

Research Article

English Language Teachers Perception and Self-Efficacy on the Use of Projectors in Learning English Language in Secondary Schools in Enugu East Local Government Area of Enugu State

BY

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ABSTRACT

Teachers' decision to reject or adopt instructional materials and technology for instructional related activities is a complex issue that has puzzled scholars and challenged many institutions of learning. As a result of superficial use of instructional materials and technologies, the researcher sought to understand the reason behind their slow uptake in the teaching and learning process. The study therefore investigated English Language Teachers Perception and self-efficacy on the use of projectors in learning English Language in Secondary Schools in Enugu East LGA of Enugu State. The study employed survey research design with one hundred and two (102) respondents purposively used as the sample for the study. Three research questions guided the study and a questionnaire was used to gather the data for the study. The validity and reliability of the instrument was ascertained. The Instrument was pilot tested and reliability was computed which yielded 0.79 coefficient using Cronbach alpha computation. The data for the study was subjected to descriptive analysis. The data was analyzed using frequency and percentage, mean and standard deviation. From the stud it was evident that English language teachers found projectors useful and also easy to use. Unfortunately, a good number of them have poor mastery of some basic skills in using projectors. This implies that English language teachers in secondary schools are yet to fully adopt the use of projectors in learning English language due to other factors not considered in this study. It is therefore recommended amongst others that training and periodic re-training of teachers via workshops and seminars should be organized to equip teachers with skills for operating projectors. Furthermore, government through proper funding and donations should make projectors and other accessories necessary for its use available and accessible to secondary school teachers.

Keyword: English Language, Teachers Perception, use of projector, learning English Language, Secondary Schools, Enugu East LGA of Enugu State.

1.0 INTRODUCTION

The objectives of teaching English Language and higher academic achievement may be realized through the use of appropriate instructional materials such as projectors, models etc in Secondary Schools. One of the aim of classroom instruction is to expand the knowledge of the learners. It is the belief of educators and educationists that if properly utilized, instructional materials and technologies have the potentials for facilitating the instructional process, the learning process,



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enhance retention and a host of other educational practices. The teachers' responsibility is to encourage the learner to acquire and to retain the knowledge imparted to them in school for future use in meeting life problems. Teachers' decision to reject or adopt technology for instructional related activities is a complex issue that remains a challenge for many institutions of learning the world over [1] Shittu et al, 2019). Several observations had been made by Linguists and language teachers on the inadequate use of vital instructional materials in our primary and secondary schools in Nigeria. This ugly trend has led to the students' poor achievement in English language in senior secondary school certificate examinations in Nigeria [2]Obah (2007). Studies revealed the penetration of various technologies in educational settings, however, effective utilization of these resources in learning is still an uphill battle for many schools of learning around the world (Ertmer,P.A.,&Ottenbreit-Leftwich. 2010; [4] Kotrlik&Redmann,2009; [5], Oye,Salleh,and Iahad, 2011). As a result of superficial use of technology, researchers seek to understand the reason behind slow uptake of technology for teaching.

A projector or image projector is an optical device that projects an image (or moving images) onto a surface, commonly known as a projection screen. Most projectors create an image by shining a light through a small transparent lens, but some newer types of projectors can project the image directly, by using lasers. A virtual retinal display, or retinal projector, is a projector that projects an image directly on the retina instead of using an external projection screen. The most common type of projector used today is called a video projector. Video projectors are digital replacements for earlier types of projectors such as slide projectors and overhead projectors. These earlier types of projectors were mostly replaced with digital video projectors throughout the 1990s and early 2000s (Projector Screen, 2022) but old analog projectors are still used at some places. The newest types of projectors are handheld projectors that use lasers or LEDs to project images. Movie theaters used a type of projector called a movie projector, nowadays mostly replaced with digital cinema video projectors. Projectors can be roughly divided into three categories, based on the type of input. Some of the listed projectors were capable of projecting several types of input. For instance: video projectors were basically developed for the projection of prerecorded moving images, but are regularly used for still images in PowerPoint presentations and can easily be connected to a video camera for real-time input. The magic lantern is best known for the projection of still images, but was capable of projecting moving images from mechanical slides since its invention and was probably at its peak of popularity when used in phantasmagoria shows to project moving images of ghosts.

[6] Burke, (2002) mentioned five advantages of projectors as follows:

- i. They can be used as chalkboard substitute or written on direct
- ii. The intensity of light from the overhead projector on the screen makes it more visible and legible than chalkboard and can be used in normal room lighting. Interaction is maintained and notes can be taken.
- iii. Transparencies can be prepared in advance and re-used.
- iv. Commercially produced transparencies are also available.
- v. The presenter can manipulate the projected materials the way he wants while the lesson is going on; point to important items, add details like notes and diagrams, cover part of the message and progressively reveal information in a step by step procedure.
- vi. Most overhead projectors are light in weight and portable and simple to operate.

