of data analyses using SPSS to ease the analyses. The finding of the study revealed that, 4Es Model is strong enough to serve as catalyst for attitudinal change among Teachers for national development. Promoting collaboration and partnership with staff through their involvement in the development process of 4Es model, reflect the cultural diversity of staff attending the service, ensuring consistency of approach and service operations of the 4Es model, and promoting a sense of worth for all parties as their input is valued and respected in 4Es model process are the most suitable processes of implementing 4Es model among Teachers for national development. The study recommended that; government should ensure effective usage of 4Es model dimensions across all its formation as that catalyse attitude change for national development. Practicing of 4Es (Enable, Engage, Encourage, and Exemplify) model-dimensions in all sectors should be prioritised to ensure national development.

Keywords: Dimensions of 4E's model; Processes of Implementing 4Es Mode; Theoretical Review.

I. INTRODUCTION

All over the world there is agreement of opinion about the fallen standard of worker's attitude towards their primary assignment (Adebule, 2004). Level of development of country is closely linked with the quality of education, which is closely linked with the quality of teachers (Aktan, Toraman & Orakcı, 2020), and development is critical and essential to the sustenance of any nation. A teacher also should possess positive attitudes, as this has an impact on the quality of education (Dağlıoğlu, 2010). Attitudes are developed as a result of some kind of learning experiences, or Attitude can also be formed simply by adapting the example and opinion of co-employees, friends and managers. This is mimicry or imitation, which also has a vital to play in developing negative attitude at workplace. Attitudes refers to a person's beliefs about and attitude toward a specific behavior (Ajzen & Fishbein, 2005). An attitude refers to a set of emotions, beliefs and behaviours towards a particular object, person, thing or event (Cherry, 2021). Attitudes are often the result of experience or upbringing and they have a powerful influence over behaviour (Suleiman, 2021). Poor attitude according to Aremu and Sokan (2003) is a performance that is adjudge by the owners/customers and some other significant as fallen below an expected standard. Poor attitude of workers has been observed among employees in both public and private own entities, which has been and is still a source of concern to the owners, customers and members of the community as a whole because of the great importance that workers have on the organizational development of any formal entity.

The 4E's model emerged from research (Jackson, 2005) focused on consumption (i.e., individual consumer behaviour) and advocates behaviour change strategies under four categories of enable, encourage, engage, and exemplify. In addition to these, the model states that in some circumstances, in particular where behaviour is entrenched or habitual, government may also need to 'catalyse' people to behave differently. Behaviours and attitudes of individual consumers are at the core of this model and the majority of interventions (Information; education; incentives) are aimed at affecting individual consumer choices. However, it also features other routes to behaviour change, such as 'deliberative fora? Leading by example. and community action' which begin to affect the social contexts in which individuals make choices. This therefore, make it necessary for a called in changing of attitude among Teachers that can attract more national development.

The place of education in virtually all aspect of human endeavours cannot be over-emphasized (Oladiti, Ogunjimi & Adedigba, 2021). Teachers according to Chai (2024) are the bedrock of the educational system, playing a pivotal role in shaping the intellectual, emotional, and social development of a nation. The influence of teachers, extends beyond the classroom, impacting students' futures and the broader community (Chai, 2024). Teachers design and deliver lessons that convey knowledge and skills.

Statement of the Problem

Attitude of a Teachers towards their primary assignment remain a concern which kills the spirit of development in Nigeria, and this led to the underdevelopment of the nation as the nation is not where it should be in terms of development. This confirm the assertion of Orok (2013) that, the attitude of the Nigerian workers to work has been a subject of criticism among scholars and other interested parties for quite a long time now. Poor attitude according to Aremu and Sokan (2003) is a performance that is adjudge by the owners/customers and some other significant as fallen below an expected standard. Poor attitude of workers has been observed among employees in both public and private own entities, which has been and is still a source of concern to the owners, customers and members of the community as a whole because of the great importance that workers have on the organizational development of any formal entity. All over the world there is agreement of opinion about the fallen standard of worker's attitude towards their primary assignment (Adebule, 2004). This study assessed the 4Es model as catalyst for attitudinal change among teachers in Bauchi State, Nigeria.

Objectives of the Study

This study was aimed at assessing the 4Es Model as Catalyst for Attitudinal Change among Teachers in Bauchi State, Nigeria with a view to improve productivity among teachers Junior Secondary Schools. Through the specific objectives:

i. To assess if 4Es model serve as catalyst for attitudinal change among Teachers in Bauchi State.
ii. To determine the processes of implementing 4E's model among Teachers in Bauchi State.

II. LITERATURE REVIEW

Dimensions of 4Es Model for Attitudinal Change

As with the behaviour theories outlined in the numerous frameworks and models are Currently in use which including 4E's (HM Government, 2005; DEFRA, 2008). The 4E's model emerged from research (Jackson, 2005) focused on consumption (i.e., individual client behaviour) and advocates behaviour change strategies under four categories: enable, encourage, engage, and exemplify. In addition to these, the model states that in some circumstances, in particular where behaviour is entrenched or habitual, government may also need to 'catalyze' people to behave differently. Behaviours and attitudes of individual client are at the core of this model and the majority of interventions (information, education, incentives) are aimed at affecting individual choices. However, it also features other routes to behaviour change, such as 'deliberative fora', 'leading by example', and 'community action' which begin to affect the social context in which individuals make choices. Despite this, and the emphasis on context within the underlying research (Jackson, 2005), by focusing on individuals and affecting client choices, the 4E's Model does not provide clear opportunities for critical reflection on the impact dominant political, social, and economic forces and structures on the context of decision-making. Nor does it enable consideration of the influence of technology and innovation.

The literature on the factors influencing human behaviour is very extensive: it has been described as enormous (Maio *et al*., 2007) and bordering on the unmanageable (Jackson, 2005) According to Darnton (2008), together the 4Es form a "package of measures", the question explicitly asked at the centre of the model is the package "strong enough to catalyse the behaviour change?". The purpose of the behaviour change intervention is thus not presented the public to comply, but supplying little extra energy sufficient to kick-start the process of change. However, within this non-coercive package there is still the potential for forcing change, as Encourage does include regulatory instruments, which provide compulsory levers. Thus, Enable relates to core infrastructure; Encourage relates to fiscal, legislative and regulatory measures; Engage to communications; and Exemplify to government demonstrating its commitment to the behaviour in question (DEFRA, 2008).

