ANALYTICAL OBSERVATION OF INSTRUCTIONAL PROCESS IN SOCIAL STUDIES IN UPPER BASIC SCHOOLS IN BAYELSA STATE OF NIGERIA

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Abstract

Classroom communication is a vital ingredient in every instructional learning process within the school environment. The quality and quantity of teacher-pupil interaction is a critical dimension of effective classroom teaching. This prompted the development of a Classroom Interaction Sheet (CIS) for an analytical observation of behavioural activities that are predominant in a teaching /learning process in Social Studies. The Classroom Interaction Sheet observed 3 categories of behaviuor namely, teachers' activities, students' activities, and others. The frequency of occurrence for each activity was observed for thirty-two instructional lessons. The inter-rater reliability estimated for CIS is 0.60. Data were analyzed with frequency/percentage and independent t-test statistical techniques. Findings show teachers' activities have the highest occurrence of 54%, followed by students' activities of 43%. Furthermore, students'behavioural activities such as responding to questions; listening: and hand up to respond got the highest scores of 12%, 13%, and 12% respectively. Teachers'behavioural activities that occurred most are: explaining (16%); standing in front of the class (14%); and demonstrating with hands (13%). Gender of the teacher

and school type did not significantly affect classroom interaction (i.e. t(30)=0.053,p>0.05 and t(30)=0.512,p>0.05). It is recommended that teachers' behavioural activities such as praising and encouraging pupils' efforts; and giving assignment which scored low should be improved on. Conclusively, the teacher's dominance in classroom interaction is sustained in this study.

Keywords

Classroom Interaction, Behaviour Category, Teachers'Activities, Students'Activities

1. Introduction

Teaching-learning process in the classroom typically involves interactive activities between the teacher and his/her pupils. A variety of behavioural activities of both the teacher and pupils are exhibited and can easily be observed in every instructional process. However, these activities determine the quality and quantity of teacher-pupil interaction, which is a very critical dimension of effective classroom teaching. Behavioural activities of pupils in a usual classroom interaction include listening, clapping, copying, responding to questions, observing among others, while the teacher based behavioural activities include giving examples, explaining, moving about while teaching, writing on the board, praising, prompting, and encouraging pupils, providing answers to questions, giving assignments, punishing, etc.

The display of these behavioral activities from both ends influences the tempo of instructional interaction; that is, how interesting, captivating, challenging, facilitating, boring, and dullish the pupils perceived the lesson to be. Pupils' perception of the instructional process cannot be overemphasized. This is because it creates a classroom climate that captures the generalized attitudes towards the teacher and the class that the pupils share in common despite individual differences. The development of these attitudes is an outgrowth of classroom social interaction. As pupils participate in classroom activities, they soon develop shared expectations about how the teacher will act, what kind of a person he/she is, and how they like their class. These expectations colour all aspects of classroom behaviour, creating a social atmosphere or climate that appears to be fairly stable, once established. Favor(2017), reiterated that the most important aspect of the classroom climate is the relationship between the teacher and the students. There must be elements of caring, trust, and respect in interpersonal relationships between teachers and students. Therefore, an effective classroom climate is one in which the teacher's authority to organize and manage the learning activities is accepted by the students.

The interaction pattern of classroom communication in a teaching-learning process is dependent on whether the teacher –based activities dominate or the learner-based activities dominate. Where in the teacher-based activities, consistently dominate in the instructional process, this tilts to a teacher-centered approach which in contemporary society is considered obsolete and inimical to the effective teaching process. But when pupil-based activities dominate on a regular basis, the learner-centered approach is integrated into the instructional process. The learner-centered philosophies focus on the individual learner's needs.They place the learner at the center of the instructional and educational process. This is because the institutional process appeals to the needs and interests of the learner, thereby motivating continuous learning. The focus is on the learner, encouraging participation, interaction, collaboration, sharing experiences through critical thinking and practice-based activities.

