

## USE OF CCTV AND ECONOMIC TEACHERS' EFFECTIVENESS IN SECONDARY SCHOOLS IN UYO SENATORIAL DISTRICT OF AKWA IBOM STATE TEACHERS

BY

---

HENRY K. FRIDAY  
DEPARTMENT OF VOCATIONAL STUDIES  
FACULTY OF EDUCATION  
UNIVERSITY OF NIGERIA  
NSUKKA

---

### ABSTRACT

*This study examined use of CCTV and economic teachers' effectiveness in secondary schools in Uyo Senatorial District of Akwa Ibom State. Two specific research objectives were formulated to guide the study. The research design was Expost-facto research design. The population of the study comprised of all the 772 Economics teachers in Uyo Senatorial district of Akwa Ibom using a stratified sampling technique. The instrument known as "Use of CCTV and Economic Teachers' Effectiveness Questionnaire (UCCTVETEQ)" was used to collect the data. The instrument was subjected to reliability test, using test-retest method and it produced high average reliability coefficient of 0.80 to justify the use of the instrument. The analysis was done using appropriate statistical techniques such as mean score rating and t-test analysis. The findings revealed that there is significant influence of use of CCTV on economic teachers' effectiveness in teaching the subject matter and there is significant influence of use of CCTV on economic teachers' effectiveness in class room discipline. One of the recommendations was that CCTVs should be installed in most of the schools, this will increase teachers commitment and preparedness in teaching their subject.*

**Key Words:** *CCTV, teachers effectiveness, subject matter, class room discipline, Uyo, Akwa*

*Ibom State*

---

### INTRODUCTION

Education is very important for every nation of the world. It is important because the transmission of cultural heritage and technological advancement of any nation depends on it. In recognition of the importance of education, every nation including Nigeria earmarks huge budgetary allocations for it yearly (Nwosu, 2008). To account for the school fees collected and to maintain appreciable number of students in their schools, the school proprietors strive to provide enabling environment for effective teaching and learning to thrive. A high quality assurance in schools entails providing most of the factors that enhance effective teaching and learning which ultimately affect students' academic achievement. These factors as enumerated by Postlethwaite (2007) include but not limited to teacher-variables environment/family variables and school variables. Of all these factors, the ones that are touted to exact most influence on the learning outcome are the "teacher-variables" as the teacher is the ultimate implementer of the curriculum (Postlethwaite, 2007).

One of the teacher-variables which contributes immensely to enhance students' academic achievement is the teaching (teacher) effectiveness. Effective teaching is a term synonymous with teaching (teacher) effectiveness and was defined by Afe (2003) as the type of teaching characterized by the exhibition of intellectual, social and emotional stability, love for children

and positive disposition towards the teaching profession and ability to inspire good qualities in students. It was also defined by Vogt (1984) as the ability of instruction to inspire students of different abilities while incorporating instructional objectives and assessing the effective learning mode of the students. According to Evans (2006), teaching effectiveness is a measure of the extent of realization of the instructional objectives. It is a net growth in intellectual aptitude and skills as measured by students' achievements.

Bill Gates (1990) view of teaching and learning is simple. According to him, measuring what students learned in a course was actually quite easy to decide using the stored record data in CCTV. According to him, video can be an effective tool for teachers only if they are in control of how, when, and why video technology is used in their classroom. Video can be used to gather digital images and movies on different pedagogical practices, of students at work, discussions and debates. Video, used in consultation with teacher-research collaborative, can inquire into classroom instruction and learning. Video of various teaching methods can be assembled and put up on the web for use in staff development and teacher education (Beger, 2003). It is on this ground that this study is conducted to assess the use of CCTV and economic teachers' effectiveness in secondary schools in Uyo Senatorial District of Akwa Ibom State.