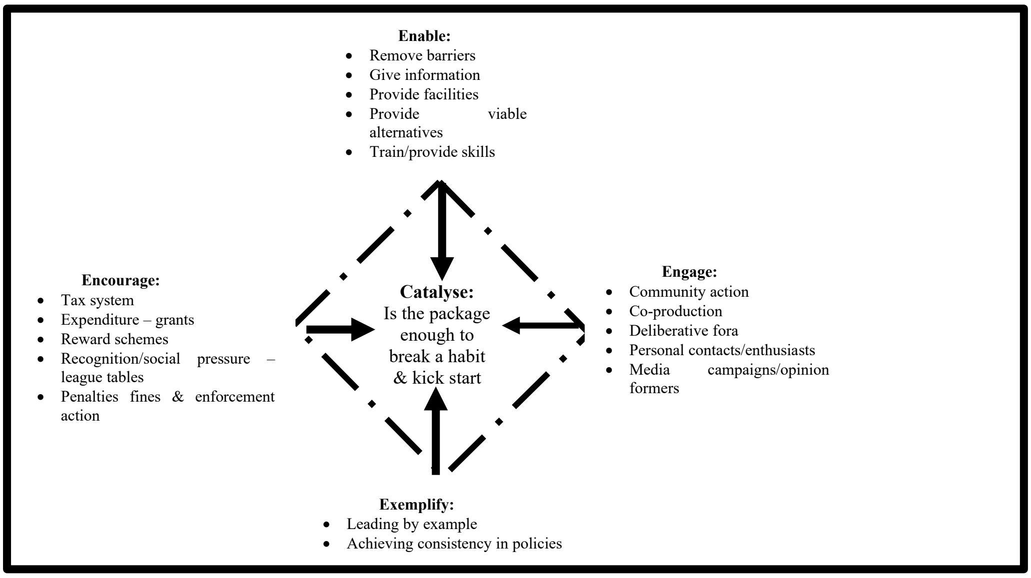

Figure 1: Department for Environment, Food and Rural Affair's Model
Source: DEFRA (2008)

While there will continue to be a very important role for regulation and enforcement, regulation alone will not be able to deliver the changes needed. According to DEFRA (2005), there is need to make sure that the controls available are use in a consistent way. The new strategy therefore focuses on the need to enable, encourage and engage people and communities in the move toward sustainability; recognising that Government needs to lead by example. The diagram above sets out what the elements under each of these headings could comprise. While these elements are all necessary for change to take place, they may not be sufficient to bring about the changes we need when behaviour is rooted. In these circumstances, the need highly existed to go further and think about how design policies to catalyse people to behave differently is in place. Over time the aim is for the new behaviour to become the norm. That in turn can open up further possibilities for progress.

I. Enable

Many individuals and organizations found change to be a real challenge (Onuorah & Okeke, 2013). A supervisor who wants a subordinate to work harder might put it this way, you have got to work harder. That been the tradition of the organization since it was founded. It helped get us where we are today, and everyone is expected to subscribe to this ethic. In this case an attitude serves as a basis for expressing one's central values (Shekhar, 2011).

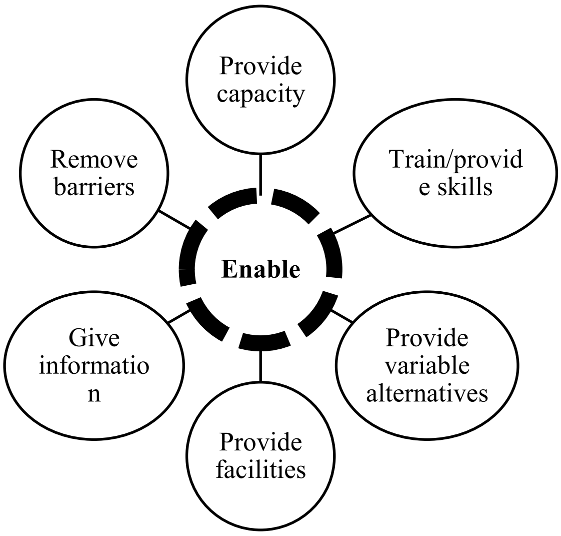

Figure 2: Enable Dimension
Source: DEFRA (2008).

II. Engage

Change is the movement away from a present state towards a future state or generally a response to some significance threat or opportunity arising outside of the organization (Gilgeous, 1997). Attitudes can be difficult to change once they have been learned, and this is because there can be resistance to change from within, also noted that resistance to change may result from one or a combination of factors such as substantive change in job, reduction in economic security, psychological threats, disruption of social arrangements, and lowering of status. Nonetheless, it cannot be denied that the attitude toward change by individuals may differ. Some are more resistant to change while others are more receptive to change (Onuorah & Okeke, 2013).

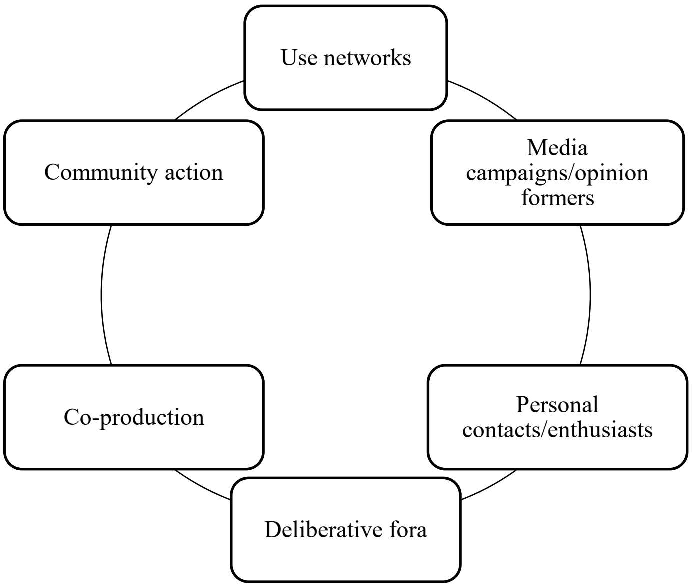

Figure 3: Engage Dimensions
Source: DEFRA (2008).

III. Encourage

The risk of failure as possible are generally resistant to changes. For some, change may bring pain, stress and disadvantages (Onuorah & Okeke, 2013). Organization grows, survive, decline or become extinct, depending on the behaviour, of the employees. The basic change process attempts to make employees change their behaviour, which cannot happen over-night. We need a paradigm shift in our understanding of human resistance to change and the consequences thereof (Shekhar, 2011). Attitudes can change for a number of reasons. It is a key interest or psychologists, advertisers and more to understand what makes people change their belief or opinions.

