Dimensions of Communication as Predictors of Effective Classroom Interaction

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ABSTRACT This study focuses on the dimensions of communication as predictors of effective classroom interaction. To guide the study, four hypotheses were formulated and tested using regression statistics, at 0.05 level of significance. A twenty-item questionnaire was administered to 600 respondents used in this study. The results revealed that there was a significant relationship between teachers' attitude, knowledge base, communication skills and effective classroom interaction. Based on the findings, it was concluded that attitude, knowledge base, and communication skills were significant correlates and predictors of effective classroom interaction. The study also suggested that teachers should be provided with opportunities where they develop such attributes.

INTRODUCTION

The process of education has two main dimensions teaching and learning. Education according to Afe (1995) is a tool used for the integration of the individual into the society so that he can achieve self – realization, develop national consciousness, promote unity and strive for social, economic, political, scientific, cultural and technological progress .Teaching is a process of communicating and imparting basic knowledge and skills in a formal or informal situation that will bring about a change in behaviour. It is an interactive process between the instructor and the learners via the process of communication, which directs learning activities. Learning is defined as a natural process of pursuing meaningful goals, discovering and constructing meaning from information and experience filtered through the learner's unique perceptions, thoughts and feelings (Osakwe 2006). Nweke (1996) viewed learning as a process by which people acquire change. Communication, which is pervasive to all sphere of life, is needed in organizations for managerial effectiveness. As such the school as a social organization is of no exception, since teachers spend most of their time interacting with students in order to achieve educational objectives. Okwo (1995) defined communication as an interactive process involving design of ideas, message, information, and their dissemination in an attempt to effect change in a person's behaviour or to

persuade him to act in a particular or pre-determined manner. Nzerem (1996) viewed communication as encoding and decoding messages or information usually through a medium – sounds, gestures, books, pictures, etc. Daly (2003) said that communication is a process of effectively conveying information, expressing thoughts and facts, and demonstrating effective use of listening skills and displaying openness to other people's ideas and thoughts. As a process, communication has synod. The act of communication is for a purpose, which is directed towards persuading, influencing, modifying and changing behaviours of individuals. Based on this, feedback is always expected when information is passed on, and such feedbacks will enable the teacher to know if the information was actually passed on to the students effectively or not. Teachers by their nature of work communicate a lot and for that purpose they need to know much about communication process and also acquire the skill of effective communication. Thus the acquisition of communication skills is paramount to the social and educational development of students, yet some students in the school have virtually no ability to communicate effectively with their teachers. However, Heinich et al. (1999) asserted that instruction is the arrangement of information to produce learning and the transfer of information from a source to a destination is called communication. They noted that new learning usually depends on taking in new information and effective instruction cannot take place

without communication taking place. In a school system, there are many variables (attitude, knowledge base, communication skills, socio-cultural context, etc.) which enhance performance and achieve educational objectives, and when these fail the management and administration are disrupted and most importantly hinder the teaching learning activities of the school system. The attitude of the teachers towards effective classroom interaction is an index which is very important because it determines the achievement of educational goals. Okorodudu (2006) ascertained that teachers who possess positive work attitude will enhance teaching learning process leading to the achievement of educational goals and objectives. Thus, negative attitude posed by the teacher (source) definitely will affect the outcome of the message and may eventually lead to wrong misinterpretation and reception. The knowledge base of the teachers is a source of effective classroom interaction. This is because if the source (teacher) of knowledge does not have adequate information about the audience (learners) the interaction will not be effective. The actual process of teaching is the transmission or communication of 'what is to be learned' by the 'teacher' to the 'learner' in a manner that will enable the learners to develop the necessary skills for the understanding and utilization of what is to be learned. It therefore stands that a teacher must possess a good knowledge of what is to be learned. A scanty knowledge of the subject matter exposes the teacher to the risk of being ridiculed by some bright students. A vast knowledge of the subject matter will enable teachers to manipulate the topic being taught and give numerous examples and illustrations (Okorosaye – Orubite 2005)

It is therefore needful that mastery of the subject matter by the source of knowledge is very crucial to classroom interaction. These variables therefore are very crucial to classroom interaction, for without them, there will be no meaningful interaction between the teacher and learners. Effective communication skills can enable teachers to draw on the vast array of talents available in the multicultural world of the school to enhance classroom interaction. (Stoner et al. 1999).

