Poor Visibility and Classroom Management in Public Secondary Schools in Benue State

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ABSTRACT
The study investigated the impact of poor visibility on classroom management in public secondary schools in Benue State. One research question and one hypothesis guided the study. Survey design was adopted for the study. The population comprised 5,110 teachers from 297 public secondary schools in Benue State during 2017/2018 academic session. Out of which a total of 921 teachers from 100 public secondary schools were chosen using proportionate stratified random sampling technique. Poor Visibility and Classroom Management Questionnaire (PVCMQ) was used for data collection. The data collected was analyzed using mean and standard deviation to answer the research question and chi-square to test the hypothesis at 0.05 level of significance. The findings showed that poor visibility had significant impact on classroom management in public secondary schools in Benue State. Based on the findings it was recommended among other things that school management should provide alternative sources of light such as electricity or power plants in the school to be able to handle the cases of poor visibility in the classrooms and school premises generally.

Keywords: Power Visibility, Classroom Management.

INTRODUCTION
Classroom management is one of the fundamental objectives of the school system that are used to ensure effective teaching-learning process. As part of measures to achieve this objective, the teacher must be able to manage the classroom effectively. The classroom, according to Atanda (2008), is a room where students having similar characteristics are taught. The author further stresses that it is a geographical space occupied by a group of students for the purpose of teaching and learning. This is to say that a classroom is a room set aside and specifically designed and furnished for the purpose of teaching and learning.

Classroom management involves the organization, maintenance and utilization of the various components of the classroom to enhance teaching and learning. It also implies all methods, activities or techniques which a teacher adopts to ensure every learner utilizes available resources with the sole aim of achieving the goals of the school system towards learning (Osaat, 2010). According to Arogundade (2008),
classroom management refers to some forms of arrangement and co-ordination that go on in the classroom. Tella, Ajayi and Olowoye in Osaat (2010) added that classroom management is the method or technique a teacher adopts to ensure that every learner utilizes available resources with the aim of achieving the goals of the school system towards learning. Learners cannot optimally attain reasonable concentration and comprehension if the classroom environment is devoid of calm and light. The same thing applies to teachers as they can hardly perform duties maximally in an environment that is not comfortable. One major disturbing, yet unnoticed, element of the climate change that seem to have been exerting influence on the classroom is the cloud cover which if it is thick enough, can form a significant barrier to the penetration of the sun radiation that could yield low visibility and affect teaching and learning negatively in the classroom.

Smith (2008) noted that different environments around the world experience different levels of visibility at varying times. This is to say that people in other states or regions may experience clear visibility. At the same time, those in other states or regions may experience low or poor visibility. This makes it difficult for residents that experience low visibility to see beyond their reach. Visibility is simply how far one can see. In weather terms, it is how clear the atmosphere and air are, taking into account fog, mist and urban pollution.

Riley (2009) also observed that serious fog and dew can reduce visibility to near zero per cent, making it difficult for parents to drive their wards to school. Worst of all, this causes darkness in the classroom which makes teaching and learning impossible. In the same vein, students are also very difficult to control under such conditions due to lack of attention and concentration on the part of the students. The researchers also observe that not only fog and dew causes such low visibility, but heavy rainfall, thunderstorm, sandstorm, dust and smoke can also cause darkness in the classroom and disrupt classroom discipline and academic activities in the school system.

Wang (2004) notes that in order to effectively engage students in a distributed classroom, the critical factors in each domain need to be well attended to in order to encourage students’ cognitive, emotional and social presence in a learning environment. Ariv, Erlich, Ravid and Geva (2003) also pointed out that visibility is the communication artefact which helps students’ thinking process in comprehending course materials and completing assignments as well as maintenance of discipline in the classrooms. Ariv, Erlich, Ravid and Geva maintained that when the radiation is sharp enough, students are able to visualize the teaching aids more properly and comprehend the message there in.

On the contrary, when visibility is low or poor, it affects students’ ability to view the characters on the chalkboard and teaching aids as well as teacher’s demonstration in the classroom (Pinga, 2018). This may influence students’ concentration and comprehension in the classroom. By implication, poor visibility may force the management of the affected schools to budget funds for the installation of power plants to enable students and teachers to clearly visualize happenings within and around the classroom. Boast (2007) observes that whenever radiation is low as a result of thick clouds or the presence of fog, dew and mist in the area, it affects teacher-students eye contact. This makes students to indulge in certain unacceptable activities such as pinching, hitting others, stealing biros and causing unnecessary distractions since the teacher can hardly view what they are doing. Students may not be able to see and understand what the teacher is doing in front of the class. Therefore, it could influence the effective maintenance of discipline in the classroom as well as supervision of instructional activities.