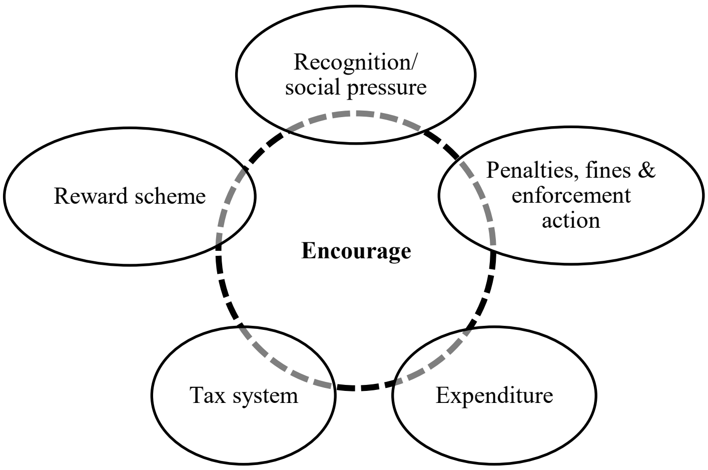

Figure 4: Encourage Dimension
Source: DEFRA (2008).

IV. Exemplify

The change process in each situation is unique, due to the differences in the nature of the leadership style, and behaviour and attitude of the employees (Onuarah & Okeke, 2013). Kevin (2011), attitudes most commonly change in response to social influence, and what other people do or say can have a huge effect on our own cognitions. The whole advertising industry function on the knowledge that people's attitudes towards products or services can bemolded through the use of imaginary and/or sound.

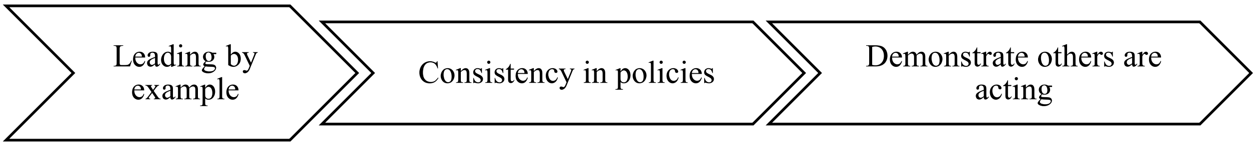

Figure 5: Exemplify Dimension
Source: DEFRA (2008).

Processes of Implementing 4Es Model for Attitudinal Change in an Organization

Change is a word that creates stress in the business world (Jay & Smith, 1996). According to Bridges (1991), if a change is to yield the desired results, it must be managed, and if it is to be managed, it must be understood. As he described change as, passing from one state to another as the transition process in an organisation. Handy (1995) stressed that, those who understand why change has to occur, will waste less effort in protecting themselves from the change or in resisting the inevitable. Also, in a positive light, he argues that change is ... another word for growth, another synonym for learning. Most models of change seem to regard change initiatives as projects within themselves, with definitive beginning and end points. This concept may work if the entire scope of the project is limited to achieving change (Jay & Smith, 1996). Bridges (1991) identified the main issues of change as unlearning the old system and learning something new, as unlearning old attitudes and values and changing people, and as motivating changes through a multi-stage process. The process is very people-oriented.

Organisational implementation comprises the activities that prepare organisations and users for a new system as well as the activities that prepare the system for the transition period during which it enters into operation and takes over from previous systems and artefacts (Hertzum, 2002). The implementation of models in an organization involves a structured process of converting a design into a working system, which requires managing change, ensuring technical and human integration, and establishing processes for ongoing support and evaluation. According to Jay and Smith (1996), an increased focus on change management is vital for the successful implementation of new information systems. Key areas of change management are planning for change, ensuring appropriate change leadership, creating a readiness for change, managing resistance to change, managing the transition, implementing the change, and finally, evaluating change. The key tool for planning is the project workplan. Individual tasks should detail the steps that deal with the human side of change, as well as task-oriented functions. Change can be viewed at the organizational level (the macro level) or at the individual level (the micro level). Depending on the response of people to the change, the micro element of change may lead to the success or destruction of the change. The impact on people needs recognition, analysis and careful planning. Grundy & King (1992) warn that the communication process takes as much planning as the 1mt1al change plan. Schaffer & Thomson (1992) and McKersie & Walton (1991) concur that successful change programmes begin with a statement of expected results. Any change that is introduced should have a very specific goal. Both ODR (199l) and Bridges (199 l) stress the need to address how individual behaviour and attitudes will have to change.

In selecting a change strategy, a manager should determine whether the approach used will he participative or directive. Participative change is more successful in the long term because of the resulting people buy-in and commitment. It may, however, take significantly longer to plan and implement the change using this approach. A directive change, imposed from the 'top', may be achieved in a much shorter time-frame, but it may create animosity and covert, undermining behaviour. As Jay and Smith (1996) stressed that, organizational change issues are identified as planning for change, ensuring appropriate change leadership, creating a readiness for change, managing resistance to change, managing the transition, implementing and evaluating the change. Implementing the change is the process of rolling out the change plan. Duberly and Burns (1992) describe the success areas for implementing change as the content, the context and the process. They claim that people have to understand, believe in and have a common view of the purpose of the change. Four clear phases have been identified in a change model to include: the initial orientation, the preparation phase, implementation of the change and a supportive phase. An analysis of change models in the literature identified several key activities and deliverables within these phases (Andersen, 1992; Herzog, 1991; Rochester, 1990).