In communication there are different elements and factors that must work together in harmony to facilitate effective communication (Abura 1998). These are sender of the message, the receiver or listener, the message itself, the channels through which the message is sent and feedback, levels of communication, purpose of communication, communication models, and barriers to effective communication. Teachers therefore, must be conversant with these elements / factors and judiciously guide against them in order to promote effective communication in the teaching – learning process.

Statement of the Problem

Effective communication is essential to the success of both the student and the teacher. In the school system, teachers and learners play a vital role in the communication process. In communication, it is possible to find a situation where two people say exactly the same thing to a given audience, using exactly the same language, even the same words, but the two will end up passing two different messages (Abura 1998). If teachers exhibit hostility and repugnance and distaste during communication with the students, students will certainly become afraid, withdraw from participating in class activities and even-tually be unwilling to interact with the teacher. Again teachers may not have the guarantee that the words or means he chooses in passing information will convey correct and adequate meaning to all students, because each student's home and cultural background influences his interpretation, and under standing. In classroom interaction, there are distortions in teaching – learning process such as misconceptions , distrust, misinterpretation of words, physical discomfort, day-dreaming, familiarity, various noise factors, attitudes, inadequate mastery of subject matter, individual's health, age, size, time pressure and socio-economic factors which can affect communication effectiveness. However the effectiveness of communication in the teaching-learning process can be enhanced or disrupted by either the teacher (sender/source) or the student (receiver) factors which have almost the same characteristics attitudes, knowledge base, socio-cultural context and communication skills. The problem therefore put in a question form is – what is the relationship between the independent variables and effective classroom interaction?

Hypotheses

The following research hypotheses formula-ted to guide the study.
1   There is no significant relationship between

teachers' attitude, knowledge base, communication skills and effective classroom interaction.

2   There is no significant relationship between teachers' attitude and effective classroom interaction.
3   There is no significant relationship between teachers' knowledge base and effective classroom interaction.
4   There is no significant relationship between teachers' communication skills and effective classroom interaction.

RESEARCH DESIGN

The research design used for this study was the descriptive design of the survey type making use of the questionnaire to find out the dimensions of communication as predictors of effective classroom interaction.

Population: The population of this study comprised all teachers of all public schools in the Niger-Delta Region of Nigeria. It consists of Bayelsa, Cross-River, Delta, Edo and Rivers States.

Sample and Sampling Procedure: The sample study comprised of 600 subjects drawn from public secondary schools in Niger-Delta Region of Nigeria. The selection based on a stratified random sampling technique because of the distinct sub-groups in the population that needed to be represented. One hundred and twenty subjects were selected from each state. By this selection, the information obtained could provide some insight into the general nature on the dimensions of communication as predictors of effective classroom interaction.

Research Instrument: The instrument used for data collection is the questionnaire. The questionnaire comprising of two sections designed on a four-point likert scale of measurement. The reliability of the instrument was determined using the split half method of testing reliability co-efficient, thus the computed value of 0.87 was considered satisfactory. The questionnaire was distributed to the respondents and retrieved immediately, after completion by the subjects. The data generated was analyzed using regression statistics to test the hypotheses in order to determine the degree of agreement and disagreement.

RESULTS

The results of the null hypotheses presented in the tables established at 0.05 level of significance.

Hypothesis One: It states that there is no significant relationship between teachers' attitude, knowledge base, communication skills and effective classroom interaction. .

The result in table 1 shows that there are inter-correlations among the variables – attitude, knowledge base and communication skills. All the predictor variables are positive and significant correlates of classroom interaction. The variable of attitude correlated with classroom interaction with the r-value of .982 (P<0.05), while knowledge base correlated with classroom interaction with r-value .981 (p<0.05), whereas the variable of communication skill correlated with classroom interaction with r = .999 (p<0.05). Therefore, the null hypothesis was rejected showing that attitude, knowledge base and communication skill are predictors of effective classroom interaction.

Table 1: Correlation between attitude, knowledge base, communication skill and classroom interaction

Variables	AIT	KB	C.S	C.I
ATT	1.00			
K.B	999*	1.00		
C.S	998*	.9988	1.00	
C.I	.982*	.981*	.980*	1.00

Hypothesis Two: There is no significant relationship between teachers' attitude and effective classroom interaction (Table 2).

The result in table 2 shows that the relationship between attitude and classroom interaction is .982. The regression co-efficient of determination (R2adj) of .982 was found. This indicates that the variation in classroom interaction accounted for by attitude is 96%. The regression data produced an f-value of 5302.18, which was significant at 0.05 level of confidence. Therefore, the null hypothesis was rejected. The conclusion was reached that attitude is a predictor of classroom interaction.