The learner-centered approach intertwines with the learning theories of cognitivism and constructivism. Cognitive school highlights learning that is active, constructive, and long-lasting. It engages students in the learning processes; teaching them to use their brains more effectively to make connections when learning new things. According to Alqurashi(2018), with regard to the instructional design process, learner's thinking, attitudes, beliefs, and values are all important in the learning process in cognitive theory. The learner is considered when determining how to design instruction to be easily assimilated. Constructivism theory sees the learner as the center of the learning process. It views the role of the learner as more than just an active processor of information. The learner's role is to construct new ideas from current and past knowledge. Partlow&Gibbs cited in Simsek et al. (2017) enumerated the basic characteristics of constructivist learning environments to include active learning; authentic instructional tasks; cooperation between students; and diverse and multiple learning formats.

The instructional process in social studies is similar to what is obtainable in other subjects in social sciences. However, social studies are the focus of this study. Social studies is one of the core subjects in the curriculum of primary school education. Social studies is the study of man in his environment. It is a discipline through which society imparts knowledge, skills, values, and desirable attitudes, considered worthwhile in younger minds. It is a study of man within the context of his environments: the social, physical, political, economic, culture, and technology. However, the impartation of these knowledge, skills, values, and positive attitudes is predicated on a good classroom climate.

Observation as a vital component of classroom interaction cannot be overemphasized. The systematic and accurate collection of visual evidence which could lead to informed judgments for necessary changes to accepted practices underpins interaction in a classroom setup. Through classroom observation is one way of gathering data for appraisal purposes if appraisal performance is about the quality of children's education by improving teachers' effectiveness, then looking at what is happening within the classroom is very important.

This study is premised on the basic theoretical assumptions of interaction analysis. Some of these assumptions are:

- The teacher exerts a great deal of influence on the pupils. Pupils' behavior is affected to a great extent by the type of teacher behavior exhibited.
- The relation between pupils and teachers is a crucial factor in the teaching process and must be considered as an important aspect of the methodology.
- The role of the classroom climate is crucial for the learning process.
- Modification of teacher classroom behaviour through feedback is possible (Niki, cited in Amatari, 2015)

Interaction Analysis is an analytical observation scheme that captures the verbal behaviour of teachers and pupils that is directly related to the social-emotional climate of the classroom. The development of the original system of interaction analysis was primarily the work of Ned Flanders (1970). The system is often referred to as the Flanders System of Interaction Analysis (FIA). Flanders' interaction analysis system is an observational tool used to classify the verbal behaviour of teachers and pupils as they interact in the classroom. Flanders' Interaction Analysis Categories (FIAC) is a ten Category System of Communication which are said to be inclusive of all communication possibilities. There are seven categories used when the teacher is talking (Teacher talk) and two when the pupil is talking (Pupil talk) and the tenth category is silence or confusion.

In the same vein, the Classroom Interaction Sheet (CIS) in social studies was developed as an observational tool to capture both the verbal and the non-verbal behaviours of the teacher and pupils at the primary level. Unlike Flanders' Interaction Analysis System that does not describe the totality of the classroom activity, Classroom Interaction Sheet attempts to capture almost all activities that do take place in the classroom during the instructional process. The purpose of this study is, therefore, the application of the Classroom Interaction Sheet to observe and analyze the

various behavioural activities that occur in an instructional process in social studies.Six research questions guided the study

1.1 Research Questions

1. What percentage of occurrence for each of the teachers' behavioural activities was observed?
2. What percentage of occurrence for each of the pupils' behavioural activities was observed?
3. What percentage of occurrence for each of the other activities was observed?
4. What is the proportion of teachers' behavioural activities to pupils' behavioural activities and others in the instructional process of social studies?
5. Does the gender of the teacher determine teacher-pupil interaction in the instructional process?
6. Does school type determine teacher-pupil interaction in the instructional process?

2. Methods

The observation technique was adopted. A sample of 32 teachers (16males and 16 females) teaching in the upper basic classes (4-6) was randomly selected. 32 classroom lessons in social studies (17 from private primary schools and 15 from public primary schools) were observed in Yenagoa Metropolis, Bayelsa State of Nigeria. A self-developed and validated instrument tagged "Classroom Interaction Sheet" (CIS) was used to collect data. Inter-rater reliability of 0.60 was estimated for this instrument.