1.1 Limitations of Projectors

Furthermore, [6] Burke (2002) also name the limitation of overhead projector as;

- i. Overhead projection cannot be programmed to operate on its own. A presenter must be there to operate it and so the effectiveness of presentation depends heavily on him.
- ii. It cannot be self- instructional as the projection system is designed for large group presentation.
- iii. Unlike the opaque projector, non- transparent materials cannot be projected immediately unless made into transparencies.
- iv. Electricity supply is a requirement. It cannot be used where electricity is not available.



The overhead projector system is particularly suitable for large – group presentation. It enables the lesson to be developed progressively step – by –step. It is possible to lay one transparency over another making it possible to build up diagrams gradually. Transparencies on various subject areas are available. It is necessary to avoid the temptation of proceeding too quickly when using transparencies prepared in advance.

The *Technology Acceptance Model* TAM[7] (Davis et al., 1989) is one of the most profound frameworks frequently used in studies to predict and explain the use of projectors and other related technologies. The model affirms that the adoption of a technology is determined by the user's intention to use technologies, which in turn is influenced by his or her attitudes towards the technology. It is very likely that the variableness in these attitudinal and behavioral constructs depends on the user's perceptions — *perceived usefulness* (PU) and *perceived ease of use* (PEU). While PU indicates the extent to which the use of the technology is promising to promote one's work, PEU represents the degree to which the technology seems to be free of effort[7](Davis *etal.*,1989). This model assumes that attitudes and behavioral intention mediate the effects of PU and PEU, the two constructs of extrinsic motivation.

Teachers, especially English language teachers and schools do not always use the technologies as expected and more often projected visual technologies continue to be underutilized. However, the utilization of these technologies is sometimes prevented by some factors which according to Darell and Sellbomas cited in [1]Shittu, etal (2019) include economical, sociological and psychological factors. Other barriers to the utilization of technologies in teaching and learning in secondary schools are financial barriers, unavailability of computer hardware and software, lack of theoretical and technical knowledge, and lack of the acceptance of technologies and innovations. As a result of the rapid technological change, a growing number of schools have adopted internet-based course delivery [8](Liaw &Chen,2007)and have invested heavily in technology[9] (Trentin, 2006; [10]Yohon & Zimmerman, 2006). Research has shown that secondary school education cannot become more productive unless schools embrace technological tools for teaching and learning. Yet, some teachers embrace technology while others resist it. In the21st century, it is imperative for schools and institutions to adopt technology for instructional purposes. Therefore, this study decided to look at the affective ramifications of projector adoption, specifically perceived usefulness, perceived ease of use and self-efficacy by English language teachers in learning English Language.

1.1 Purpose of the Study

The aim of this study is to determine English language teachers perceived usefulness, perceived ease of use, self-efficacy and use of projector in learning English Language in Secondary Schools in Enugu East LGA of Enugu State. Specifically, the objectives of the study are to:

- 1. Determine whether English language teachers perceive projectors to be useful for teaching and learning.
- 2. Determine whether English language teachers perceive projectors are easy to use.
- 3. Find out the state of self-efficacy of 1 English language teachers towards projectors

HIMETHODOLOGY

2.1Research Questions

1. What is the perceived usefulness of projectors by English language teachers in Enugu East LGA?



- 2. To what extent do English language teachers in Enugu East LGA perceive projectors to be easy to use?
- 3. To what extent do English language teachers possess basic skill for operating projectors(self-efficacy)?

2.2Method

The study employed survey research design to investigate English language teachers perception regarding their perceived usefulness, self-efficacy and ease of use of projectors. The population of the study comprised of all the English Language teachers in Secondary Schools in Enugu East LGA. Purposive sampling method was used to select the sample of the study. One hundred and two (102) English Language teachers were sampled with 59 female respondents and 43 male respondents. The sample was drawn from English language teachers belonging to various secondary schools in Enugu East LGA having a total of two hundred and thirteen teachers (213) English language teachers. Each member of the population had an equal chance of been selected, the participants were drawn at random from basically ten (10) state government secondary schools in Enugu East LGA of Enugu State. However, the number of teachers from each school varied depending on the willingness of participants to take part in the study.