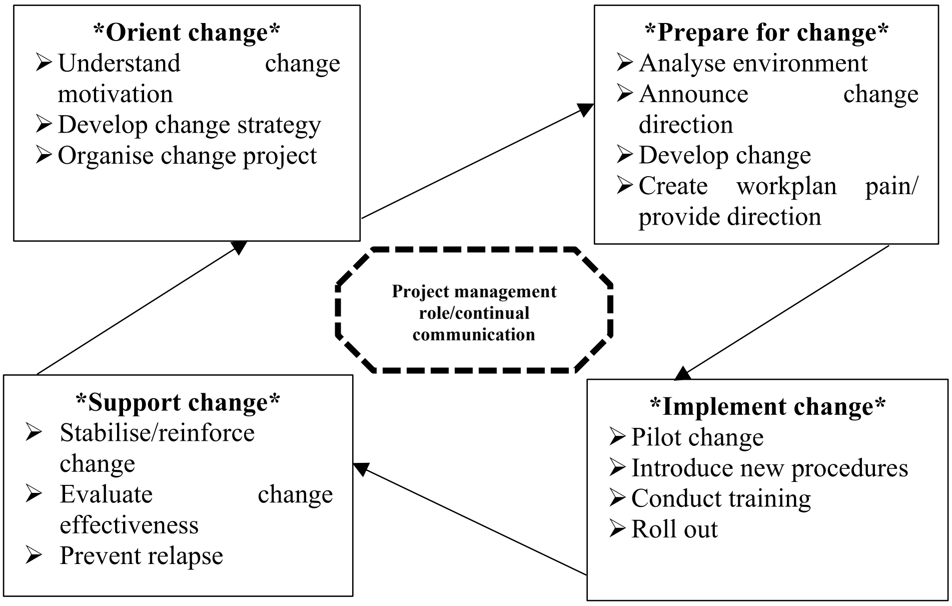

Figure 6: Clear phases of change model
Source: Andersen (1992); Herzog (1991); Rochester (1990).

For any change to occur, management role and continual communication must be in place in order to facilitate such activities as shown in figure 6 above, which is a key success factor underlying the change process (Finkin, 1992). Each phase of the model has been decomposed further into steps and activities along with the specific deliverables required at the end of each step.

First phase: Orientation phase

This phase would include understanding the change motivation, developing a change strategy and organizing the project. The change motivation would include a mandate, the purpose of the change, a cost/benefit analysis and specific terms of reference. The change strategy would include how quality would be measured, the project milestones, and how objectives would be measured. Organization aspects would include the establishment of a skilled change team and committed change sponsors. These activities are specifically focused on the impact of the macro and micro changes and should not be confused with the project planning activities.

Second phase: Preparation phase

Next phase of the process is to Prepare for the Change by analysing the environment, announcing the change direction, developing the change workplan, creating pain and providing direction. In the analysis of the environment, the critical success factors for change should be identified along with a threat analysis. The change announcement should maximize communication effectiveness. The workplan should include detailed tasks and timings. The creating pain step should communicate the future position to a wider audience specifying clearly the need to make the change and its potential consequences. The final step in this phase is to provide direction. This would include strong communication of the goals and how they will be achieved.

Third phase: Implement change

In this phase, the changes are implemented by piloting the change, introducing the new procedures, conducting training and finally rolling-out the change. If implementation at a pilot site is beneficial, one is chosen and implementation proceeds. Organizational aspects relating to reporting relationships, job definitions, training schedules, working procedures and reward systems must be defined and communicated. Appropriate training should be completed and the implementation at all sites must be carried out using a roll-out plan.

Final phase: Support change phase

In this phase full organizational support is offered with tasks that cover the stabilizing of the change. evaluating the effectiveness of the change and the prevention of a relapse. In the stabilizing step, management openly commits itself to the change and procedures are fine-tuned or adjusted where necessary. The effectiveness of the change is evaluated by measuring acceptance and new behaviour and producing a formal report. To prevent a relapse into the old ways, regular review meetings should be held along with continual training and procedure reviews

In this study, some parameters were utilized in order as process for implementing 4Es model for attitudinal change viz: understanding of role by the educators and all staff members including their responsibilities in 4E's model; promote a sense of worth for all parties as their input is valued and respected in 4E's model process; result in policies and procedures that staff agree with and implement fairly; support the vision, principles and practices of the 4E's model; promote collaboration and partnership with staff through their involvement in the development process of 4E's model; reflect the cultural diversity of staff attending the service; as well as, ensuring consistency of approach and service operations of the 4E's model.

Theoretical Review

This study carries out within the theoretical framework of consistency, social judgement, and functional theories regarding attitude change to support the subject of the study. Several attitude change categorization schemes have been proposed in the literature (Eagly & Chaiken, 1993; O'Keefe, 1990), and most are similar. There are two theories to be considered in the case of this study as follows:

A. Consistency theories

Consistency theory was originated by Kiesler, Collins and Miller (1969), the basic assumption of these theories is the need of the individual for consistency. There must be consistency between attitudes, between behaviors, and among attitudes and behaviors. A lack of consistency causes discomforts so that an individual attempt to ease the tension by adjusting attitudes or behaviors in order to once again achieve balance or consistency. One of the earliest consistency theories was balance theory (Himmelfarb & Eagly, 1974; Kiesler *et al*., 1969; O'Keefe, 1990).

Relationships among the perceiver, another person, and an object are the main focus of balance theory (Heider, 1958). Relationships are either positive or negative, based on the cognitive perceptions of the perceiver. In this theory, there are eight possible configurations; four balanced and four unbalanced. Unbalanced states are recognized as being unstable. Under these conditions, perceivers attempt to restore balance by changing their attitudes towards objects or other persons.

Two extensions of Heider's balance theory include the work of Newcomb (l961) and that Abelson (Abelson & Rosenberg,1958). Newcomb (1961) studied interpersonal situations as well a cognitive balancing and transferred these ideas to research on the pressures for uniformity groups. Abelson proposed four additional modes of restoring balance:

a) Denial.
b) Bolstering,
c) Differentiation, and
d) Transcendence.

Establishing balance was critical to individuals. Attitude changes occurred when the individual attempted to reestablish balance by modifying their attitudes (Himelfarb & Eagly, 1974; Kiesler *et al*., 1969; Insko, 1967; O'Keefe, 1990). Affective-cognitive consistency theory examines the relationship between attitudes and beliefs (Rosenberg, 1956), An unstable state occurs when an individual's attitudes toward an object and knowledge about an object are inconsistent. Persuasive communications attempt to change the affective component of an attitude system by changing the cognitive component of attitude.

In other words, providing an individual with new information that changes the cognitive component of attitude will tend to cause that individual to change overall attitudes toward an object. An alternative to Rosenberg's theory is Festinger's theory of cognitive disagreement (Festinger, 1957). While Rosenberg's theory deals with affect and cognition. Festinger's theory examines consistency among cognitive elements or beliefs about oneself, behaviour or environment. Disagreement occurs when elements are logically inconsistent or psychologically inconsistent because of cultural mores, specific opinions deviating from more encompassing opinions, or information or experiences that are contrary to previous information or experiences. Disagreement motivates the individual to reduce the disagreement and return to consonance. When faced with dissonance, the individual seeks to avoid situations or information that may increase disagreement.