The classroom interaction sheet is a behavioural category observation instrument that captures the interaction between teachers and pupils in an instructional lesson. It constitutes of three bahaviour categories namely: Category A (Teachers' activities), Category B (Students' activities) and Category C (Others). Category A consists of 17 teachers' behavioural activities. Category B consists of 12 students'behavioural activities and Category C consists of 7 other behavioural activities that could adversely affect the smooth teacher-pupil interaction in the teaching-learning process.

Recording of how often each of the enlisted behavioural activities occurs in a time-bound instructional process is the worth of the classroom interaction sheet. Coding spontaneously the activities as they occur by the observer for every 10 seconds in a 35 minutes time duration for each instruction process implies, that for each lesson, a maximum of 210 clackings of behavioural

activities would have been done by the observer. Classroom Interaction Sheet enables the observer to check a particular activity as many times as possible within the length of time such activity persists for every 10 seconds. It is a two-way chart. The behavioural categories listed down the left column and the frequency of occurrence of each activity listed up the right row. For each activity that occurs, the observer clacks in the appropriate cell. The total number for each activity and its equivalent percentage is supplied in the last two cells right of the table. Descriptive statistics (frequency count and percentage) and t-test statistical techniques were adopted to analyze data in this study.

3. Results

Research Question I: What percentage of occurrence for each of the teachers' behavioural activities was observed?

Table 1: *Descriptive Statistics of Teacher's Behavioural Activities*

Behaviour Category: Teachers' Activities	Frequency	Percent	Mean	Standard Deviation
Writing on the chalkboard	165	9		
Explaining	300	16		
Demonstrating with hands	224	13		
Giving directives	82	5		
Emphasizing using mother tongue	5	0.3		
Praising/Encouraging	39	2		
Giving assignment	1	0.1	55.63	
Giving examples	198	10		
Providing answers to questions asked by self	79	4		15.44
Providing answers to questions asked by students	146	8		
Reinforcing ideas/opinions	23	1.3		

Monitoring students' participation	3	4		
Moving about while teaching	195	11		
Standing in front of the class while teaching	229	14		
Punishing students for non-response	5	0.3		
Criticizing/justifying authority	4	0.2		
Monologue (teacher dominating the verbal interactions	32	2		

Table1shows that teacher's activity of explaining occurred most (16%), followed by teacher's standing position in the instructional process (14%) and teacher's hand demonstration (13%). Activities with minimal occurrence are emphasizing using mother tongue (0.3%), punishing students for non-response (0.3%), criticizing/justifying authority (0.2%), and giving assignments (0.1%).

Research Question 2: What percentage of occurrence for each of the pupils' behavioural activities was observed?

Table 2:*Descriptive Statistics of Students' Behavioural Activities*

Students' activities	Frequency	Percent	Mean	SD
Copying from the chalk board	88	6		
Copying from one another	38	3		
Responding to questions	176	12		
Listening	179	13		
Chorus response	163	11		
Looking into notes to supply the answer	34	2	44.40	
Observing the teacher	93	7		
Clapping	85	6		12.48
Standing up to respond	165	11		
Indicating readiness to respond by raising up a hand	189	13		
Silence (Group)	101	7		
Side talking	110	8		

Table 2 shows that pupils 'hand up to respond (13%), Listening (13%), responding to questions (12%), and chorus response (11%)occurred most. The least occurred activities are copying from one another (3%) and looking into notes to supply answers (2%).

Research Question 3: What percentage of occurrence for each of the other activities was observed?

Table3: *Descriptive Statistics of 'Others' Behavioural Activities*

Others	Frequency	Percent	Mean	Standard deviation
Social	7	8		
Nonchalant attitude of teacher	2	2		
The use of abusive language in the teaching/learning process	3	4	2.59	4.74
Distraction (i.e. phone call disruption)	11	13		
Distraction (acknowledging visitor)	9	11		
Noisy environment	31	37		
Poor classroom management	20	24		

Noisy environment (37%) and poor classroom management (24%) were at the peak while nonchalant attitude of teacher (2%) and distraction (4%) were at the bottom as shown in Table3

Research Question 4: What is the proportion of teachers' behavioural activities to pupils' behavioural activities and others in the instructional process in social studies?