The instrument used for data collection for the purpose of this study was a questionnaire which was designed to investigate the English language teachers perceptions, self-efficacy and use of projectors in learning of English language. The questionnaire consisted two sections. The first section which was section A asked questions relating to demographic details such as gender, teaching experience, and highest academic qualifications. The type of data collected was ordinal data. Section B included eighteen (18) items was further divided into three sub-sections according to the research questions which are questions 1, 2, and 3 using a five-point likert scale of SD=Strongly disagree, D=disagree, N=Neither, A=Agree, SA=Strongly agree for the first two research questions, and the third sub-section was the self-rating of their technology skills which is also a measure of self-efficacy using also a five-point likert scale; 1=Not confident at all, 2= Not confident, 3=Neutral, 4=Confident, 5=Very Confident. The instrument was validated by two experts in English language and one expert in Educational technology. The instrument and experimental packages were validated in terms of clarity, appropriateness of the language used. Their comments were useful in modifying the items of the tests, and experimental packages. The surviving items were regarded to be adequate for data collection.

The reliability of the instrument was established using 30English language teachers from 4 public senior secondary schools in Enugu North LGA. in order to detect weaknesses and assess the respondents' general understanding and ability to respond to the questions A review was done to incorporate changes to the weaknesses identified and a final draft was produced. Cronbach Alpha method was used and a reliability coefficient of 0.79 was obtained and thus the instrument was found to be reliable.

The research instrument was administered by the researcher personally to English language teachers in the ten (10) government secondary schools in Enugu East LGA of Enugu. The respondents were given 3 days in which to complete the questionnaires and return it. Out of the one hundred and eighty nine English language teachers that constituted the sample of the study, one hundred and two respondents (102) representing 54% completed the questionnaire.

The data collected for the purpose of the study was analyzed using the Statistical Package for Social Science (SPSS) which measured the frequency and percentage, mean and standard deviation of the data.

III RESULTS

3.1 Research questions



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Research question 1
What is the perceived usefulness of projectors by English language teachers in Enugu East LGA?

Table 1: Mean Response of English Language Teachers Perceived Usefulness of Projectors

S/ N	Items English Language teacher (N=102)									
	English language teachers perceived usefulness of Projectors.	SD F(%)	D F(%)	N F(%)	A F(%)	SA F(%)	Mean	SD	Remark	
	Projectors									
1.	Can be used as substitute	5	3	8	51	35	4.06	0.99	Agree	
	for chalkboards	(4.9%)	(2.9%)	(7.8%)	(50.0%)	(19.6%)				
2.	can make text visible and	3	5	11	39	44	4.14	0.99	Agree	
	more clearer than chalkboards	(2.9%)	(4.9%)	(10.8%)	(38.2%)	(43.1%)				
3.	can improve the quality of	1	1	6	33	61	4.49	0.74	Agree	
	my teaching	(1.0%)	(1.0%)	(5.9%)	(32.4%)	(59.8%)			C	
4.	Can allow me to do more		1	7	35	59	4.49	0.67	Agree	
	interesting and		(1.0%)	(6.9%)	(34.3%)	(57.8%)			υ	
	imaginative English		, ,	, ,	,	,				
	language lesson									
5.	Enhance the presentation		3	5	45	49	4.37	0.72	Agree	
	of my work to a degree		(2.9%)	(4.9%)	(44.1%)	(48.0%)	,		8	
	which justifies the extra		, ,	, ,	,	,				
	work.									
6.	Use in teaching English	1	2	3	43	52	4.42	0.74	Agree	
	can enhance	(1.0%)	(2.0%)	(2.9%)	(42.2%)	(52.0%)			υ	
	understanding of the	(-)	(-)	(-)	,	()				
	subject.									
7.	Can enhance retention of			2	62	38	4.35	0.52	Agree	
	the subject.			(2.0%)	(60.8%)	(37.3%)		'	8	
8.	Make it possible to teach	2	3	6	40	51	4.32	0.87	Agree	
	English more	(2.0%)	(2.9%)	(5.9%)	(39.2%)	(50.0%)			3	
	productively	(=)	(=)	(= /	(= 2 := : 3)	(= = : = :)				
	Grand Mean/SD						4.33	0.78	Agree	

Decision mean=3.00

Keys F = frequency, SD = Strongly Disagree, D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree.

The results on table 1 above shows that English language teachers perceived that projectors are useful for teaching English language. Majority of the teachers (69.6%) agreed that projectors can serve as a substitute for chalkboards, approximately 92% agreed that they can improve the quality of teaching and enhance understanding of the subject, 94% that the projectors can make English language lessons more interesting, imaginative and enhance presentation of their work, 97% agreed that projectors can enhance retention of the subject while 89.2% of the respondent that projectors makes English language lessons more productive. The grand mean and standard deviation of 4.33 and 0.78 respectively shows clearly



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that the respondents agreed with all the items and perceive projectors to be easy to use in teaching English language in senior secondary schools.

