

**MEDIA UTILIZATION FOR ENHANCEMENT OF TEACHING AND
LEARNING CHEMISTRY IN SECONDARY SCHOOLS IN EBONYI
STATE**

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Abstract

The study is centred on the need for media utilization for enhancement of teaching and learning chemistry in Ebonyi State Secondary Schools. The study discusses; the concept of media, types of media, the influence of media in teaching and learning, the use of media in teaching and learning chemistry and the importance of media utilization in teaching chemistry. The work revealed that, the use of media would provide us with an exposure to the outside, world media have brought out easy ways of interaction and provided us with easily accessible means to reach different people. The study also showed that, the effectiveness and relevance of media towards teaching and learning of chemistry, lie in its ability to carry out its information, socialization, mobilization, functions and responsibility which in the case of Nigeria and other countries include the emancipation of the rural communities. The study recommends among other things that; media personnel should be properly trained to enable them handle all it would take in application of media utilization in teaching chemistry, and there should be provision of media in our secondary schools for utilization for effective and proper teaching and learning.

Keywords: Media, Utilization, Teaching and Learning.

Introduction

According to Onyegegbu, (1999), when various teaching strategies are applied together with audio-visual like media into teaching and learning, students tend to learn faster and as well achieve high retention. In the same note, observations have shown that students have high retention of what they see, read, and watch. In view of this would reveal the need for utilization of media in teaching and learning chemistry.

The utilization of media in the teaching and learning of chemistry in secondary schools in Ebonyi State is considered back warding. This back ward utilization of media in teaching chemistry has contributed to the poor retention of chemistry concepts among secondary school students in Ebonyi State.

The relevance and the role of communication technology in the study of life of man cannot be waved out with ordinary hands. The scientists have been working very hard to enhance the living standard of man and also solve their numerous problems. These lead to the invention aspects of technologies to ensure that world news are preserved, displayed or disseminated to the different parts of the world. The

media especially television provides information, entertainment and roles which often exert considerable influence on the mind of the children, youths and adults.

Hambage, (2000), stated that media is the impersonal medium of communication between the receiver and the sender. Aquene, (2003), viewed that media is the fourth estate of the realm. This is because of its function as the watchdog of the society. Invariably, media that can be viewed as the main way that large number of people could receive information and entertainment are; television, radio, newspaper and so on.

The important of media materials in the classroom teaching and learning mostly in chemistry cannot be over emphasized. In fact, media could be used to facilitate teaching when used as instructional material in the classroom setting. In view of this, the study would discuss the various aspects of media.

The Concept of Media

Media have provided us with an exposure to the world outside, easy ways of interaction and accessible means to reach out to people in various parts of the world. Enebe, (2000), stated that media is the transmission, through representative and perception means of knowledge content and ideas, news interaction and so for the members of the society. David, (2004), maintained that, the increasing awareness of the world is as a result of the functions of information technology mostly the media, which provides information, socialization and mobilization to the society.

Azuzu, (2006), described the media as those controversies artistically employed by communicators to bring about interactions on the local, national and international levels. Kelvin, (2012), asserted that, media are the communication channels through which news entertainment, education, data or promotional messages are disseminated. Media include; every broadcasting and narrow casting medium such as newspapers, magazines, television, radio, bill boards, direct mail, telephone, fax and internet.

Furthermore, Coldvin, (2005) described media as the agent of the dissemination of information to the generality of the people. Viewing the concepts of media above, there is every need that media should be used for enhancement of teaching of teaching and learning chemistry in our secondary schools.

Types of Media

According to Herbst, (1995), the different types of media we use presently are; Print Media, Electronic Media, and New-Age Media. **Print Media**

This is one of the channels of mass media through which information is being passed across to the targeted audience. It is the medium through which information is disseminated to the audience. The print media as a branch of the mass media channels comprises of newspaper, magazines, bill boards and so on.

Okama and Ebeze, (1999), stated that, mass media is the most existing in terms of world usage. The power of persuasion is most prominent and existing. They further explained that the print media enjoy the latitude and elasticity of verbal usage that tends to border commitment, to the common cause of its dear nation for good will

and prosperity of Nigeria.

Electronic Media

The electronic media are the television, radio, CDS and DVD as well as the new hottest electronic gadgets which circulate information to the world round. Electronic media in for of Audio- Visual Media provides new impulses for the exploration of visual expression, analyzing the theorizing “visual culture” and “visual literacy” moving pictures establish new kind of visual persuasion, compared to still images for example, by juxtaposing slots and constructing visual narratives. Together with sound, they resemble reality more than still images, (Enebe, (2000).

New-Age Media

The advent of new- age media like internet, computers, and mobile phones have contributed a lot in the development of human and material resources. All the above media are often referred to as new- age media. We are now enjoying the benefit of technological mass media which is faster and has a wide spread range. Internet has opened up several new opportunities for mass communication which include; email, websites, internet, television and so on.