Table 4:*Proportional Statistics of the 3 Behaviour Categories*

Behavioural Activities	Proportion
Teachers' Activities	54%
Students' Activities	43%
Others	3%

Teacher's dominance in classroom interaction is confirmed from the results shown in table 4

Research Question 5: Does gender determine teacher-pupil interaction in the instructional process?

Table 5:*Gender Based Independent T-Test of Classroom Interaction*

Gender	N	Mean	Standard	Standard	df	t-value	Sig level
Male	16	102.87	28.53	7.13	30	.053	0.958 [NS*]

Female	16	102.37	24.99	6.24			

NS*: Not significant at 0.5 alpha level

Research Question 6: Does school type determine teacher-pupil interaction in the instructional process?

Table 6:*Independent T-Test of Classroom Interaction Based on School Type*

School type	N	Mean	Standard	Standard	df	t-value	Sig level
Public	15	105.20	33.78	8.72	30	.512	0.612[NS*]
Private	17	100.35	18.41	4.46			

NS*: Not significant at 0.05 alpha level.

4. Discussion

As shown in Table I, teachers' behavioural activities that occurred most are explaining (16%); standing in front of the class while teaching (14%); demonstrating with hands (13%); moving about while teaching (11%), and giving examples (10%). These activities complement one another in a typical classroom teaching/learning process. The teacher tends to demonstrate with hands when immersed in the teacher's talk (i.e. explaining) and giving examples to buttress a point. However as useful as hand demonstration is, more impact would have been made if instructional materials are readily available and used in the instructional process. Most verbal instructions especially to younger children should be accompanied by the use of visual aids.

The use of instructional materials in the instructional process particularly at the basic level of education has always been a challenge in our various schools. The inability of school management to make these important learning resources readily and adequately available is a key factor. On the part of the teachers, their lack of skills and funds for improvisation is another factor. When a greater portion is allotted to the teacher's explanation, lesser time is given to pupils' active involvement in the instructional process. The efficient and effective use of instructional materials in the instructional process sustains pupils' interest and participation.

A strategy for effective classroom management is the physical arrangement in the classroom. Is the classroom arranged in such a way that the teacher can move about while talking to the pupils? Teaching positioning in the classroom is a matter of concern. When a teacher spends greater time standing at the front instead of moving about, pupils are likely to lose focus and become inattentive to what the teacher is saying. Although it may be tempting to stand at the front

of the class to stamp one's authority; Lovewell cited in Oxtoby (2016) advised teachers to always move around the space. This is because the teachers who are always standing at the front of the class lose half of the class. In his study, Amini-Philips (2019), found that classroom arrangement strategies employed by teachers in managing classrooms included the proper arrangement of seats; making sure that all instructional materials to be used in the classroom are available. Others were the proper classroom management that allows teachers to see the whole class at a glance; that enables the teachers to move freely to monitor students' participation; to have one-on-one interaction with students; ensuring that noise is minimized; handset is switched off; and maintenance of safety standards in laboratories. The result of this study shows that teachers do stand at the front of the class(11%) as well as move about while teaching (10%). It is advisable to attain a balance when it concerns teaching positioning in classroom interaction.

The use of the mother tongue by the teacher recorded less than half percent. Federal Republic of Nigeria(2014) stipulates in its national policy on education that the language of instruction for the first three years should be the "indigenous" language of the child or the language of his/her immediate environment. The upper basic classes are taught in the English language as the language of instruction. Other teachers' activities that recorded less than one percent are punishing students for non-response, criticizing/justifying authority, and giving the assignment. While the first two activities are most likely to have an adverse impact on pupils' learning when often applied in the instructional process; giving assignments must be emphasized in every instructional process. The motivational benefits of homework help teachers determine how well the lessons are being understood by their pupils; it teaches pupils how to solve the problem on their own; it gives pupils another opportunity to review class material, and parents a chance to see what is being learned in school. Other teachers' behavioural activities that recorded remarkable scores are: writing on the chalkboard (9%); providing answers to questions asked by students (8%) and giving directives (5%). These activities facilitate the teaching/learning process.