Researchquestions2

What is the mean response of English language teachers on the perceived ease of use of Projectors?

Table 2:Mean Response of English Language Teachers on The Perceived Ease of Use of Projectors.

S/ N	Items	E	inglish Lan	guage teac	her (N=102)				
	English language teachers' perceived ease of use of Projectors?	SD F(%)	D F(%)	N F(%)	A F(%)	SA F(%)	Mean	SD	Remark
9.	It is easy to acquire projectors for teaching English in secondary schools in my school.	21 (20.6%)	26 (25.5%)	8 (7.9%)	28 (24.5%)	19 (18.6%)	2.98	1.22	Disagree
10.	Projectors are easy to set up for teaching	8 (7.8%)	15 (14.7%)	9 (8.8%)	36 (35.3%)	34 (33.3%)	3.71	1.13	Agree
11.	Projectors allow for easy flow of English language lesson while operating it	(2.9%)	7 (6.9%)	8 (7.8%)	25 (24.5%)	59 (57.8%)	4.27	0.85	Agree
12.	Projectors are easy to operate while teaching	2 (2.0%)	7 (6.9%)	5 (4.9%)	34 (33.3%)	54 (52.9%)	4.28	0.83	Agree
13.	Projectors are easy to dismantle after teaching	(2.0%)	(2.9)	6 (5.9)	40 (39.2)	51 (50.0)	4.32	0.79	Agree
	Grand Mean/SD						3.91	0.94	Agree

Keys F = frequency, SD = Strongly Disagree, **D** = Disagree; **N** = Neither; **A** = Agree; **SA** = Strongly Agree Decision mean=3.00

Table2 above shows that English language teachers perceived projectors to be easy to use in teaching English Language. Though majority of the respondents disagree that Projectors are easy to acquire for teaching English language in secondary schools in Enugu East Local Government Area, they agree that projectors are easy to set up, allow for easy flow of the lesson, easy to operate while teaching and are easy to dismantle after teaching the subject. The grand mean and standard eaviation of 3.91 and 0.94 respectively shows clearly that the respondents perceive projectors to be easy to use in teaching English language in secondary schools.

Research question 3:

What extent does English Language teachers possess projector operating skills?

Table 3: Extent to Which English Language Teachers Possess Projector Operating Skills (Self-Efficacy).

S/ N	Items English Language teacher (N=102)								
	Extent of English Language teachers' projector operating skills?	NCA F(%)	NC F(%)	N F(%)	C F(%)	VC F(%)	Mean	SD	Remark
14.	I can prepare my lesson	14	22	16	18	29	3.16	0.91	Confident



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	using presentation software eg MS PowerPoint for onward projection	(10.8%)	(23.5%)	(15.7%)	(19.6%)	(28.4%)			
15.	I can assemble, connect and set up the projector	28 (27.5%)	16 (15.7%)	18 (17.6%)	19 (18.6%)	21 (20.6%)	2.89	1.04	Not Confident
16.	Can properly connect the projector to computers or other gadgets for projection	27 (26.5%)	16 (15.7%)	18 (17.6%)	19 (18.6%)	22 (21.6%)	2.37	1.04	Not Confident
17.	I can deliver English lectures by properly projecting the lecture and switching slides using slide remotes	9 (8.8%)	17 (16.7%)	12 (11.8%)	35 (34.3%)	29 (28.4%)	3.56	0.82	Confident
18.	Can disconnect and properly package the projector after use	28 (27.5%)	14 (13.7%)	17 (16.7%)	20 (19.6%)	23 (22.5%)	2.96	1.03	Not Confident
	Grand Mean/SD						2.98	0.97	Not Confident

Keys F = frequency, NCA = Not Confident At all, NC = Not confident; N = Neutral; C = Confident; VC = Very Confident

Decision mean=3.00

Table3 above shows that English language teachers skills in operating projectors for teaching English Language. About 57.8% of the respondents were confident that they could prepare lesson notes using computer presentation packages for projection and if the projector has been set up, 62.7% were confident they could operate the projector by switching from one slide, page or sheet to another. In contrast, majority of the respondent were not confident/neutral on their ability to set up the projector, connect the projector to appropriate computer or devices for projection, disconnect and package the projectors after use. The grand mean and standard deviation of 2.98 and 0.97 respectively shows that the respondents possess poor mastery of the basic skills for operating projectors.