Some observers have related the coming of the new- age media as the catalyst that has instigated a populist movement where citizens have greater access to the political world than ever before Abramson, Arteton and Orren (1998). The most optimistic articulation of this view poised that mass media serve to stimulate political interest and activism among the mass public. Ordinary citizens are able to establish meaningful and effective roles for themselves in the political arena that has been primarily the domain of elites. Talk radio for example, can provide an unstructured outlet for public expression, (Herbst, 1995). One of the primary characteristics of the new-age media is the interactivity that communication technologies facilitate among citizens, public officials and media personnel.

The Influence of Media in Teaching and Learning

The influence of media in terms of educating the society cannot be over emphasized. Media enhance the general knowledge by providing us with information from all over the world. News broadcast through different media, helps us to know about the day to day events in the world over.

Draft and Lengel, (1986), developed the media richness theory to assess the media's ability of reproducing information. The internet was widely adopted for personal use in the 1990s, and further expanding computer mediated communication (CMC) studies theories such as social information processing. Postmes et al, (2000), studied CMC (computer mediated communication), effect on user's behaviours, comparing these effects to face to face communication effects.

Walkenburg and Peter, (2009), developed the internet- enhanced self-disclosure hypothesis among adolescents, stating the social media platform that, are primarily used to maintain real-life friendships among young people. The application of all these developments would invariably influence teaching and learning of chemistry positively.

Use of Media in Teaching and Learning of Chemistry

Scholars and researchers have observed that, the use of media in teaching and learning is very effective as it facilitates learning in the classroom setting. Browning and Cocking, (1997), noted the crucial role technology plays in creating learning environment that extends the possibilities of one way communication media such as movies, documentaries, television shows and music into new areas that requires interactive learning like visualizations and student-created content.

Solomon, (1979), suggested that, people learn abstract, new and novel concepts more easily when they are presented in both verbal and visual form. More so, Mouse, (2007) stated that, mass media has been playing a great role, especially in the area of teaching and learning science subjects mostly chemistry. He outlined the roles as follows;

- 1) Through the news got from radio, television and newspapers
- 2) Teachers are assured on what he or she teaches
- 3) It serves as source of public education.
- 4) The use of mass like television helps teachers in imparting knowledge to the students and thereby using television to encourage students to listen to some useful programs in chemistry mostly the might involve practical exercises.

In a nut- shell, when chemistry concepts are programmed in the media and utilized there is every, likelihood that, teaching and learning of chemistry would be enhanced in our secondary schools.

The Importance of Media Utilization in Teaching Chemistry

Adamu, (2004), highlighted the potentials of ICT mediated instruction as follows that;

- i) Students learns more when media are utilized in the classroom,
- ii) Lessons are learnt in less time,
- iii) Students like their classes more when they receive computer help in them,
- iv) More positive attitudes are developed towards learning,
- v) Improved learning outcomes,
- vi) Improved access to informative technology and the quality of teacher training,
- vii) Media could serve as instructional material to aid teaching and learning mostly when models are programmed,
- Viii) It could also provide more information about chemistry learning,ix)

Finally, learning chemistry through the use of media makes it easier for students to learn abstract concepts by the use of model displayed in the media.

Conclusion

The enhancement of teaching and learning of chemistry lies on the type of methodology which the teacher of chemistry would be able to utilized, during teaching and learning process in the classroom. In this note, the need for media utilization in teaching and learning should come into play as it would go a long way to fast track the teaching learning processes.

Furthermore, the use of media would help immensely in facilitating teaching and learning chemistry and effective understanding of the concepts. It would as well enhances, the learners' intellectual ability, because of the global exchange of information, ideas and views from different scholars in the world.

More so, it would aid in mobilizing the people and as well as translating the science programs. To achieve these, media should be always made available to various schools in Ebonyi State to enhance teaching and learning.

Recommendation

Considering the need for utilization of media in our secondary schools for enhancement of teaching and learning of chemistry, the following recommendations were made;

- 1) Various types of media should be made available in our schools to aid teaching.
- 2) Media specialists should be employed in our various schools to effect the implementation of media utilization in teaching and learning chemistry.
- 3) Teachers of chemistry should be properly trained to enable them to have pre-knowledge of the use of information communication teaching (ICT) in teaching and learning, so that they can impact the knowledge to the learners effectively.
- 4) Infrastructural facilities such as electricity and good network system should be made available to enhance the use of media in rural areas.
- 5) There should be adequate maintenance of already available media in the schools and put them to use.
- 6) Radio and television stations should extend their educative programs to our various schools mostly science programs.

- 7) There should be regular purchasing of current scientific video films by the school authorities for enhancement of teaching and learning chemistry.

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