When the teacher presents the content of instruction in such a way that it captivates the pupils' attention, they are likely to listen with interest and attain an understanding of the content delivered. More so, their active responsiveness in the process of instruction is heightened. This actually accounted for the significant scores recorded for these pupils' behavioural activities such as listening (13%); Hand up to respond (13%); and responding to questions (12%). Other pupils'

activities that recorded significant occurrence are chorus response (11%) and standing up to respond (11%) complemented pupils' active involvement in the instructional process.

Anti-learning activities such as copying from one another (3%) and looking into notes to supply answers (2%) had minimal occurrences. This probably could be attributed to classroom discipline and the impact of many measures put in place in our educational system to curtail examination malpractices. It has to begin from the basic primary schools.

Non-productive behavioural activities such as noisy environment (37%) and poor classroom management (24%) observed are common features especially in the public schools where the challenge of managing large class is enormous. Furthermore, the sampled schools in this study are located in the beehive of the city; some are located among the busy major roads in Yenagoa metropolis, while some are open access, that is, there is no fencing of any form. Buchari and Matondang (2017) in their study found that noise impacted on students' learning brought about physiological impact in the forms of dizziness had the highest percentage of 22%; emotional and uncomfortable feeling had 21%; the communication impact of teacher's explanation disturbance had 22%, and pupils' learning performance was evidenced to decline by 22%.

The proportion of teachers' behavioural activities to students' behavioural activities and others is calculated to be 54%: 43%: 3%. Results in table 4 show that the teacher is a dominant factor in classroom interaction. This is premised on the fact that the chain of interaction between teachers and pupils is willfully considered to start with the behaviours of the teacher. Flanders cited in Amatari (2015) argued that the established norms in schools are 80% teacher talk, 20% pupil talk, and 11-12% silence. However, in this study, the gap between teachers' and pupils' behavioural activities had significantly reduced. The implication is that teachers have probably begun to involve pupils in the teaching/learning process. Consideration and sustenance of pupils' needs, interests, and capabilities in the instructional process have improved tremendously.

Findings shown in tables 4 & 5 are that gender did not impact on classroom interaction and school type is not related to classroom interactions in the instructional process. The female and male teachers observed, performed equally in the instructional process. There is no significant difference (t (30) =0.053, p = 0.958). Likewise, school type does not impact differently on classroom interaction (t (30) =0.512, p = 0.612). Rashidi and Naden (2012) explored the effect of gender on the patterns of classroom interactions of teachers and students and found that the patterns of teachers-students interaction were gender-related. Female teachers were more interactive,

supportive, and patient with their students than male teachers. They reported that the male and the female teachers asked more referential questions, gave more compliments, and used fewer directive forms. In contrast, the finding of this study shows that both the male and female teachers shared the same features in classroom interaction.

In their study, Eriba and Achor (2010) revealed that irrespective of school type, male teachers generally tended to praise and encourage learners more while the female teachers had higher records of time for accepting and using ideas of the learners in their classroom. Collaborating Eriba&Achor's study, this study found that school type is not related to classroom interaction.

On the basis of the above-discussed results, it is recommended that the teachers' behavioural activity of praising/encouraging and giving assignments to pupils must be improved upon. Praising pupils for act or response well done; encouraging and prompting them to do more; have motivational impacts on pupils' performance. This also facilitates the active participation of pupils in the instructional process on a regular basis. Homework or assignments help teachers to determine how well the lessons are being understood by their pupils. Therefore, the motivational benefits of giving assignments/homework cannot be overemphasized.

5. Conclusion

Classroom interaction sheet was developed to observe and analyze the classroom interaction in social studies lessons among the pupils in the upper basic classes at the primary school level. Teacher's dominance in classroom interaction is sustained in this study. However, findings showed a significant change from the past where teacher's dominance in classroom interaction is highly underscored. In this study, the margin of dominance had reduced significantly. Teachers are beginning to engage the pupils in active participation in the teaching/learning process. However, there is room for improvement to increase pupils' dominance in classroom interaction.

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