In the same vein, Edo and Osuji (2016) averred that teaching and learning is more convenient when the environment of the classroom is favourable and clear in order to attract the attention of learners. The teacher may have prepared appropriate behavioural objectives for a lesson to be taught for the day, but such preparations may often be disrupted as a result of sudden advent of weather change. For instance, change in the weather in respect of heavy down pour and cloudy atmosphere that does not allow clear visibility often affects the level of teaching and learning in the school system as the teacher may not have eye-to-eye contact with the students. Duke (2012) adds that during heavy down pour of rain, the thick clouds may cover the sun radiation that provides light during the day. This may cause low visibility that may reduce the extent to which both the teachers and the students can see. The implication is that such poor visibility would lead to students and teachers losing sight of each other which may influence
classroom discipline, students’ coordination attention and comprehension as well as classroom evaluation. In addition, if such incidents occur during terminal or promotion examinations, the affected schools may be forced to shift to other periods thereby interfering with the actual plan of the school time table which leads to such school exceeding the actual school calendar set by the government or relevant authorities. This therefore, form the bases why it is necessary to have knowledge of the climate change especially visibility as any little change in it may influence all the other aspects of life including the school and its classroom management. It is against this background that this paper investigated the impact of poor visibility on classroom management in public secondary schools in Benue state.

**Statement of the Problem**
The problems associated with poor visibility seem to hamper and overwhelm the efforts of the classroom teachers and that of school management to have adequate control over the students in the classroom and ensure effective performance. School administrators and teachers were worried that whenever this natural disaster occurs, its effects seem to influence what the students could see on the chalkboard as well as teacher-students eye contact that enhances discipline and classroom supervision. As a result, most students seem to deviate from the classroom ethics and norms since the teacher could hardly see what is going on in the class.

Despite the speculated effects of climate change in the area of poor visibility on classroom management in secondary schools in Benue State, the researchers observed that not much had been done on the impact of poor visibility on classroom management in public secondary schools. The problem of the study in a question form therefore is: What is the extent of poor visibility on classroom management in public secondary schools in Benue State of Nigeria?

**Purpose of the Study**
The purpose of this study was to investigate the extent to which poor visibility has impact on classroom management in public secondary schools in Benue State, Nigeria. Specifically, the study sought to find out the extent to which poor visibility impacts on classroom management in public secondary schools.

**Research Question**
The under-listed research question guided the study:
To what extent does poor visibility impact on classroom management in public secondary schools?

**Hypothesis**
The under-listed null hypothesis was formulated and tested at 0.05 level of significance:
Poor visibility has no significant impact on classroom management in public secondary schools.

**RESEARCH METHOD**
The study was carried out in Benue State, which is one of the 36 states of Nigeria. The study adopted the descriptive survey design. The population comprised 5,110 teachers from 297 public secondary schools in Benue State. A sample of 921 teachers from 70 public secondary schools in Benue State was selected using proportionate stratified random sampling technique. A self-structured questionnaire titled “Poor Visibility and Classroom Management Questionnaire (PVCMQ)” was used for data collection. The questionnaire was divided into Sections A and B. Section A sought the personal data of the respondents, while Section B contained items 1-5 that focused on impact of poor visibility on classroom management in public secondary schools. Responses were based on a modified 4-point Likert scale with response mode of Very High Extent (VHE) =4, High Extent (HE) =3, Low Extent (LE) =2 and Very Low Extent (VLE) =1. The questionnaire was validated by three experts in Educational Management, Measurement and Evaluation from Faculty of Education and from Department of Geography, Faculty of Environmental Science, Benue State University, Makurdi.

The data collected were analyzed using mean and standard deviation to answer the research questions. Any item with less than 2.50 was regarded as having an impact to a little extent, but as having an impact to a great extent if it was 2.50 and/or above. Chi-square test of goodness-of-fit was used to test the null hypothesis at 0.05 level of significance. If the calculated chi-square table value is equal to or greater than the critical table value, the null hypothesis of no significant value was not reject, if not it was rejected.
DATA ANALYSIS AND INTERPRETATION
The results were analysed and interpreted in line with the research question and hypothesis as follows:

**Research Question:** To what extent does poor visibility impact on classroom management in public secondary schools?

**Table 1:** Mean and Standard Deviation of the Impact of Poor Visibility on Classroom Management in Public Secondary Schools

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item Description</th>
<th>N</th>
<th>VH</th>
<th>HE</th>
<th>LE</th>
<th>VL</th>
<th>M</th>
<th>SD</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor visibility affects students’ ability to view teachers’ demonstration in the classroom.</td>
<td>921</td>
<td>459</td>
<td>20</td>
<td>87</td>
<td>175</td>
<td>2.6</td>
<td>0.8</td>
<td>HI</td>
</tr>
<tr>
<td>2</td>
<td>In my school, poor visibility makes students’ visualization of characters on the chalkboard difficult and this leads to distraction and poor classroom coordination.</td>
<td>921</td>
<td>200</td>
<td>34</td>
<td>27</td>
<td>104</td>
<td>2.1</td>
<td>0.9</td>
<td>LI</td>
</tr>
<tr>
<td>3</td>
<td>Poor visibility lowers students’ attention and makes such students to indulge in indiscipline since the teacher has no effective eye-to-eye contact with them.</td>
<td>921</td>
<td>522</td>
<td>24</td>
<td>10</td>
<td>54</td>
<td>2.5</td>
<td>0.9</td>
<td>HI</td>
</tr>
<tr>
<td>4</td>
<td>In my school, poor visibility affects students’ ability to view teaching aids and this affects their comprehension.</td>
<td>921</td>
<td>182</td>
<td>40</td>
<td>12</td>
<td>205</td>
<td>2.5</td>
<td>1.0</td>
<td>HI</td>
</tr>
<tr>
<td>5</td>
<td>Poor visibility affects supervision of instructional activities in my school.</td>
<td>921</td>
<td>207</td>
<td>53</td>
<td>13</td>
<td>50</td>
<td>2.4</td>
<td>0.8</td>
<td>LI</td>
</tr>
</tbody>
</table>