3.2 Discussion

This study investigated English language teachers perceptions and self-efficacy on the use of projectors in learning English language as an effort to assist in cultivating positive use of projectors among English language teachers in teaching and learning. This study sought to probe the English language teachers perceptions, self-efficacy and use of projector through the guidance of Technology Acceptance Model (TAM).

Tables land 2 respectively showed that English language teachers perceived projectors as useful and easy to use for teaching English language as they agreed with the items that showed that teaching with projectors will enhance performance in the subject. The results of this study confirmed this proposition as it showed that English language teachers perceive projectors to be useful and easy to use. Because these two variables (ie usefulness and ease of use) have had such a significant impact on attitudes, it was therefore very important to investigate the factors themselves to determine how they could be positively influenced with the ultimate goal of promoting the use of projectors in secondary schools. In this study, self-efficacy (projector operative skills) was brought in as an external variable that hypothesized to have had a significant influence on people's perception on the usefulness of projectors and on its ease of use. However, the results of this study indicated that most English language teachers have poor self-efficacy (projector operative skills) even though they agree on its ease of use.



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The level of self-efficacy on the use of projectors as shown in this study is fascinating because logically one can assume that if a person believes in his/her capability to perform an activity, then that should improve the person's perception toward its ease of use as shown by similar empirical studies[13] (Uwaifo,2010). Though participants in this study reported low self- efficacy levels (projector operative skills) and were not confident in operating projectors) as shown in table 3, surprisingly this did not influence their perception on the usefulness and ease of use of projectors. This could be that they have previously been taught, or have taught with projectors and this influenced their perception on its use. A possible explanation to this lack of relationship between self-efficacy and perceive usefulness may be through Bandura's social modeling concept that posits people's ideas of usefulness can be influenced by observing how useful something is to other people, which eventually make them believe it is useful to them too. However, whether they actually find projectors useful to their practices is what is paramount because that translates into positive attitudes [1](Shittu, Kareem, and Tukura, 2019)

IV CONCLUSION

English language teachers perceived projectors as useful and easy to use for teaching English language. However, respondents in this study reported low self- efficacy levels (projector operative skills) and were not confident in operating projectors) which tends to suggest very poor use of projectors in teaching English language in secondary schools in Enugu East LGA of Enugu State.

V RECOMMENDATIONS

Based on the findings of this study the following recommendations were made:

- 1. Government through proper funding and donations should make projectors and other accessories necessary for its use e.g. electricity, and UPS available and accessible to secondary school teachers.
- 2. Use of projectors should be made mandatory for teaching English language in secondary schools to facilitate assimilation of the subject.
- 3. Training and periodic re-training of teachers via workshops should be organized to equip teachers with skills for operating projectors.

REFERENCES

- [1] Shittu, A. T., Kareem W. B. and Tukura, C. S. (2019). Science Lecturers' Perceptions and Self-Efficacy Towards Use of Computer Mediated Technologies in College Of Education Minna, Niger State. *Journal of Science and Vocational Education*. 1 (12) 254-260. https://jrsve.gouni.edu.ng
- [2]Obah T. Y. (2007) Teaching English language skills. Ahyi-p & sons or printing press.
- [3] Ertmer, P.A., & Ottenbreit-Leftwich .A. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 42(3), 255–284.
- [4] Kortrlik, J.W., &Redmann, D.H. (2009). Technology adoption for use in instruction by secondary Technology education 11 teachers. *Journal of Technology Education*, 21(1),44-59.
- [5]Oye, N. D., Salleh, M., and Iahad, A. N. (2011). Challenges of E-learning in Nigerian University based on the experience of developed countries. *International Journal of Managing Information Technology*, 3(2), 39-48



- [6]Burke R. (2002). Teaching and Learning through broadcast and recorded media. London: University Press
- [7]Davis, F. .D., Bagozzi, R. P., &Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, volume 35, 982-1003.
- [8]Liaw .S.S., Huang H.M, & Chen G.D(2007). Surveying instructor and learner attitudes toward e-Learning. Computers & education 49(4), 1066-1080.
- [9]Trentin, G. (2006). The Xanadu Project: training faculty in the use of Information, Communication technology for university teaching. *Journal of computer assisted learning* 22(3), 182-196
- [10]Yohon, T. and Zimmerman, D. (2006). An exploratory study of adoption of software and hardware by faculty in the liberal arts and sciences. *Journal of technical writing and Communication 36 (1), 9-27.*
- [11]Uwaifo, V. O. (2010). Technical education and its challenges in Nigeria in 21st Century. *International NGO journal 5(2)*, 040-044.