TEACHERS' PERCEPTION OF THE ROLE OF MEDIA IN CLASSROOM TEACHING IN SECONDARY SCHOOLS

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ABSTRACT

This study is an evaluation of teachers' perception of the role of media in Oyo State of Nigeria. A total of 150 secondary school teachers of Oyo State participated in the study: 110 trained and 40 untrained teachers randomly selected from ten secondary schools at two gender level (70 females and 80 males). Two media roles were selected for the study: media used to supplement the teacher by enhancing his effectiveness in the classroom and media used to substitute the teacher through instructional media system. The research tested three hypotheses. The findings revealed that there were significant differences in the perceptions of teachers about each of the two roles of media identified for the study. In addition there was significant difference found between the perceptions of trained and untrained teachers. However, the teachers' gender was not significant. The article discusses the findings and makes some recommendations.

Keywords: Teacher's Perception, Media, Media Roles, and Technology

INTRODUCTION

The way teacher view the role of media in classroom teaching will to a large extent determine the level and degree of its usage. Teacher forms an impression which is favourable or otherwise, depending on specific traits teacher attribute to media. Teacher perception of media is predicted upon what they feel media can do in teaching-learning process. However, evidence abounds that what teachers said were their reasons for not using media were not true (Zepp, 2005: Scrimshaw, 2004; Sugar, Crawley & Fine, 2004; Cohen, 1996; Hubbord, 1999).

Over the years, many research studies have pointed out various external deterrents for the utilization of audiovisual media. The major deterrents reported were budget difficulty in obtaining materials, lack of audiovisual classroom facilities and lack of trained audiovisual personnel (Higgins & Moseley, 2001; Richardson, 1996; Windschitl & Sahl, 2002).

It must be noted that perception can be influenced by the personality characteristics of the perceiver. It can also be influenced by the features of the thing/object perceived. Unfortunately, in any perception study, one is not sure which has more control over the other (Simonsen & Dick, 1997).

Fabos and Young (1999) reported that a 30 minutes sound film entitled "Wisconsin makes its law" was made available for a minimal rental fee and in sufficient qualities. They later found that it was used by more teachers in Winsconsin elementary schools than any other film. Yet it was not used by the majority of teachers teaching that topic in Winsconsin. Apparently, they concluded that the reasons of cost, unavailability or inappropriateness did not apply.

If constraints have lessened, why are media not used more fully? An answer may well lay within the broad topic of how media are "perceived" by the teacher, and how they feature in his thinking and organizational planning (Ross, Hogaboam-Gray & Hanney, 1999).

Eichoiz and Rogers (1994) have suggested that here are psychological components in teachers' perception of media. Aquino (1994) has found significant personality differences between acceptors and rejectors of new media. Other researchers have noted that some teachers appeared to perceive media as threatening and perhaps in human.

Lewis (1990) tested fifteen questions in an efforts to determine teacher perceptions relative to education media. Among his findings were that teachers perceive educational media as being readily available and that they perceive formal training in the area of audiovisual instruction as being unnecessary.

Romiszowski (1998) has grouped the roles of media into two. In the first instance media are used as instructional aids, here media are used exclusively to enhance or enrich the teacher's presentation. Media used in this way are basically one-way transmitters quite incapable of interpreting any messages that the learner may

transmit. Secondly, media are used as instructional systems. They are used to promote individualization of instruction in both conventional and non-conventional setting.

According to Morris (1962) the function of technological media is to supplement the teacher through enhancing his effectiveness in the classroom. Educational media are both tools for teaching and avenues for learning, and their function is to serve these two processes by enhancing clarity in communication, diversity in method, and forcefulness in appeal. Except for the teacher, these media will determine more than anything else the quality of our educational effort.

Studies have shown, however, that teachers generally have favourable disposition toward the role of media, in which media are used as instructional aids than media as instructional systems.

LITERATURE REVIEW

Though funding, equipment, lack of time, and knowledge are known obstacles to successful technology integration (Hardy, 1998; Lam, 2000, Simonsen & Dick, 1997), a critical component in meeting teachers, technology needs is responding to teacher's beliefs toward technologies. Hope (1997) wrote, "Teachers basically had to contend with two factors (with technology adoption); (a) the psychological effect of change and (b) learning to use microcomputer technology." (p. 158). Understanding teachers' beliefs towards technology play an essentials role in successful technology adoption.