Hypothesis Three: This hypothesis states that there is no significant relationship between teachers' knowledge base and classroom interaction (Table 3).

As shown in table 3, there was a significant correlation between knowledge base and classroom interaction. This is shown by the regression co-efficient of determination (R2adj) which was .962; this indicates that knowledge base was accounted for by 96% amount of

Table 2: Correlation between attitude and class-room interaction.

MR	.982				
R^2 =	.964				
R^2(adj)	.964				
Standard	Error = 70439				
ANOVA	df	SS	MS	F	
Regression	1	2630.776	2630.776	*5302.184	
Residual	198	68.241	.496		
Total	199	2729.020			
Parameter	Estimates				
Variable	B	Std Error	Beta	T	Sign.
Attitude	976	.013	.982	72.816	0.000
Constant	40.680	.461		88.197	0.000

Table 3: Correlation between teacher's knowledge base and classroom interaction.

MR	.981				
R^2	.962				
R^2(adj)	.962				
Standard	Error=.72582				
ANOVA	df	SS	MS	F	
Regression	1	2624.709	2624.709	*4982.168	
Residual	198	104.311	.527		
Total	199	2729.020			
Parameter	Estimates				
Variable	B	Std Error	Beta	T	Sign
Knowledge base	.969	.014	.981	70.584	0.600
Constant	38.086	.512		74.332	0.000

variance in classroom interaction. The regression data produced an f-value of 4982.17, which was significant at 0.05 level of confidence. The null hypothesis rejected. The conclusion was drawn that knowledge base is a predictor of classroom interaction.

Hypothesis Four: There is no significant relationship between teachers' communication skills and effective classroom interaction (Table 4).

In table 4 from the regression analysis the correlation of communication skills along with classroom interaction at 0.05 significant level with a corresponding R2 (adj.) of .961 was found. This implied that the variance in classroom interaction is 96%, and the F-value of 4875.068 was signi-

ficant. Therefore, the null hypothesis of no significant relationship between communication skill and classroom interaction rejected. This showed that communication skill is a predictor of effective classroom interaction.

DISCUSSION

The major purpose of this study was to determine the relationship between attitude, knowledge base and communication skills as predictor variables of effective classroom interaction. The findings of this study showed that there exists a positive and significant relationship between attitude, knowledge base, communication skills and classroom interaction.

Table 4: Correlation between communication skill and classroom interaction.

MR	.980				
R^2=	.961				
R^2 (adj)	.961				
Standard	Error=.73345				
ANOVA	df	SS	MS	F	
Regression	1	2624.709	2624.709	*4982.168	
Residual	198	104.311	.527		
Total	199	2729.020			
Parameter	Estimates				
Variable	B	Std. Error	Beta	T	Sign.
Communication skill	. 967	.014	.980	69.822	0.000
Constant	38.205	.545		66.456	0.000

The study showed that the entire null hypotheses tested were rejected, and all the predictor variables were significant. This can be interpreted to mean that teachers who possess positive attitude, have adequate mastery of the subject matter and good communication skills will have effective classroom interaction, and this will lead to achieving the values of educational goals and objectives in our secondary schools in the Niger-Delta Region of Nigeria. On the other hand, the reverse would be the case. The results reported here also proved an empirical basis for suggesting that the independent variables are predictors of effective classroom interaction. These findings here support those of earlier studies (e.g. Daly 2003; Stoner et al. 1999; Okorodudu 2004; Okorosaye- Orubite 2005), which conform that attitude, knowledge base and communication skills are significantly related to classroom interaction and are inevitable for teaching – learning success.

CONCLUSION AND RECOMMENDATION

Based on the findings of this study, it was concluded that attitude, knowledge base, and communication skills were significant correlates and predictors of effective classroom interaction.

The factors that have been identified as significant correlates and predictors have implications for education, most especially for teachers, and even learners based on the conclusions reached. This is because no educational goals and objectives will be achieved where there are negative attitudes, in adequate knowledge base, and lack of good communication skills.

Therefore since effective classroom interaction could be influenced by teachers attitude, knowledge base and communication skills, secondary school teachers should be provided with opportunities where they can develop such attributes through seminars, workshops, conferences and educational programmes organized by state ministry of education, Nigeria union of teachers and school principals.

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