### **Statement of the Problem**

Academic achievement of students in Nigeria particularly the students from the study area, on the average has witnessed a steady decline in recent times. Poor performance of students may partly be attributed to ineffectiveness of teachers among other factors (Akpan, 2012). Economics is one of the subjects offered at secondary school level whose main objective is to equip students with necessary knowledge, basic concepts and principles of practicing economics for becoming self employed. Unfortunately, there has been a persistent low performance in the WASSCE and NECO examinations by students that offered economics as a subject as compared with other subject in Akwa Ibom state (Akpan, 2012). Experts in economics have advanced reasons for this negative development in education in the state among which are the use of learning methods adopted by some teachers. It has been the habit of economics teachers to use the instructional methods that are mainly teacher-centered, that is those involving showing, telling and observing rather than the ideal practice, learning-by doing approach which involves both the teacher and the student participation. Therefore this research work seeks to explore the use of CCTV and economic teachers' effectiveness in secondary schools in Uyo Senatorial District of Akwa Ibom State

### **Objectives of the Study**

The main objective of this study is to examine the influence of use of CCTV on economic teachers' effectiveness in teaching the subject matter and room discipline of economic teachers. The specific objectives of the study are as follows:

1. To find out the influence of use of CCTV on economic teachers effectiveness in teaching the subject matter.
2. To examine the influence of use of CCTV on class room discipline of economic teachers.

### **Research Questions**

The following research questions will be answered:

1. What is the influence of use of CCTV on economic teachers' effectiveness in teaching the subject matter?

2. What is the influence of use of CCTV on economic teachers' effectiveness in class room discipline?

### **Hypotheses**

The following hypotheses will be tested:

1. There is no significant influence of use of CCTV on economic teachers' effectiveness in teaching the subject matter.
2. There is no significant influence of use of CCTV on economic teachers' effectiveness in class room discipline.

### **LITERATURE REVIEW**

#### **Use of CCTV and teachers effectiveness in teaching the subject matter**

According to Baldry and Painter (2000), there is no doubt that CCTV surveillance Cameras have become one of the electronically monitoring measures used by teachers to enhance their efficiency in controlling/monitoring their students' activities, especially when they are not physically present with them. With CCTV installation in schools, the public generally feel happier and safer that teachers who teach their children will do so with due diligence, having known that their conducts are also being watched by school higher authority via CCTV Cameras. Kaighin, (2000) asserts that CCTV cameras are increasingly being deployed by schools in a more proactive and intelligent way to provide a safe and secured environment for students and teachers. Choosing a reputable supplier is essential to achieving teachers' effective modern teaching techniques in monitoring their students' activities/valuables.

The introduction of CCTV to schools helps a great deal in enhancing teachers' effectiveness and confidence while on duty in the following areas (Ludlow, 2001):

1. CCTV surveillance systems help in the protection of teachers vehicles.
2. It helps in keeping track of teacher attendance and punctuality.
3. CCTV cameras can help keep track of teacher's attitude and methodology in teaching professions.
4. Installation of CCTV Cameras make teachers to organize and conduct themselves in an orderly manner within school compound. CCTV cameras aid monitoring and preventing bullying amongst students.
5. Keep parents mind at ease about school security and environment

Lawlink (2000) opine that teachers see CCTV surveillance cameras as stress-freed solutions that can help them to supervise or monitor their students from cheating during exams from the comfort of CCTV operator office. With this surveillance, it can also help to lessen cases of bullying among students simply because they know that somebody's watching them like a big brother. Making use of the Best CCTV Cameras, school teachers will have an easier time monitoring any untoward doing inside the school premises like vandalism, trespassing, and even drug use and other prohibited activities. These issues might not be common on most of the school but the fact is, these problems exists in some school campuses. Images are being recorded with the help of Spy CCTV Cameras also, which can give a hard evidence in case that a situation will arise. Teachers in schools where CCTV Cameras are installed bother no more to know what happens in places like; hallways, stairs, classrooms and cafeterias in their absence, because CCTV Cameras are well mounted capturing every activities going on there and as well as outdoor CCTV Cameras commonly placed on schools' entrances and parking areas. High Resolution CCTV Cameras are truly beneficial in monitoring who goes in and out of the school premises.

According to Dee (2000), CCTV is very convenient for teachers to monitor how their students interact with their parents when visited them. These surveillance systems are being also used to monitor whether teachers and students are obeying laws that were implemented in the school. A lot of teachers /students are just following school laws whenever there is a superior around them but still commits dishonest actions whenever no one's around. The real purpose of having CCTV cameras installed in schools, is to reduce the situations inside the campus and to offer the school teachers a better security.