Previous studies employed a variety of methods and perspective to assess in-service teachers' technology beliefs. These methods included: Likert-scale questionnaires (e.g., Ross, Hogaboam-Gray & Hannay, 1999) case study methodology (e.g. Ertmer, Gopalakrishnan, & Ross, 2001). German and Sasse (1997) found that teachers who participated in a two-year technology integration program improved their technology self-efficacy and their interest in learning more about how technology could impact the curriculum. Ross, Hogaboam-Gray, and Hannay (1999) reported that access to technologies increased teachers' "opportunities for successful teaching experiences, thereby contributing to greater confidence in their instructional ability" (p.7). In addition, they also noted, "teachers who interpret their interactions with computers as indicative of high grow in self-confidence, regardless of their experience" (p.93). Research also reveals that before teachers use technology for instruction they must be personally convinced of its benefits and must see the utility of using a particular technology (Lam, 2000).

Before technology is used in the classroom teachers focus attention upon their students. They want to know what impact it will have on students' learning outcomes (e.g., Higgins & Moseley, 2001). Teachers use technology because it motivates students and offers a different mode of presentation. Instead of using computers for drill and practice, more confident teachers use technology as an instructional tool to enhance students' learning (Lam, 2000). Successful technology adoption in teachers' classrooms is dependent upon school administrators providing an individualized, differentiated process of training and implementation (Gray, 2001) Glean (1997) commented, "often districts rely upon a 'one size fits all' approach that meets the needs of only a few participants" (p.125). Teachers must see how technology fits within their localized classroom setting (Stein, Smith, & Silver, 1999).

Teachers' technology beliefs are influenced by their philosophy. Resistance to adopting new technologies stem from teachers' existing teaching beliefs (Norton, McRobbie, & Cooper, 2000). For technology adoption to be successful teachers must be willing to change their role in the classroom (Hardy, 1998). When technology is used as a tool, the teacher becomes a facilitator and students take a proactive role in learning. Niederhauser and Stoddart (2001) noted a "consistent relationship between teachers' perspectives about the instructional uses of computers and the types of software they used with their students" (p.27). Often, this change of teaching philosophy and methods focuses on learners-centered teaching and constructivist teaching practices (e.g. Rakes, Flowers, Casey, & Santana, 1999). In fact, Ertner, Gopalakrishnan, and Ross (2001) found that exemplary technology-using teachers exhibit more constructivist teaching practices. Successful integration of technology into teaching depends on transforming teachers' belief and philosophy concurrently (Windschitl & Sahl, 2002).

STATEMENT OF THE PROBLEM

Specifically the study sought answer to the following questions:

- 1. How do the secondary school teachers perceive the role of media identified for the study?
- 2. To what extent do male and female teachers differ in their perception of these media roles?
- 3. Are teachers trained in the use of media more likely to differ from untrained teachers in their perceptions of media role?

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PURPOSE OF THE STUDY

Both the federal and state governments of Nigeria contribute immensely to instructional technology by providing various educational resource centres. In Oyo State alone between 1999 and May 2003, a total of 33 Learning Resource Centres were built with each local government area having at least one.

In view of the above, this study seeks to look into how teachers, who are expected to use these media in their teaching perceive the role of media.

Therefore, the study was designed in the first place to measure and analyse secondary school teachers' perception of the role of media. It will also explore possible relations between teachers' perceptions and selected characteristics like training and the gender of the teacher.

METHOD

Sample and Sampling Procedure

In Oyo State, there are 33 Local Government Areas (LGA). For this study, the local government areas were divided into five major zones – Ibadan, Ibarapa Oyo, Ogbomoso and Oke-Ogun zones. The stratified proportional random sampling procedure was used to select 10 LGA, from the 33 LGAs. The simple random sampling procedure was then used to select 2 secondary schools in each of the 10 selected LGAs.

The simple random sampling procedure was used to select 10 teachers from each secondary school. A total of 200 teachers participated in the study. However, out of these 200 teachers, only 150 completed usable questionnaire.

Research Instruments

Data for the study were collected using two instruments:

- 1. Questionnaire Media Perception Evaluation Scale (MPES).
- 2. Interview.

Media Perception Evaluations scale (MPES): is a collection of 45 statements developed by the writer about the two media roles selected for this study the MPES has an introductory section where the following biographical information was demanded from each teacher:

- a. Whether the teacher offered instructional technology/educational technology at college or not.
- b. Number of year for which instructional technology was offered at college
- c. Number of years of teaching experience
- d. Gender

The 45 items developed were given to four experts, two in psychology and the other two in Educational Technology. These experts were asked to indicate whether they agreed or disagreed with the classification of items under the media emphases. Items with less than 75 per cent agreement among the experts were selected from the list. Thus items were added later due to the advice of the experts.

In other words, 31 items were chosen, distributed as follows Media as supplement to teachers -15 items Media as substitute for teachers -16 items

These items were matched with a Likert – type scale having five categories of responses ranging from strongly agree 95 to Strongly Disagree (1) (See Appendix A)

Interview: The writer also used informal narrative interview to further gather information from participants. In the context of this paper, narrative interviews were in the form of a discussion of the research questions. Each participant was encouraged to narrate, the story of his/her experience in classroom teaching and the multiplier effects it had on his/her perception of media role. This style of interview creates a conversational encounter that allows the interviewee to tell a story in his/her own way and the interviewer the freedom to respond to new material raised during the interview.

