



IMPACT OF LOST INSTRUCTIONAL TIME ON ACADEMIC PERFORMANCE IN RURAL BENUE SCHOOLS: THE ROLE OF CHILD LABOUR AND CLASSROOM INTERRUPTIONS

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Abstract

The study investigated impact of lost instructional time due to child labour and classroom interruptions on students' academic performance in rural schools in Kwande Local Government Area of Benue State. The study adopted descriptive survey design. The population of the study comprised 346 students in rural schools. A sample of 120 students was selected through random sampling technique. The instrument for collecting data was developed by the researchers and validated. The reliability of the instrument was determined by conducting pilot test. Adopting Cronbach alpha procedure, the reliability coefficient of 0.82 was obtained. Data analysis was done through SPSS. Mean and standard deviation were used for answering research questions while t – test was used for testing hypotheses at 0.05 level of significance. The findings of the study showed that child labour and classroom interruptions have significant impact on students' academic performance in Kwande LGA in Benue rural schools. It is therefore recommended that parents and teachers should avoid using their children for child labour.

Keywords: Instructional time, child labour, classroom interruptions, academic performance.

Introduction

Instructional time is a scarce resource which is valuable and essential for students' better academic performance. Misuse of instructional time often leads to students' poor academic performance, since they do not learn adequately what is planned in the school curriculum. Parents in Benue State, in particular, are worried that many students who completed basic and secondary education could not read and write well in their mother tongue and English Language (Nwosu & Anzaa, 2017) due to lost instructional time. In one of the Parent – Teacher Association (PTA) meetings in Benue State, a parent lamented that their child was in primary four but could not read and write. Another parent in the meeting also lamented that their child completed senior secondary education but could not write an application for an employment.

The parents in the PTA meeting wondered whether teachers actually teach and students actually learn what is built into school curriculum nowadays. They blamed teachers for engaging students in child labour at school. A teacher responded to parents accusing them of preventing their children from attending school by engaging them in farming, domestic chores and hawking during school hours. While the debate persists, students continue to lose instructional time available for teaching and learning in Benue State.

According to UIS – UNESCO, instructional time is amount of time during which students receive instruction from a classroom teacher in a school context. UIS – UNESCO further explained that instructional time does not include holidays or teacher development days when students are not expected to be in school, it does not include break during the school day, or time spent on learning outside of school, like home work tutoring. Thus, instructional time is conceived as the amount of available time teachers usually use in teaching scholastic subjects and is related to how much students learn in school. It is important especially for students in rural schools in Benue State whose out of school time and opportunities are limited, where there is no online instruction in rural schools and students depend heavily on what they hear from their teachers.

Classroom Interruptions and Learning Outcomes

It should be noted, however, that instructional time is not fully utilized across the globe. It varies from one country to another. According to Abadzi (2013) in Ghana only 39 percent of instructional time is used; in Brazilian State of Pernambuco is 63 percent, Morocco 71, and Tunisia 78 percent. Besides, Fernandez (2022) corroborated that there are different amount of time that students from different countries spend at school. In Finland, primary schools receive 650 hours of instruction, while in Australia, they receive about 1000. Similarly, large differences are observed in secondary education (OECD, 2019). Again, Fernandez (2022) pointed out that there are also important cross country differences in instructional time allocation to different subjects. In Portugal, for example, primary school students spend the same amount of time in language and mathematics. In France, however they spend 80 percent more time in language and mathematics. Similarly, OECD (2015) latest statistics indicate that the average hours per school year in lower secondary education range from 754 in Sweden to 1164 hours in Morocco, with OECD average of 916 hours.

In Nigeria, according to Slideshare (2024), Nigeria student spends less than 850 hours of instructional time in a year. Slideshare attributes this to the following reasons:

School closes at 1:00pm on Friday – this is one hour less than the normal closing time.

State governments can unilaterally declare public holiday (e.g. Adamawa).

Some South-West States celebrate Democracy Day on June 12.

Traditionalists may decide to hold some rituals / festivals mandating school closure.

Political, ethnical or religious unrest, and Strike actions.

In a similar vein, Kraft (2020) attributed lost instructional time to interruptions in the classroom mainly from school staff, announcements; students entering class late, calls to the classroom phone, teachers, administrators and staff knocking at classroom door. The study further revealed that external interruptions are a regular feature of the school day and the most common source of interruptions in schools that has received little attention in the research

literature where students arriving late to class in a disruptive way. Corroborating, Abadzi (2013) revealed that lost instructional time is due to informal school closures, teachers' absenteeism, delays, early departures, and sub-optimal use of time in classroom. Besides, Osei – Owusu et al (2018) revealed that where there are high prevalent rate of maternity leave, sick leave, absenteeism, and lateness, maximum instructional time is hindered.