B. Social Judgment Theories

Social judgment theory focuses on how people's prior attitudes distort their perceptions of the positions advocated in influential messages, and how such perceptions facilitate encouragement. In general terms, the theory assumes that a person's own attitudes serve as a judgmental standard and anchor that influences where along a continuum a persuader's advocated position is perceived to lie (Sherif & Hovland, 1961). Social judgment theory-is an attempt to apply the principles of judgment to the study of attitude change. According to Sherif, Sherif, and Nebergall (1965), an individual's initial attitude serves as an anchor for the judgment of related attitude communications. Opinions are evaluated against this point of reference and are placed on an attitudinal continuum. Opinions that most characterized the individual's own opinion is in the latitude of acceptance. Those opinions found most objectionable are placed in the latitude of rejection. The latitude of noncommitment consists of those opinions that are neither accepted nor rejected.

Communication that falls within the latitude of acceptance is assimilated, and if judged to be fair and unbiased will result in a change in attitude, within the limits of the latitude of acceptance, the greater the difference between the initial opinion and the communicated opinion, the greater the attitude change. Though some change is possible when opinions fall within the latitude of rejection, the greater the discrepancy the less the change in attitude (Hinneifarb & Eagty. 1974; Kiesler *et al.*, 1969; Insko, 1967). Social judgment theory's core propositions can be summarized as follows (Eagly & Chaiken, 1993):

i. A person's current attitude serves as a judgmental anchor for new attitude positions.
ii. Latitude widths determine whether a message's position will be assimilated or contrasted (e.g., accepted or rejected). Positions falling within the latitude of acceptance will be assimilated toward a person's current attitude. Positions falling within the latitude of rejection will be contrasted away from the person's own attitude.
iii. Ego involvement of a person broadens the latitude of rejection and narrows the latitude of no commitment.
iv. Both assimilation and contrast effects increase as a positive function of a message's position and the recipient's attitude.
v. Ego involvement increases the anchoring property of initial attitudes.
vi. Greater assimilation produces more positive evaluation of message content, which produces greater amounts of attitude change. Conversely,

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greater contrast produces more negative evaluations of message content, which produces lesser amounts of attitude change.

vii. Ambiguity enhances the likelihood of judgmental distortions. Therefore, other effects are greater when recipients are exposed to persuasive messages whose content positions are ambiguous.

III. METHODOLOGY

Research Design

This research was quantitative in nature, sought to count occurrences and which established statistical links among variables and generalize findings to the population from which the sample was drawn. The research design for the current study was adopted to be cross-sectional field study (survey) research design because it involved collection and analyses of data in numerical form, to help analyse data obtained to answer the research objectives, descriptive method was utilised. Osuala (2001) stated that, a survey research design centers on individual and their opinion, belief, motivation and behaviour.

Population of the Study

Population of the study refers to the totality of all elements, subjects, or members that possess a specific set of one or more common characteristics (Usman, 2015). Population in this study refers to the entire Seniour Staff in each of the fourty-four (44) Government Juniour Secondary Schools within Bauchi Metropolis as displayed in table 1 below which are the: Principals; Vice I; Vice II and Seniour Masters/Mistresses. Reason for choosing these four categories is that, they are the most longer serving and experienced staff in the hierarchy in each school possibly with a reasonable educational qualification.

Table 1: Population of the Study

SN	Name of Schools within Bauchi Metropolis	Number of Respondents
1	Dr. Ibrahim Tahir Junior Secondary School, Bauchi	4
2	Government Comp. Junior Secondary School Bakari Dukku	4
3	Government Day Junior Secondary School, Bakari Dukku	4
4	Government Girls Junior Secondary School, Bauchi	4
5	Government Junior Secondary Babasidi	4
6	Government Junior Secondary Birshin Fulani	4
7	Government Junior Secondary Federal Low Cost	4
8	Government Junior Secondary Gudun Sayawa	4
9	Government Junior Secondary Hospital Quarters	4
10	Government Junior Secondary Inkil	4
11	Government Junior Secondary Jahun 1	4
12	Government Junior Secondary Jahun Wayan Makafi	4
13	Government Junior Secondary Lushi	4
14	Government Junior Secondary Miri	4
15	Government Junior Secondary Saleh Manga	4
16	Government Junior Secondary Adamu Jumba Bauchi	4
17	Government Junior Secondary Army Barracks	4
18	Government Junior Secondary Babban Mutum	4
19	Government Junior Secondary Bayara	4
20	Government Junior Secondary Bigi	4
21	Government Junior Secondary Birshi Gandu	4
22	Government Junior Secondary Dumi	4
23	Government Junior Secondary Fadamar Mada	4
24	Government Junior Secondary Games Village	4
25	Government Junior Secondary Garba Moh'd Nama	4
26	Government Junior Secondary General Hassan Usman Katsina College	4
27	Government Junior Secondary Gudun Fulaní	4
28	Government Junior Secondary School, Gwallameji	4
29	Government Junior Secondary School, Ibrahim Bako	4
30	Government Junior Secondary School, Kandahar	4
31	Government Junior Secondary School, Kobi	4
32	Government Junior Secondary School, Kofar Dumi	4
33	Government Junior Secondary School, Kofar Wase	4

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34	Government Junior Secondary School, Married Women Bauchi	4
35	Government Junior Secondary School, Sa'adu Zungur	4
36	Government Junior Secondary School, Special Education Centre, Yelwa, Bauchi	4
37	Government Junior Secondary School, Tirwun	4
38	Government Junior Secondary School, Tudun Gambo	4
39	Government Junior Secondary School, Tudun Salmanu	4
40	Government Junior Secondary School, Wuntin Dada	4
41	Government Junior Secondary School, Yelwan Makaranta	4
42	Government Junior Secondary School, Zannuwa	4
43	Government Junior Secondary School, Unguwar Borno	4
44	Jubril Aminu Model Junior Secondary School, Bauchi	4
	Total	**176**

Source: Bauchi State, Ministry of Education (2019).