**Cluster Mean and Standard Deviation**

<table>
<thead>
<tr>
<th>item</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>921</td>
<td>2.48</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Table 1 reveals that items 1 – 5 have the mean ratings of 2.69, 2.10, 2.59, 2.55 and 2.47 respectively with the corresponding standard deviations of 0.82, 0.91, 0.98, 1.08 and 0.83. The cluster mean of 2.48 with the standard deviation of 0.92 showed low impact respectively. This low impact from respondents means that the extent of poor visibility on classroom management in public secondary schools in the area of study was low. This result also showed item by item analysis which implies that poor visibility affects students’ ability to view teachers’ demonstration in the classroom. The respondents’ opinion was low on the item that poor visibility makes students’ visualization of characters on the chalkboard difficult and this leads to distraction and poor classroom coordination. They showed high level of extent that poor visibility lowers students’ attention and makes such students to indulge in indiscipline since the teacher had ineffective eye-to-eye contact with them. The respondents disagreed that poor visibility affects students’ ability to view teaching aids and this affects their comprehension as well as supervision of instructional activities. On a whole, the cluster mean of 2.48 was below the cut-off point of 2.50. This implies that poor visibility has low influence on the management of public secondary schools in Benue State of Nigeria.
**Hypothesis:** Poor visibility has no significant impact on classroom management in public secondary schools.

**Table 2:** Chi-square Test of the Impact of Poor Visibility on Classroom Management in Public Secondary Schools

<table>
<thead>
<tr>
<th>Responses</th>
<th>Observed Frequency</th>
<th>Expected Frequency</th>
<th>df</th>
<th>Level of Sig.</th>
<th>$\chi^2$-Cal.</th>
<th>$\chi^2$-Crit.</th>
<th>P-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLE</td>
<td>218</td>
<td>230.3</td>
<td></td>
<td>3</td>
<td>0.05</td>
<td>43.57</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>LE</td>
<td>182</td>
<td>230.3</td>
<td>3</td>
<td>0.05</td>
<td>43.57</td>
<td>7.82</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>HE</td>
<td>314</td>
<td>230.3</td>
<td></td>
<td>3</td>
<td>0.05</td>
<td>43.57</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>VHE</td>
<td>204</td>
<td>230.3</td>
<td></td>
<td>3</td>
<td>0.05</td>
<td>43.57</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Total</td>
<td>921</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that $\chi^2$-cal. = 43.573 > 7.815; $P<.05$ with 3 degree of freedom. This shows that the null hypothesis which states that poor visibility has no significant influence on classroom management in public secondary schools was not accepted. The implication is that poor visibility has significant negative impact on classroom management in public secondary schools in Benue State of Nigeria.

**DISCUSSION OF FINDING**

The finding of the study showed that poor visibility had significant negative impact on classroom management in public secondary schools in Benue State of Nigeria. This is so because during the field work, the researchers discovered that a teacher may have prepared an admirable lesson objective for the day but such preparations were often disrupted by the sudden advent of weather change. For instance, change in the weather in respect of heavy down pour and cloudy atmosphere that does not allow clear visibility affected the level of teaching and learning in the school as teacher had ineffective eye-to-eye contact with the students. This finding supports Ariv, Erlich, Ravid and Geva (2003) report that visibility is the communication artefact which helps student’s thinking process in comprehending course materials and completing assignments as well as maintenance of discipline in the classrooms. Ariv, Erlich, Ravid and Geva maintain that when the radiation is sharp enough, students are able to visualize the teaching aids more properly and comprehend the message there in; and when low or poor, it affects students’ ability view the teaching aids as well as teacher’s demonstration in the classroom. This may influence students’ concentration and comprehension. In the same vein, Edo and Osuji (2016) aver that teaching and learning is more convenient when the environment of the classroom is favourable and clear in order to attract the attention of the learners.

**CONCLUSION**

Based on the results of the study, it has been established that poor visibility has significant negative influence on classroom management in public secondary schools. The major objective of classroom management is to ensure effective teaching-learning process. However, this cannot be easily accomplished in an environment that is not conducive for learning as a result of poor visibility.
RECOMMENDATIONS
Based on the finding, it was recommended that:
1. School management should provide alternative sources of light such as power plants in the school to be able to handle the cases of poor visibility in the classrooms and school premises generally.
2. Educational planners should ensure that all classroom buildings are properly positioned with adequate window sizes to provide lightening in the classrooms.

REFERENCES