Child Labour and Academic Performance

Another important factor of lost instructional time is child labour. According to Chanda (2023), child labour refers to the exploitation of children through any form of work that deprives them of their dignity and that is harmful to physical and mental development. Furthermore, the study revealed that students who did not involve in domestic activities performed higher than those who were involved. Also, Amar et al (2014) stated that labour conditions, the number of weekly hours dedicated to work and the presence of work scheduled in the morning negatively affect the performance of child labourer. This suggests that the relationship between child labour and academic performance is based on the conflict between these two activities. In addition, Anzaa and Nwosu (2017) found that domestic chores have significant influence, on girls schooling in rural and urban secondary schools. According to them, girls are late or absent from school by gathering firewood in the bush for the family, supporting the family on the farm, running errands, looking after siblings, washing dishes, fetching water, and cleaning the house in the morning.

Besides, other studies have also shown that lost instructional time has significant impact on students' academic performance. Gronados (2022) reported that in Carolina, during COVID – 19, students who went to school in person where specific and targeted resources and supports were in place, did better in school subjects than those who stayed totally remote. The study further reported that during the COVID-19 pandemic, students of all races and ethnicities did worse than expected. Similarly, Saloviita (2013) investigated loss of time in primary and secondary schools in Finland, found that the time loss was minimal. However, for various reasons, lesson starts were

delayed by an average of about six minutes. According to Saloviita, calculated on this basis, the total loss of instructional time in the whole school year was about five weeks of schooling.

In similar vein, Goodman (2014) using Massachusetts data, found that each absence induced by bad weather reduces mathematics achievement by 0.05 standard deviation, suggesting that attendance can account for up to one-fourth of achievement gap. The study further revealed that absences matter but closures do not is consistent with a model of instruction in which coordination of students is the central challenges. Furthermore, the study reported that teachers appear to deal well with coordinated disruptions of instructional time like closures but deal poorly with disruptions like absences that affect different students at different time.

Relatedly, Sakurai (2013) and UNICEF (2013) reported that many children have difficulty in accessing education due to competing family and work commitments that may prevent them from attending school regularly. Also, socio-cultural practices and beliefs about gender roles, which allocate more domestic chores to girls, continue to affect family's decision about who should be sent to school (Everso, 2012; Anzaa 2013; Anzaa & Nwosu, 2018). This suggests that students who share their time with studies in formal labour and domestic chores are not likely to perform well in any subject.

Bronfenbrenner Ecological Systems Theory (1917–2005)

Urie Bronfenbrenner was a Russian-born American Psychologist. He was born on the 29th April, 1917 and died on the 25th September, 2005. He is well known for developing human ecological systems. The theory states that individuals are seen as maturing not in isolation but within the context of relationship such as such as those involving families, friends, schools, neighbourhood and society (Britannica 1917 – 2005). This study is hinged on this theory to explain how students' environment can influence their academic performance. The students are influenced principally by two environments – the home and school. At home, students' families especially their parents can determine when the students should attend school even if they are enrolled. Some students do not attend school

regularly because they have to support their parents on the farm or perform some domestic chores. The consequences are that the students may be late for school or not attend school completely, leading to loss of instructional time.

At school, students come in contact with teachers, administrators and peers. During break time, some students may engage in games like playing ball and competition in running, and may forget to return to classrooms on time. On realizing they are late, they start running to classrooms, and may enter their class in disruptive manner, not knowing that their teacher is already in the classroom. This behaviour often leads to loss of instruction time because the teacher in the class will temporarily stop teaching to deal with late-coming. In addition, teachers from other classes may come knocking at the classroom's door for one reason or another.

All these behaviours culminate to loss of instructional time. Thus, the students' two environments, the home and school need to work collaboratively to ensure that students do not lose instructional time either by labour or classroom interruptions.

Statement of the Problem

Instructional time is a scarce resource which is valuable and essential for students' better academic performance. However, misuse of instructional time often leads to students' poor academic performance. Nonetheless, studies have shown that instructional time is not fully utilized across the countries of the world. This lost instructional time is attributed to many factors such as child labour, classroom interruptions, absenteeism, school closures, and bad weather. Many studies have reported how lost instructional time affects students' academic performance. Nonetheless, the researchers did not find any empirical study conducted on this topic in rural schools of Kwande Local Government Area (LGA) of Benue State, Nigeria. In view of this, the researchers are motivated to investigate child labour and classroom interruptions factors, and their impact on students' academic performance in rural schools of Benue State.