### **CCTV and Teachers' Effectiveness in Class Room Discipline**

There is no clear evidence that the use of metal detectors, security cameras, or guards in schools is effective in preventing school violence, and little is known about the potential for unintended consequences that may accompany their adoption, (Nickerson and Martens, 2008). According to him, there has not been sufficient research to determine if the presence of metal detectors in schools reduces the risk of violent behavior among students. Some researchers have expressed concern about the widespread use of guards, cameras, and other security technologies, given that so little is known about their effectiveness. Research has found security strategies, such as the use of security guards and metal detectors, to be consistently ineffective in protecting students<sup>16</sup> and to be associated with more incidents of school crime and disruption<sup>17</sup> and higher levels of disorder in schools. Evidence from a school-police partnership implemented in New York City reveals that students in these schools continue to experience higher than average problems linked directly to future criminality, compared to students in other New York City schools not involved in the partnership. According to Schreck, Miller and Gibson (2003) surveillance cameras in schools may have the effect of simply moving misbehavior to places in schools or outside of schools that lack surveillance. Even more troubling, it's possible that cameras may function as enticement to large-scale violence, such as in the case of the Virginia Tech shooter who mailed video images of himself to news outlets. Research suggests that the presence of security guards and metal detectors in schools may actually increase levels of violence in schools by strengthening the influence of youth "street" culture with its emphasis on self-protection.

In his note Brady, Balmer and Phenix (2007) stated that the widespread public impression that schools are unsafe fueled by rare, but highly visible school shootings is contradicted by empirical evidence. In fact, schools are not only safe, but are arguably safer today than they were a decade ago. Research comparing the levels of fear among 12- to 18-year-old students before and after the Columbine tragedy found that, contrary to expectations, students were only slightly more fearful after Columbine.<sup>25</sup> In fact, evidence suggests that students believe their schools to be safe places and that their schools' security strategies are unnecessary. Analysis of media reports of the Columbine shooting suggests that perceptions of that tragedy were merged with terrorism as part of a broad framework of fear and national security,<sup>27</sup> stimulating increased use of stringent security measures in U.S. schools.

Studies have shown that the presence of security guards and metal detectors in schools negatively impacts students' perceptions of safety and even increases fear among some students. Many types of school security correspond with a significantly greater likelihood that students will be worried about crime while none reduce feelings of worry (Warnick, 2007). The use of metal detectors is negatively correlated with students' sense of safety at school, even when taking into account the level of violence at the schools. Studies suggest that restrictive school security measures have the potential to harm school learning environments. The adoption of rigid and intrusive security measures in schools diminishes the rights of students and increases the likelihood that trivial forms of student misconduct that

used to be handled informally by schools will result in arrest and referral to the courts, (Borum, Cornell, Modzeleski and Jimerson, 2010). Along with the increasing use of security measures, schools are employing strict discipline policies to keep students in line and maintain safety, which undoubtedly negatively influences the social climate of schools. According to the courts, surveillance cameras provide students with a reasonable expectation of safety and if they are attacked in full view of a camera and no one comes to their aid, schools could be successfully sued.

Research suggests that the presence of school resource officers does not change students' views of the police or of offending, and their presence has engendered concern that schools are criminalizing student behaviour by moving problematic students into the juvenile justice system rather than disciplining them at school. Analysis of the use of surveillance cameras in schools suggests that they may work to corrode the educational environment by, among other things, implicitly labeling students as untrustworthy (cameras magnify this impact since their sole purpose is to record misbehaviors and deter through intimidation) (Altheide, 2009).

## **RESEARCH METHOD**

### **Design of the study**

Expost Facto design will be used for the study because the phenomena for the study have already occurred. Accordingly, the researcher does not have direct control of independent variables (use of CCTV) because of their earlier manifestations on the dependent variables (economic teachers' effectiveness). The researcher cannot manipulate the effects but just obtain the effect on already existing natural course of events. It involves the investigation of relationship among variables. Hence this design is relevant to the study.

### **Study Area**

The study area is Uyo Senatorial district in Akwa Ibom State.

### **Population of the study**

The population of the study will consist of all the 772 economic teachers in Uyo Senatorial district of Akwa Ibom.

### **Sample and Sampling Technique**

The sample of this study which will comprise 77 respondents made up of male and female economics teachers in Uyo Senatorial district of Akwa Ibom State and will be stratified according to the three senatorial districts.