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Validation of the Instrument

The Media Perception Evaluation Scale (MPES) was subjected to face and content validity by four experts - two in psychology and the other two in Educational Technology. Irrelevant items were deleted as a result of their suggestions.

Reliability of the Instrument

The Spearman - Brown formula of finding the reliability of an instrument was employed for MPES. The coefficient of the split-half reliability of 0.86 was then obtained, thereby making the instrument good enough for the study.

Method of Data Collection

All the twenty schools were approached by the researcher personally. The questionnaire (MPES) was filled in complete anonymity so as to avoid teachers presenting artificial behaviours that they would not have displayed in normal situations. The teachers were given a maximum of 20 minutes to fill out the questionnaire. They were assured that the completed questionnaires were confidential. The questionnaires were completed and collected on the spot.

Analysis

The first hypothesis was tested by applying chi-square test of one variable case. While the last two hypotheses were tested via chi-square of independence of categorical variables. The null hypotheses were rejected or not rejected, depending on whether the calculated F ratio was significant of the probability level of 0.05 (or 5%).

RESULTS AND DISCUSSION

HO¹: There will be no significant difference in perceptions of teachers about each of the two roles of media identified for the study.

	Media as a supplement	Media as a substitute	Total	df	Critical Value	р
	80	70	150			
Teachers				1	3,841	*0.05
	(75)	(75)				

 Table 1: Perceptions of Teachers for the two roles

Figures in brackets are expected value $X^2 = *4.361$ significant at p = .05

HO₂: There will be no significant difference in the perceptions of male and female teachers about the two roles of media.

Table 2: Chi-Square test on the Perception level of Teachers about the test of teachers about the test of t	bout the two roles of media by gender.
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Predictor Variable	Media as a supplement	Media as a substitute	Total	df	Critical Value	р
	f 45	35	80	1		
Male	% (40.1)	(38.9)			2.041	* 05
Female	f 32	38	70		3.841	*.05
	% (35.9)	(34.1)				
Total	77	73	150			

Figures in brackets are expected values $X^2 = 1.631 * Not$ significant of p = .05

HO₃: There will be no significant difference in the perceptions of trained and untrained teachers about the two roles of media.

Table 3: Chi-square test on the perception level of teachers about the two roles of media by training.

Predictor Variable	Media	a as a supplement	Media as a substitute	Total	df	Critical Value	Р
Trained	f	35	75	110	-		
	%	(46.43)	(63.06)				
Untrained	f	29	11	40	1 3.	841 * .05	
	%	(17.06)	(22.93)				
Total		64	86	150			

Figures in brackets are expected values $X^2 = 19.86 *$ significant at p = .05

After testing the first hypothesis, it was found that teachers' perceptions of media roles were related to the type of roles teachers thus perceived to be methodologically different.

Teachers, however, indicated more agreement with media as instructional aids (63%) than with media as substitute for teachers (37%). The finding that conventional/traditional use of media was more preferred to modern use may be partly explained in the current quasi-conception of media as "replacing teachers". This is consistent with the findings of Aquino (1994), Lewis (1990), Morris (1962), & Romiszowski, (1998). They found that teachers generally have favourable disposition toward the role of media, in which media are used as instructional aids than media as instructional systems.

Consistent with the findings from earlier studies (Lampe & Chambers, (2001); MacArthur & Malouf, (1991); & Zepp (2005), this study found that teachers had syncretic perceptions. Specifically, the proportion of teachers with eclectic preferences was 57%. That the percentage for traditional use of media was higher than the modern use of media explained the seemingly lack of knowledge about modern use of media. Most teachers were indifferent to it because they could not imagine how these media could be used without threatening the traditional role, or at best position of classroom teachers.

The effects of pre-service training on the perceptions of teachers were significant for the roles identified for the study. This conclusion was evident after the testing of null hypothesis three. The data for this hypothesis as set out in table 3 shows the proportions of teachers preferred media as a substitute to media as supplement, whereas, untrained teachers preferred traditional use of media to modern use. It is not surprising that this is so with respect to modern role of media, since those who were exposed to instructional technology while at College should better appreciate all the media, especially modern roles.

The effects of gender were not significant on the perceptions of teachers about the two media options. This was evident after testing of hypothesis two. This corresponds with the finding of Olawepo (1984). Olawepo found that gender as a variable did not affect teachers' perceptions of social studies orientation. These findings did not support conclusions from cognitive style studies which hold that female teachers are field-dependent and technophobia; while male teachers being field-independent, prefer application of media to instruction (Parker & Leonie, 2002; Haynie, 2003; Weber & Custer, 2005).