Sample Size

Sampling is a procedure or technique for drawing a representative's group of people or cases from a specific population (Creswell, 2002). The sample to be drawn in this type of study where it is difficult to obtain data from all member of the population, hence, the sample survey method provides an effective way of obtaining data from the population. To ensure a thorough and detailed evaluation devoid of the ambiguity of a more expansive population, the public secondary facilities will be evaluated using stratified sampling method. Samples are selected because it is not possible at times to study the entire population due to various limiting factors such as lost time and other research resources (Mugenda & Mugenda, 1999). For this study, the sample se was determined using Krejcie and Morgan (1970) table for determining sample size. From the table, the sample size was one-hundred and twenty-one (121) see appendix I.

Sampling Technique

The study employed the use of a no-probabilistic sampling technique to select the sample of the study, purposive sampling technique specifically. According to Daniel (2012), purposive sampling is a type of sampling that the participants are choosing base on own judgment, keeping back in mind the purpose of the study.

Research Instrument

For the purpose of this particular study, the main tool for data collection in this study was questionnaire. This follow the pattern of Aburime and Uhomoibhi (2010) and, Oviawe and Oshio (2011) that such kind of studies is best carried out using a questionnaire as instrument for data collection. Eze (2012) stated that a questionnaire is a list of questions structured for collection of individuals responds to solve a particular problem in relation to personal information, intention, attitude, activities or behaviour. The questionnaire was developed from the research questions/objectives and the review of related literature and studies. The questionnaire was sub-divided into four (4) parts each addressing one objective. The survey questionnaire was presented in such a way that the respondents rated their degree of agreement on a five points likert-scales on each item in respect of each study objectives. The questionnaire was developed in a closed-ended question so as to limit variations in willingness and ability to respond to questions.

Validity Test

Validity in this study was conducted to answer whether the study have measured what it wants to measure (Muijs, 2004). Validity is established and guaranteed by process of the study, not by the inference made (Byme, 2002). In this study, when the questionnaire was developed and presented to the supervisor and other experts in the academia from the Abubakar Tafawa Balewa University, Bauchi, Faculty of Management Sciences to ascertain the validity by making corrections in both the items and its ambiguity. All the observations were affected to enrich the instrument before administering the tool to the respondents in the field.

Reliability Test

Byrme (2002) defined reliability as the quality of repeated constancy of the measurement instrument. Reliability has to do with how easy to reproduce research using the previous methodology and analysis tools to arrive at relatively the same results (Corbetta, 2003). In this study, internal consistency measure's reliability or coefficient alpha was adopted. This can be generated by Cronbach's alpha in SPSS software. This study used internal consistency in order to test the reliability of the instrument. Internal consistency is the degree to which the items that make up the scale are all measuring the same underlying attribute (that is, the extent to which the items hang together). This consistency can be measured commonly by using statistic as Cronbach's coefficient alpha (α). According to Olatunji (2010), alpha-value (α) of < 0.5 is regarded as poor reliability, 0.5 – 0.7 is regarded as sufficient reliability, while, > 0.7 is regarded as good reliability. The study revealed that the questionnaire was sufficiently reliable with an average reliability value of 0.685.

Table 2: Cronbach's coefficient alpha-value (α) interpretation

S/N	Constructs	Cronbach's α-values	Decision
1	Enable dimension	0.678	Sufficient
2	Engage dimension	0.691	Sufficient
3	Encourage dimension	0.689	Sufficient
4	Exemplify dimension	0.669	Sufficient
5	Implementation of 4E's Model	0.700	Good
	Average alpha-value (α)	**0.685**	**Sufficient**

Source: SPSS version 23 Scale output

Sources of Data

Data collection plays a very crucial role in the statistical analysis. In research, there are different methods used to gather information, all of which fall into two categories, i.e., primary and secondary data (Douglas, 2015). The sources of data gathered for this study was from both primary and secondary sources. The Primary data was the original and unique data, collected directly by the researcher from a source such as questionnaires, according to its requirements. As opposed to secondary data which was easily accessible but are not pure as they have undergone through many statistical treatments. The sources of secondary data were government publications, websites, books, journal articles, internal records in line with Ajayi (2017).

Method of Data Collection

Data gathering is crucial in research, as the data is meant to contribute to a better understanding of a theoretical framework (Bernard, 2002). The study employed the use of questionnaire as a tool for the data collection, and the questionnaire was administered with the help of three (3) research assistants to the respondents (Principal, Vice I & II, and Head Masters/Mistresses) in the government junior secondary schools in the study area. The respondents were given four days' period to complete the questionnaire as in Chacón (2009) and return them for analyses; this is to allow the respondents to complete the questionnaire at their own convenience and effectively as they think about their responses. This according to Ivankova (2002), leads to achievement of good response from the respondents.

Methods of Data Analyses and Presentation

For the purpose of this study, descriptive statistical tools such as mean score (X), standard deviation (SD) were employed for analyses using Statistical Package for Social Sciences (SPSS) as a tool for analyses. The 4Es model was assessed using mean score and standard deviation to established if can serve as catalyst for attitudinal change among Teachers in Bauchi State. Also, the processes of implementing 4E's model among Teachers in Bauchi State was determined using mean score and standard deviation.

Each objective was analysed and presented in a tabular form with brief descriptive for clarity purpose.

IV. RESULTS AND DISCUSSION

This chapter presents the data analyses and the discussion of results gathered with the aid of the research instrument (questionnaire) from the study area. The study administered a total of one-hundred and twenty-one (121) instruments but retrieved a total of property filled instruments of ninety (90) which amount to 74.4%.

Data Analyses

Table 3: Decision Table for the Study

Scales	Interpretation	Abbreviation
0.00 – 1.50	Strongly Disagree	SD
1.51 – 2.50	Disagree	D
2.51 – 3.50	Moderately Agree	MA
3.51 – 4.50	Agree	A

4.51 – 5.00	Strongly Agree	SA

Source: Adapted from Hamid, Ali, Kiyanoosh, Pejman and Morshedi (2014)

Objective 1: To assess if 4E's model serve as catalyst for attitudinal change among Teachers in Bauchi State

This objective was analysed using same procedure as objective one. The mean scores of the variables range between 3.5470–4.0000 and the standard deviations range from 1.01338–1.16946. All these standard deviations revealed low values hence the indication of agreement in their assessments.