Purpose of the Study

The main aim of the study was to investigate the impact of lost instructional time on academic

performance in rural Benue schools: The role of child labour and classroom interruptions. Specifically, the study sought to:

- i . Determine the impact of child labour on student's academic performance in rural schools.
- ii . Ascertain the impact of classroom interruptions on students' academic performance in rural schools.

Research Questions

The following research questions are raised to guide the study:

- i . What impact does child labour have on students' academic performance in rural schools in Kwande LGA of Benue State?
- ii . What impact does classroom interruptions have on students' academic performance in rural schools in Kwande LGA of Benue State?

Hypotheses

The following hypotheses are formulated and tested at 0.05 level of significance:

- 1 . Lost instructional time due to child labour has no significant impact on students' academic performance in rural schools.
- 2 . Lost instructional time due to classroom interruptions has no significant impact on students' performance in rural schools.
- 3 . There is no significant difference between the impact of lost instructional time due to child labour and classroom interruptions on students' academic performance in rural schools.

Methodology

The study adopted descriptive survey design. According to Hale (2011), descriptive survey design can be used where the respondents are allowed to answer questions through questionnaire. The population of the study comprised 346 students in rural schools of Kwande Local Government Area (LGA) of Benue State. A sample of 120 students was selected through random sampling technique. The instrument for data collection, titled Child Labour and Classroom Interruptions Questionnaire (CLCIQ) was developed by the researchers. The questionnaire is divided into two parts A and B. Part A contained the bio-data of the respondents while Part B contained 18 questionnaire items

designed to elicit information about child labour and classroom interruptions from the respondents. The questionnaire adopted four points Likert Scale Format, Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

The questionnaire was validated by two professionals, one in Sociology of Education, and another in Measurement and Evaluation from the Nasarawa State University, Keffi. Based on their suggestions and amendments, the new version of the questionnaire was structured. The reliability of the instrument was determined by conducting a pilot test on 25 students who constituted the

population, but did not form part of the sample. Adopting Cronbach alpha statistic, the reliability coefficient of 0.82 was obtained. Data were analysed using SPSS. Mean and standard deviation were used for answering research questions, while t – test was used to test the hypotheses at 0.05 level of significance.

Results

The data collected for the study were analysed using SPSS. Data analysis was guided by two research questions and three hypotheses, and presented in tables as follows:

Research Question 1

What impact does child labour have on students' academic performance in Kwande LGA of Benue State?

Table 1: Mean ratings and standard deviations of impact of lost instructional time due to child labour on students' academic performance.

Items	Child labour factors	Mean	Standard deviation
1.	Supporting my parents on the farm during school hours affects my academic performance	3.48	2.81
2.	My hawking during school hours affects my academic performance	3.31	2.64
3.	By combining schooling with work affects my academic performance	3.40	2.71
4.	My irregular attendance to school due to work at home affects my academic performance	3.30	2.62
5.	My frequent absence to school due to work at home affects my academic performance	3.50	2.84
6.	My teachers using me to work on their farm during school hours affect my academic performance	3.44	2.77
7.	By going to school late due to working in the morning affects my academic performance	3.26	2.60
8.	By running errands at school during school hours affects my academic performance	3.3	2.64
Grand Mean		3.00	2.70

Table 1 has a grand mean of 3.00 and standard deviation of 2.70 above cut off mark of 2.50. This means that lost instructional time due to child

labour has impact on students' academic performance in Kwande LGA of Benue State.

Research Question 2

What impact does classroom interruptions have on students' academic performance in Kwande LGA of Benue State?

Table 2: Mean ratings and standard deviations of lost instructional time due to classroom interruptions on students' academic performance

Items	Classroom interruption factors	Mean	Standard deviation
9.	Lost of instructional time due to staff interruptions in the classroom affects my academic performance.	3.56	2.88
10.	Lost instructional time due to students making lot of noise in the classroom affects my academic performance	3.19	2.51
11.	Lost instructional time due to students' fighting in the classroom affects my academic performance	3.15	2.47
12.	Lost instructional time due to teacher absenteeism in the classroom affects my academic performance	2.91	2.25
13.	Lost instructional time due to informal school closures affects my academic performance	3.31	2.62
14.	Lost instructional time due to high prevalent rate of my teacher's maternity leave affects my academic performance.	3.40	2.70
15.	Lost instructional time due to students entering classroom in disruptive way affects my academic performance	3.20	2.59
16.	Lost instructional time due to staff frequent knocking at classroom door affects my academic performance	3.30	2.60
17.	Lost instructional time due to high prevalent rate of teachers' sick leave affects my academic performance	2.96	2.27
18.	Lost instructional time due to repeated phone calls to classroom affects my academic performance	3.49	2.83
Grand Mean		3.26	2.57