### **Research Instrument**

The researcher developed a 30 item research instrument tagged: "Use of CCTV and Economic Teachers' Effectiveness Questionnaire (UCCTVETE) for data collection. The questionnaire is made up of two sections, sections A and B.

### **Validation of Instruments**

The instrument was designed by the researcher, vetted by the supervisors and a lecturer in test and measurement in the Faculty of education, University of Uyo, Uyo. They were expected to assess the instrument in order to be sure that it measures all the variables of the research objectives.

### **Reliability of the Instrument**

A test-retest reliability test was conducted on 30 respondents who did not form part of the main study but only used for the reliability test. The instrument was subjected to Cronbach

Alpha reliability test and it produced a reliability coefficient of 0.80 which was considered high enough to be used in collecting data for the study.

**Method of Data Collection**

A letter of introduction was written by the researcher. This letter was to introduce the researcher to the economics teachers for understanding and compliance. The questionnaire were issued and retrieved one week latter from each respondent. The exercise took about two weeks.

**Method of data analysis**

The researcher will subject the data generated for this study to appropriate statistical techniques such that means score rating will be used in answering the research questions, while t-test will be used to test the hypotheses. The test for significance will be done at 0.05 alpha levels.

**DATA ANALYSIS AND RESULTS**

**Hypotheses testing**

**Hypothesis One**

There is no significant influence of use of CCTV on economic teachers’ effectiveness in teaching the subject matter. In order to test the hypothesis, two variables were identified as follows:

1. CCTV as independent variable
2. Economic teachers’ effectiveness in teaching the subject matter as dependent variable

The independent t-test analysis was used in comparing the mean score of the two independent groups (see Table 1).

Table 1:

Independent t-test analysis of the influence of use of CCTV on economic teachers’ effectiveness in teaching the subject matter

Variable	N	X	SD	t
Availability	23	18.70	1.22	10.12*
Unavailable	54	14.33	1.90	

*\*Significant at 0.05 level; df = 75; critical t-value =2.000*

As shown in table 1 the calculated t-value is 10.12. This value was tested at 0.05 level with 75 degree of freedom. The obtained t-value (10.12) is greater than the critical t-value (2.000). Hence, the result was significant. The result therefore means that there is significant influence of use of CCTV on economic teachers’ effectiveness in teaching the subject matter.

**Hypothesis Two**

There is no significant influence of use of CCTV on economic teachers’ effectiveness in class room discipline. In order to test the hypothesis, two variables were identified as follows:

1. CCTV as independent variable
2. economic teachers’ effectiveness in class room discipline as dependent variable

The independent t-test analysis was used in comparing the mean score of the two independent groups (see Table 2).

Table 2:

Independent t-test analysis of the influence of use of CCTV on economic teachers’ effectiveness in class room discipline

Variable	N	X	SD	t
----------	---	---	----	---

Available	23	15.39	1.50	7.88*
Unavailable	54	12.30	1.61	

**\*Significant at 0.05 level;  $df = 75$ ; critical  $t$ -value = 2.000**

As shown in table 2 the calculated  $t$ -value is 7.88. This value was tested at 0.05 level with 75 degree of freedom. The obtained  $t$ -value (7.88) is greater than the critical  $t$ -value (2.000). Hence, the result was significant. The result therefore means that there is significant influence of use of CCTV on economic teachers' effectiveness in class room discipline.

### Discussion of Findings

The result of the data analysis in table 1 was significant due to the fact that the obtained  $t$ -value (10.12) was greater than the critical  $t$ -value (2.000) at 0.05 level with 75 degree of freedom. The result implies that there is significant influence of use of CCTV on economic teachers' effectiveness in teaching the subject matter. The result therefore was in agreement with the research findings of Kaighin, (2000) who asserts that CCTV cameras is increasingly being deployed by schools in a more proactive and intelligent way to provide a safe and secured environment for students and teachers. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The result of the data analysis in table 2 was significant due to the fact that the obtained  $t$ -value (7.88) was greater than the critical  $t$ -value (2.000) at 0.05 level with 75 degree of freedom. The result implies that there is significant influence of use of CCTV on economic teachers' effectiveness in class room discipline. The result therefore was in agreement with the research findings of Schreck, Miller and Gibson (2003) who highlighted that surveillance cameras in schools may have the effect of simply moving misbehavior to places in schools or outside of schools that lack surveillance. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

### Conclusions

Based on the findings of the research work, it was concluded that there is significant influence of use of CCTV on economic teachers' effectiveness in teaching the subject matter and there is significant influence of use of CCTV on economic teachers' effectiveness in class room discipline.