Table 4: Enable dimension of 4E's model for attitudinal change among Teachers' attitudes

Enable dimension of 4E's model	X	SD	Rkng	Decision
Educate/train/provide skills	4.0000	1.03510	1	Agree
Give information	3.7193	1.01338	2	Agree
Provide capacity	3.6140	1.03085	3	Agree
Provide facilities	3.5912	1.16946	4	Agree
Remove barriers	3.5737	1.10076	5	Agree
Provide variables alternatives	3.5470	1.06281	6	Agree
Average mean score (AMS) = ΣX÷ 6 = 22.0452 ÷ 6	**3.6742**			**Agreed**

Table 4 above depicts one of the Enable dimensions of 4E's model for attitudinal change among Teachers. The mean score of Education/training/provision of skills was determined to be 4.0000 which is the highest agreed 'enabling dimension of 4E's model for attitudinal change among Teachers with standard deviation of 1.03510. Give information was determined the 2nd agreed enabling dimension of 4E's model with a mean score of 3.7193 and standard deviation of 1.01338. Provision of capacity was determined 3rd agreed enabling dimension of4E's model for attitudinal change among Teachers with standard deviation of 1.03085 and a mean score of 3.6140. Provide facilities with a mean score of 3.5912 and standard deviation of 1.16946 was agreed to be 4th. Removal of barriers with a mean score of 3.5737 and standard deviation of 1.10076 was determined to be 5th agreed enabling dimension of 4E's model for attitudinal change among Teachers. Provide variable alternatives was determined to be 6th agreed enabling dimension of 4E's model for attitudinal change among Teachers with a mean score of 3.5470 and standard deviation of 1.06281.

Table 5: Engage dimension of 4E's model for attitudinal change among Teachers' attitudes

Engage dimension of 4E's model	X	SD	Rkng	Decision
Personal contacts/enthusiasts	4.0256	1.23766	1	Agree
Media campaigns/opinion fomers	3.8462	1.15181	2	Agree
Community action	3.8077	1.17393	3	Agree
Deliberative for a	3.6923	1.26191	4	Agree
Use networks	3.6923	1.26191	4	Agree
Co-production	3.6923	1.26191	4	Agree
Average mean score (AMS) = ΣX÷ 6 = 22.7564 ÷ 6	**3.7927**			**Agreed**

Table 5 above depicts one of the Engage dimensions of 4E's model for attitudinal change among Teachers' attitude for national development. Personal contact/enthusiast is determined and agreed to be the 1st engaging dimension of 4E's model for attitudinal change among Teachers' attitude for national development with a mean score of 4.0256 and standard deviation of 1.23766. Media campaigns/opinion formers with a mean Score of 3.8462 and standard deviation of 1.15181 is determined and agreed to be the 2nd engaging dimension of 4E's model for attitudinal change among Teachers. Community action with a mean score of 3.8077 and standard deviation of 1.17393 is determined and agreed to be 3rd engaging dimension of 4E's for attitudinal change among Teachers. Also, Deliberative fora (planned environments) is determined and agreed to be the 4th engaging dimension of 4E's model for attitudinal change among Teachers with a mean Score of 3.6923 and standard deviation of 1.26191. Use networks is determined and agreed to be the 5th engaging dimension of 4E's model for attitudinal change among Teachers with a mean score of 3.6923 and standard deviation of 1.35136. and, Co-production is determined and agreed to be the 6th engaging dimension of 4E's model for attitudinal change among teachers with a mean score of 3.6923 and standard deviation of 1.18768.

Table 6: Encourage dimension of 4E's model for attitudinal change among Teachers' attitudes

Encourage dimension of 4E's model	X	SD	Rkng	Decision
Reward scheme	4.0385	0.95947	1	Agree
Penalties, fines and enforcement action	3.9487	0.85124	2	Agree
Recognition/ social pressure	3.7821	1.05249	3	Agree
Tax system	3.6410	1.20577	4	Agree
Expenditure- grants	3.5026	1.39888	5	Agree
Average mean score (AMS) = ΣX÷ 5 = 18.9129 ÷ 6	**3.7826**			**Agreed**

Table 6 above depicts one of the Encourage dimensions of 4E's model for attitudinal change among Teachers. Reward scheme with a mean score of 4.0385 and standard deviation of 0.95947 is determined and agreed to be the 1st encouraging dimension of 4E's model for attitudinal change among Teachers. Penalties, fines and enforcement action with a mean score of 3.9487 and standard deviation of 0.85124 is also determined and agreed by the respondents to be 2nd encouraging dimension of 4E's model for attitudinal change among Teachers. Recognition social pressure is ranked 3rd encouraging dimension of 4E's model for attitudinal change, determined and agreed with a mean score of 3.7821 and standard deviation of 1.05249. Tax system with a mean score of 3.6410 and standard deviation of 1.20577 is determined and agreed to be another encouraging dimension of 4E's model for attitudinal change among Teachers. As well as, Expenditure-grant is determined and agreed to an encourage dimension of 4E's model for attitudinal change among Teachers with a mean score 3.6026 and standard deviation of 1.39888.

Table 7: Exemplify dimension of 4E's model for attitudinal change among Teachers

Exemplify dimension of 4E's model	X	SD	Rkng	Decision
Achieving consistency in polices	4.1056	1.02376	1	Agree
Leading by example	3.8462	1.10518	2	Agree
Average mean score (AMS) = ΣX÷ 2 = 7.9518 ÷ 2	**3.9759**			**Agreed**

Table 7 above depicts one of the Exemplify dimensions of 4E' model for attitudinal change among Teachers for national development. Achieving consistency in policies is determined and agreed to be the 1st exemplify dimension of 4E's model for attitudinal change among teachers with a mean score of 4.1056 and standard deviation of 1.02376. As well as, leading by example with a mean score of 3.8462 and standard deviation of 1.10518 is determined and agreed as 2nd exemplify dimension of 4E's model for attitudinal change among Teachers for national development.

To address objective 1: To assess if 4E's model serve as catalyst for attitudinal change among Teachers in Bauchi State

Table 8: 4Es model as catalyst for attitudinal change among Teachers in Bauchi State

Dimensions for 4Es model	X	Decision
Enable dimension	3.6742	Agreed
Engage dimension	3.7927	Agreed
Encourage dimension	3.7826	Agreed
Exemplify dimension	3.9759	Agreed
Overall Average mean score (OAMS) = ΣX÷ 4 = 15.2254 ÷ 4	**3.8064**	**Agreed**

Table 8 above addressed the objective of the study, if 4Es Model serve as catalyst for attitudinal change among Teachers. The overall average mean score (OAMS) reveals a value of 3.8064 which means that, 4Es model can serve as catalyst for attitudinal change among Teachers for national development.