Table 2 has a grand mean of 3.26 and standard deviation of 2.57 above the cut off mark of 2.50. This means that lost instructional time due to

classroom interruptions has impact on students' academic performance in Kwande LGA of Benue State.

Hypothesis 1

Lost instructional time due to child labour has no significant impact on students' academic performance in rural schools in Kwande LGA of Benue State.

Table 3

One sample test					
Test Value = 2.50					
				95% confidence interval of the difference	
t	df	sig.	mean	lower	upper
(2 tailed) difference					
27.614	7	.000	.87750	.8024	.9526

Mean -
response

Table 3 has $t = 27.614$ at 7 df. $P = .000$. This is less than 0.05 level of significance. This means that the hypothesis lost instructional time due to child labour has no significant impact on students' academic performance in rural schools, is not

supported. It is concluded that lost instructional time due to child labour has significant impact on students' academic performance in rural schools of Kwande LGA, Benue State.

Hypothesis 2

Lost instructional time due to classroom interruptions has no significant impact on students' academic performance in rural schools in Kwande LGA of Benue State.

Table 4

One sample test					
Test Value = 2.50					
				95% confidence interval of the difference	
t	df	sig.	mean	lower	upper
(2 tailed) difference					
5.557	9	.000	.68300	.4050	.9610

Mean -
response

Table 4 indicates that $t = 5.557$ at $df = 9$, $P = .000$ is less than 0.05 level of significance. The hypothesis that lost instructional time due to classroom interruptions has no significant impact on students' academic performance in rural

schools, is not supported. This means that lost instructional time due to classroom interruptions has significant impact on students' academic performance in rural schools in Kwande LGA, Benue State.

Hypothesis 3

There is no significant difference between the impact of lost instructional time due to child labour and classroom interruptions on students' academic performance in rural schools of Kwande LGA, Benue State.

Table 5
Paired samples test

				Paired difference			
				95% confidence interval of the difference			
				Lower	upper		
Mean	mean	standard	standard			t	Sig (2tailed)
Response		deviation	error of mean			df	
89	2.773	.5967	.14064	2.45716	3.05062	19.581 17	.000

Table 5 indicates that $t = 19.581$ at 17 df, $P = .000$ which is less than 0.05 level of significance. Consequently, the hypothesis 3 is not supported. This means that there is significant difference between the impact of child labour due to lost instructional time and classroom interruptions on students' academic performance in rural schools of Kwande LGA, Benue.

Discussion of the Findings

The study investigated impact of lost instructional time due to child labour and classroom interruptions on students' academic performance in rural schools in Kwande LGA of Benue State. The results of the study revealed that lost instructional time due to child labour has impact on students' academic performance in rural schools of Kwande LGA of Benue State. This finding resonates with Chanda (2023) who found that students who did not involve in domestic chores performed higher than those who were involved. Besides, the finding of the study is similar to Amar et al (2014) who stated that labour conditions, the number of weekly hours dedicated to work and the presence of work scheduled in the morning negatively affect the performance of child labourer. Similarly, the study by Anzaa and Nwosu (2017) revealed that domestic chores have significant influence on girls schooling in rural and urban secondary schools. Their study found

that girls were late or absent for school y gathering firewood in the bush or the family, supporting the family on the farm, running errands, looking after siblings, and washing dishes in the morning. All these affect their academic performance.

Another result of the study revealed that lost instructional time due to classroom interruptions also have negative impact on students' academic performance. This finding agrees with Kraft (2020) who attributed lost instructional time to classroom interruptions mainly from school staff, announcements, students' entering class late and in disruptive way, calls to the classroom phone, teachers, administrators and staff knocking at classroom door. When this happens the teacher in the class discontinuous with the lesson. Thus, time last bits by bits is likely to affect students academic performance.