### Recommendation

The following recommendations are deemed necessary:

1. CCTVs should be installed in most of the schools, this will increase teachers commitment and preparedness in teaching their subject.
2. The government should encourage schools by donating and installing CCTV in schools, this will help checkmate different vices and nefarious activities around the school surrounding.

## REFERENCES

- Afe, L. A. (2003). Cops and cameras: Public school security as a policy response to Columbine. *American Behavioral Scientist*, 52, 1424-1446.
- Akpan, M. (2012). Statistics of Examination Pass Rate in Akwa Ibom State. *Concord Newspaper*, p5.
- Altheide, D. L. (2009). The Columbine shootings and the discourse of fear. *American Behavioral Scientist*, 52, 1354-1370.
- Baldry, P. & Painter, K. (2000) Watching Them Watching Us. *The Surveyor* 30/04/98
- Beger, R. R. (2003). The “worst of both worlds”: School security and the disappearing Fourth Amendment rights of students. *Criminal Justice Review*, 28, 336-354.
- Bill, G. (1990) CCTV in town Centres: three case studies. Police Research Group Crime Detection and Prevention Series [Online], No. 68, London: Home Office Police Department. Available from: <http://www.homeoffice.gov.uk/rds/prgpdfs/fcdps68.pdf>
- Borum, R., Cornell, D. G., Modzeleski, W. & Jimerson, S. R. (2010). What can be done about school shootings? *A review of the evidence*. *Educational Researcher*, 39, 27-37.
- Brady, K. P., Balmer, S. & Phenix, D. (2007). School-police partnership effectiveness in urban schools: An analysis of New York City’s Impact Schools Initiative. *Education and Urban Society*, 39, 455-478.
- Dee, M. (2000) *The Use Of CCTV To Police Young People In Public Spaces - A Case Of Big Brother Or Big Friend?* Paper presented at the 27th International Conference on Making Cities Livable, Vienna, Austria. De Montfort University, Youth and Community Division, Scraptoft Campus, Leicester, LE7 9SU, U.K. (Available on the Internet from Yspace :<http://www.yspace.net/>)
- Evans, A. (2006) CCTV is no silver bullet: it risks making life less safe [Online]. 1 November. Available from: <http://www.guardian.co.uk/comment/story/0,,2202697,00.html>
- Kaighin, D. (2000) The effectiveness of computer applications: A meta-analysis. *Journal of Research on Computing in Education*, 27 , 48-61.
- Lawlink, N. S. (2000) *CCTV Guidelines*. [http://www.lawlink.nsw.gov.au/cpd.nsf/pages/cctv\\_intro](http://www.lawlink.nsw.gov.au/cpd.nsf/pages/cctv_intro)
- Ludlow, M. (2001) *Freedom Curtailed In Fight Against Crime*. Report in *Courier Mail*, 7.05.01
- Nwosu, P. (2008) *Building Code To Aid Fight On Crime*. *Courier Mail* 21 Feb, 2001 (Australia)
- Postlethwaite, S. W. (2007). Security in schools: Its effect on students. El Paso, TX: *LFB Scholarly Publishing LC*.



- Schreck, Z., Miller, D. & Gibson, P. (2003) *Second Attempt Fails To Install Spy Cams On Oakland Streets*. ALCU-NC News. Full article available from the internet at: <http://www.privacy.org/pi/issues/cctv/> or contact American Civil Liberties Union of Northern California, 1663 Mission Street, Suite460, San Francisco, CA 94103
- Vogt, A. (1984) *Surveillance Cameras To Boost Australia's Fight Against illicit Drugs*. Media Release, Minister for Justice & Customs, Australian Federal Government. July 2000 (Available on the Internet: [http://www.ag.gov.au/aghome/agnews/2000newsjus/105\\_00htm](http://www.ag.gov.au/aghome/agnews/2000newsjus/105_00htm)).
- Warnick, B. R. (2007). Surveillance cameras in schools: An ethical analysis. *Harvard Educational Review*, 77, 317-343.