Objective 2: To determine the processes of implementing 4E's model among Teachers in Bauchi State

This objective is analysed using mean score (X) and standard deviation (SD) with rating method. The mean scores of the variables range between 2.8070 – 3.5965 and the standard deviations range from 1.23112 – 1.51682. All these standard deviations revealed low values hence the indication of agreement in their assessments.

Table 9: Implementation of 4Es model among Teachers

Implementation of 4E's model among Teachers	X	SD	Rkng	Decision
Promote collaboration and partnership with staff through their involvement in the development process of 4E's model.	4.3462	0.90922	1	Agree
Reflect the cultural diversity of staff attending the service.	4.1026	0.84653	2	Agree
Ensure consistency of approach and service operations of the 4E's model.	4.0897	0.95599	3	Agree
Promote a sense of worth for all parties as their input is valued and respected in 4E's model process.	4.0897	0.95599	3	Agree
Understanding of role by the educators and all staff members including their responsibilities in 4E's model.	4.0385	0.95947	4	Agree
Support the vision, principles and practices of the 4E's model.	3.7949	0.95834	5	Agree
Result in policies and procedures that staff agree with and implement fairly.	3.6795	1.26382	6	Agree

Table 9 above, revealed the mean scores (X), standard deviations (SD), ranking with decisions from the analyses regarding the how 4Es model can be implemented among Teachers for national development. Promote collaboration and partnership with staff through their involvement in the development process of 4E's model is agreed and ranked 1st most suitable ways of implementing 4E's model among Teachers for national development with a mean score of 4.3462 and standard deviation of 0.90922. Reflect the cultural diversity of staff attending the service is also agreed and ranked 2nd most suitable ways of implementing 4E's model among Teachers for national development with a mean score of 4.1026 and standard deviation of 0.84653. Ensure consistency of approach and service operations of the 4E's model, and, promote a sense of worth for all parties as their input is valued and respected in 4E's model process with a mean score of 4.0897 and standard deviation of 0.95599 each is ranked 3rd most suitable ways of implementing 4E's model among Teachers for national development. Understanding of role by the educators and all staff members including their responsibilities in 4E's model with a standard deviation of 0.95947 and mean score of 4.0385 is ranked 4th and agreed to another way of implementing 4E's model among Teachers for national development. Support the vision, principles and practices of the 4E's model is ranked 5th and agreed to be a way of implementing 4E's model among Teachers for national development with a mean score of 3.7949 and standard deviation of 0.95834. And, Results in policies and procedures that staff agree with and implement fairly is ranked 6th and agreed to be the last way of implementing 4E's model among Teachers for national development with a mean score of 3.6795 and standard deviation of 1.26382.

V. Discussion

Objective 1: 4Es (Enable, Engage, Encourage, and Exemplify) model serve as catalyst for attitudinal change among Teachers in Bauchi State

It was revealed from Table 8 that, 4Es Model can serve as catalyst for attitudinal change among Teachers with the overall average mean score of 3.8064. As the enable dimension revealed average mean score of 3.6742 (Table 4), engage dimension revealed average mean score of 3.7927 (Table 5), encourage dimension revealed average mean score of 3.7826 (Table 6), and exemplify dimension revealed average mean score of 3.9759 (Table 7).

This overall average mean score of 3.8064 (76.1%), addressed the question if the 4Es model package is "strong enough to catalyse the attitudinal change? The established that, 4Es model is strong enough to catalyse attitudinal change.

The result of this objective agreed with the finding earlier assertion of DEFRA (2008), thus, enable relates to core infrastructure. As earlier asserted by Onuorah and Okeke (2013) that, many individuals and organizations including educational sector as backbone for national development found change to be a real challenge. In this case an attitude serves as a basis for expressing one's central values (Shekhar, 2011). The outcome also validates Darnton (2008) that, together the 4Es form a 'package of measures.' Also, an assertion by Kevin (2011) that, attitudes most commonly change in response to social influence, and what other people do or say can have a huge effect on our own cognitions.

Therefore, by implication practicing enabling, engaging, encouraging and exemplify dimensions as dimensions of 4Es model among Teachers will leads to attitudinal change which in turn ensure national development that will enhance trust in governance even though many are resistant to change while others are more receptive to change. Organization grows, survive, decline or become extinct, depending on the attitude of the employees.

Objective 2: Processes for implementing 4E's model among Teachers in Bauchi State

Table 9 revealed the three (3) most processes for implementing 4Es model among Teachers for national development. Promote collaboration and partnership with staff through their involvement in the development process of 4Es model was agreed and ranked 1st most suitable ways of implementing 4Es model among Teachers for national development with a mean score of 4.3462 and standard deviation of 0.90922. Reflect the cultural diversity of staff attending the service was also agreed and ranked 2nd most suitable ways of implementing 4Es model among Teachers for national development with a mean score of 4.1026 and standard deviation of 0.84653. Ensure consistency of approach and service operations of the 4Es model, and promote a sense of worth for all parties as their input is valued and respected in 4Es model process with a mean score of 4.0897 and standard deviation of 0.95599 each ranked 3rd most suitable ways of implementing 4Es model among Teachers for national development.

By implication, involving staff in the design and implementation of the model can ensure smooth transition of change among teachers with a degree of precision which assures successful passage of government policies by designing and teaching skills for national development.

VI. CONCLUSION AND RECOMMENDATIONS

Conclusions

The research concluded based on the research objectives as follows:

i. 4Es Model is strong enough to serve as catalyst for attitudinal change among Teachers for national development.
ii. Promoting collaboration and partnership with staff through their involvement in the development process of 4Es model, reflect the cultural diversity of staff attending the service, ensuring consistency of approach and service operations of the 4Es model, and promoting a sense of worth for all parties as their input is valued and respected in 4Es model process are the most suitable processes of implementing 4Es model among Teachers for national development.

Recommendations

The research also recommends based on the conclusions of the research as follows:

i. Government should ensure effective usage of 4Es model dimensions across all its formation as that catalyse attitude change for national development.
ii. Practicing of 4Es (Enable, Engage, Encourage, and Exemplify) model-dimensions in all sectors should be prioritised to ensure national development.

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APPENDIX I: KREJCIE AND MORGAN TABLE

Table for determining sample size from a given population

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368

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140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1,000,000	384

Source: Krejcie and Morgan (1970). N = Population size; S = Sample size.