In addition, the result of the study showed that there is significant difference between the impact of child labour and classroom interruptions on students academic performance in rural schools in Kwande LGA. From the result, child labour exerts more significant impact on students' academic performance than classroom interruptions. The reason could be that it is easier to control factors responsible for lost instructional time at school due to classroom interruptions than factors responsible for lost instructional time at home due to child labour. For example, at school,

factors responsible or lost instructional time like knocking at classroom door by staff, administrators, teachers and students entering classroom late and in disruptive way are relatively easy to control. But at home where child labour prevails, it is difficult to control parents who use their children for domestic chores, another form of child labour.

Conclusion

Based on the findings of the study, it is concluded that lost instructional time due to child labour and classroom interruptions have significant impact on students' academic performance in rural schools in Kwande LGA, Benue State, and that child labour exerts more impact than classroom interruptions.

Recommendations

Based on the results of the study, the following recommendations are made:

- 1 . Parents should be educated to avoid excessive use of their children for domestic chores, another form of child labour. This could be done during PTA meeting where they will be explained the negative impact of child labour on students' academic performance.
- 2 . Teachers, staff, students, and administrators should avoid knocking on the classroom door during lessons. This could be done during staff meeting. Also stem measures should be taken against students returning to classroom late, and in disruptive manner.
- 3 . The Ministry of Education, school boards, and community organisations should systematically tackle child labour and classroom interruptions through seminars, workshops and conferences.

References

- Abadzi, H. (2023). Absenteeism and beyond: Instructional time loss and consequences. Policy Research Working Paper.
- Amar, J.J. Holgado, D; Jariengo, I.M.; Ramos-Vidal, I; Sanudo, J.E.P.; Oviedo-Trespalacios, O; & Mendoza, V.M.R. (2014). *Impact of child labour on academic performance. International Journal of Educational Development*. Vol. 34. Page 58 – 66.
- Anzaa, J.T. & Nwosu, N.P. (2017). *Influence of domestic chores on girls' schooling in rural an urban secondary schools in Kwande LGA, Benue State. Nasarawa Journal of Education*. 1(1): 114 – 126.
- Anzaa, J.T. & Nwosu, N.P. (2018). *Impact of economic recession and gender on parental decision about their children access to school: A case of Keffi Metropolis, Nigeria. Journal of Sociology of Education XII*(1): 119 – 129
- Anzaa, J.T. (2013). Socio-Cultural practices and beliefs in Tiv as correlates of girl-child education. Unpublished Ph.D Thesis, Department o Educational Foundations, University of Nigeria, Nsukka.
- Britannica, <https://www.britannica.com>
- Chanda, T.C. (2023). *Effects of child labour on education. International Journal of Research Publication and Review*, 4(8): 1704 – 1710.
- Cygan – Rehm, K. (2022). Life time consequences of lost instructional time in the classroom: Evidence from shortened school years. Cesifo Working Paper No. 9892.
- Everson, E. (2012). State of girl education in Africa: Achievement since 2000. Challenges and Prospects for the future. http://etc.indenet.net/publications/state%20girls%Education%2West%Africa_ENG.Pdf
- Fernandez, A.B. (2022). Instructional time and educational outcomes. Centre for Economic Performance (LSE) and VATT Institute.
- Goodman, J. (2014). Flaking out: Student absences and snow days as disruptions of instructional time. NBEK Working paper No. 20221

- Gronados, A. (2022). The impact of lost instructional time on students during COVID – 19. www.the74million.org
- Hale, J. (2011). The 3 basic types of descriptive methods. <http://psychcentral.com/bio/archives/2011/09/02>
- Kraft, M.A. (2020). The hidden cost of classroom interruptions. ASCD.
- OECD (2019). Education at glance. OECD Publishing.
- OECD. (2015). Education at a glance. Paris. OECD.
- Osei-Owusu, B.; Ampose, E.T.; Ampomah, R. & Akeyina, K.O. (2018). Misuse of instructional time and its effects on students' academic in four public senior high schools in the Ashanti Mampong Municipality of Ghana. Research Gate.
- Sakurai, R. (2013). Child labour and education for all. Educational International. http://download.ei_ei.org/sidedirectory/childlabour/educationalgroup/childlabour%20and20EAEN.Pdf
- Saloviita, T. (2013). *Classroom management and loss of time at the lesson start: Preliminary study. European Journal of Educational Research*. 2(2): 167 – 170.
- Slideshare. (2024). How much time does Nigerian student spend in school? www.slideshare.net.
- UIS-UNESCO. (2024). Definition of instructional time. UNESCO Institute for Statistics (UIS).
- UNICEF. (2013). Ghana at a glance: Statistics. <http://www.unicef.org/infobycountry/Ghanastatistics.html>.