CONCLUSION

Eclecticism was evidenced in the findings of this study. In the first place, there was syncretism in teachers' perceptions because they tended to be in favour of both the traditional use of media and the modern use of media. In the second place, the influence of training was found to affect the level of teachers' perception. Thirdly, the study shows that the influence of gender did not affect the level of teachers' perception.

LIMITATIONS

Confining the study to teachers in one state is likely to prevent the researcher from generalizing the findings of this study freely outside Oyo State. Another limitation has to do with the nature of media roles. Media roles especially the two selected for this study are not end-points on a continuum. They are critical references which are orthogonal to each other, allowing an individual teacher to be in favour of both (or neither) of the roles.

IMPLICATIONS FOR PRACTICE

Though teachers had eclectic perception about the roles of media, one can use their perception as a guide to instructional technology course outlines construction by combing two roles of media together.

The use of media as instructional system emphasizes innovation and change in method over the use of media as instructional aids. In order to aid in the implementation of this new method, which is of high quality, teachers' guide and teaching aids must be produced for teachers.

Apart from making available to practicing teachers requisite instructional materials, teachers also need to be inducted into the new trends. The ministries of education in the 36 states of Nigeria in collaboration with the N.E.T.C. and N.E.R.D.C, should initiate in-service courses on the use of instructional media.

These in-service courses (or holiday courses) should be based in the College of Education and the Faculties of Education in our Universities where experts can be assembled. Attendance in these courses should count towards the salary increases or even promotion if teachers would be unenthusiastic and unwilling to attend them.

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APPENDIX A MEDIA PERCEPTION EVALUATION SCALE (MPES)

Dear Teacher,

The following questionnaire is to be for research purposes only. Please help me to complete the questionnaire very well thanks.

NB:

- a. The concept of "Media" is used here to mean Audiovisual aids in teaching -learning situations.
- b. There are two major roles of media viz:
- i. Media as a supplement to Teacher. Here media are used to enrich existing instruction. Hence the teacher must be physically present in the classroom.
- ii. Media as a substitute for Teacher. Here media alone are used for instruction to improve overall productivity. Hence the teacher need not be physically present in the classroom.

PART ONE

- 1. Number of years for which you studied instructional media/instructional technology when in College of Education and /or University.....
- 2. Total number of years for which you have been teaching
- 3. Gender (Male / Female).....

PART B

The following statements describe the role of media in class-room teaching-learning situation. Please indicate how far you agree or disagree with each statement by circling one of the figure below:

- 1, 2, 3, 4, 5 where
- 5 =Strongly Agree

4 = Agree

3 = Uncertain

- 2 = Disagree
- 1 = Strongly Disagree

For example if l circle the number 5. It means l strongly agree with a statement. There are no wrong statements. Also, there can be no wrong answers. Therefore, please give your true views about all the items.

STATEMENT

- 5. Television adds interest but teaches little...... 1, 2, 3, 4, 5
- 6. The use of media per se makes teacher redundant...... 1,2,3 4,5
- 7. Media should be considered by the teacher as a device which saves teacher preparation 1, 2, 3, 4, 5
- 8. Media like Television, Radio, Video cassette, etc are manufactured not for learning but for relaxation...... 1,2,3,4,5
- traditional role 1, 2, 3, 4, 5
- 12. Media dictates to the teacher, and thus limit his freedom 1, 2, 3, 4, 5

- 16. Whether we like it or not, at least, in the foreseeable future, teacher will still dominate the classroom because it is meant only for him 1, 2, 3, 4, 5
- 17. The major use of media is to assist the teacher by enhancing his effectiveness in the classroom 1, 2, 3, 4, 5

- 20. Teachers use media because they see them as partner in progress 1, 2, 3, 4, 5
- 21. I believes I can only teach well when I use media..... 1, 2, 3, 4, 5
- 22. Both media and teacher are indispensable to each other 1, 2, 3, 4, 5
- 23. The effectiveness of any teaching-learning situation depends on the amalgam of teacher and media 1, 2, 3, 4, 5
- 25. No matter what methods a teacher employs, without the use of media the quality of such learning is poor 1, 2, 3, 4, 5
- 27. Media used, when the teacher is physically present in the classroom help to enrich existing instruction only 1, 2, 3, 4, 5
- 29. Instruction, whereby media are used with teacher is defective because teacher still dominates the classroom1, 2, 3, 4, 5
- 30. Media when used with teacher limit the power of student to think for themselves 1, 2, 3, 4, 5
- 31. Media when used with teacher do not provide for individualised learning and hence is defective 1, 2, 3, 4, 5

Thanks, Dr. Taiwo S.A.