NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF ARTS AND SOCIAL SCIENCES

COURSE CODE: JLS 843

COURSE TITLE: ELEMENTS OF MULTIMEDIA: THEORY AND PRACTICE

COURSE GUIDE

JLS 843
ELEMENTS OF MULTIMEDIA: THEORY AND PRACTICE

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Introduction

This course is titled Elements Multi Media: Theory and Practice with course code number JLS 843 is designed for postgraduate Diploma students of Mass Communication. The course provides the students with basic knowledge of multimedia communications with emphasis on journalism. At the end of the tutorials in the course, students are expected to learn a great deal of the principles, theories and applicatory knowledge of multimedia. Students will also learn the historical and philosophical underpinning of multimedia technology and their relevance in mass communication scholarship and practice with particular reference to journalism practice. Precisely, the students who have gone through this course would be expected to have in-depth understanding of the basic principles imperative for effective use of multimedia in global journalism practice. Students would also be expected to acquaint themselves with mainstream literature in Information and Communication Technologies; the major discussion that embed the literature and be able to apply the basic concepts so learned in multimedia journalism practice.

This course guide therefore, offers you with informative insights into the course contents. It also provides you with a list of relevant materials you will need to gain adequate familiarity with the subject matter. The course design is structured in such a way that would enable you gain far reaching insight into the course. It will engage you into productive thinking through the underlying principles of multimedia uses and application, and other issues you will study. It will also serve as a guide post to effective understanding of the nature and dimensions of multimedia journalism during and after the course of your study.

Study Units

JLS 843 which is titled Elements of Multimedia: Theory and Practice is a course for postgraduate Diploma Mass Communication students. It is a 3 credit unit course. The course is packaged in five modules of varying units and lengths. The modules and their corresponding units are:

MODULE 1: ICTs: THE STARTING POINT FOR MULTIMEDIA EXPERIENCE

Unit 1: Meaning and Nature of ICTs

Unit 2: Major Components of ICTs

Unit 3: ICTs and Global Information Flow

MODULE 2: MULTIMEDIA: AN HISTORICAL AND CONCEPTUAL OVERVIEW

Unit 1: Origin of Multimedia Concept

Unit 2: Definition and Explanation of Multimedia

Unit 3: Elements/Nature of Multimedia

Unit 4: Advantages of Multimedia

MODULE 3: THEORIES OF MULTI-MEDIA

Unit 1: Paivio's Dual Coding Theory

Unit 2: Baddley's Working Theory

Unit 3: Engelkamp's Multimodal Theory

Unit 4: Sweller's Cognitive Load Theory

Unit 5: Mayer's Multimedia Theory

Unit 6: Some Communication Theories Relevant in Journalism Practice

MODULE 4: FUNDAMENTALS OF MULTIMEDIA JOURNALISM

Unit 1: Understanding Multimedia Journalism

Unit 2: Trends in the Use of Multimedia News

Unit 3: Recipes for Multimedia News Production

Unit 4: Major Multimedia Journalism Technologies/Tools

MODULE 5: Research, Ethical and Legal Issues in Multimedia Journalism

Unit 1: Research Interests in Multimedia Journalism

Unit 2: Ethical Issues In Multimedia Journalism

Unit 3: Legal Issues in Multimedia Journalism

Unit 4: Epilogue: Problems and Prospects of Online journalism in Nigeria

It is important to note that every module offers you a listing of all the units that make it up. Each unit also offers you the content outlines, introduction and objectives with the main content preceding each unit. Self-Assessment Exercises (SAEs) will be provided to enhance learning, comprehension, internalization and retention of what you will be taught. To further enhance learning and effectively monitoring of your progress on the course, every unit will end with one Tutor-Marked Assignment (TMA) which you are to work on and submit for marking.

Textbooks and References

Enormous effort was made to provide you with in-depth and useful materials you need to pass this course. However, you will find at the end of each unit, a listing of relevant reference materials you may consult at your convenient time to enhance your understanding of the course. I therefore, expect that you would make out time to consult as many of the relevant reference materials as possible within the time available to you even before attempting to do your exercises.

Assessment

To excel in this course, you would undergo two important assessments. These are Self-Assessment Exercises (SAEs) and Tutor-Marked Assignment (TMA). Though you are not to submit the answers to SAEs questions to your tutor, it is important you take it serious as it would help you to assess your own understanding of the course. It would also help you to identify the areas you need to improve on as the tutorials progresses. The Tutor-Marked Assignment should also be taken serious and carefully answered. It should be properly filled in your assignment file for submission and marking. Your performance in this exercise counts a lot as 30% of your total score on the course depends on it. You are once again encouraged to take it serious.

Tutor-Marked Assignment

You will find at the end of every Unit, a Tutor-Marked Assignment (TMA). I expect that you will carefully answer the assignments and put them in your assignment file for submission as instructed. Note that this course guide does not contain any Tutor-Marked Assignment questions. You will find them in virtually all the units of every module in the main course details.

Final Examination and Grading

As a 3-credit unit course, the final examination for JLS 843 will last for three hours. The examination will count for 70% of the total course grade. Note again that the Tutor-Marked Assignment will be 30% of the total grade. So, your score in the Tutor-Marked Assignment plus your score in the final examination will determine your final grade in this course. The examination questions will reflect to a large extent, the SAEs and TMAs which you are expected to have answered while studies on the course last. I advise you make proper use of the time you have between the completion of the units and the examination to revise the whole course. You will find this exercise useful as it will help you to be familiar with SAEs and TMAs before your final examination.

What You Will Need for This Course

To excel in this course, you will need to review your knowledge of historical overview of ICTs and journalism practice. This will certainly refresh your mind on the meaning, essence and process of communication technologies with greater emphasis on multimedia journalism and communications. Although the main course manual is well detailed and comprehensive, you will need to purchase at least, two textbooks out of the number of textbooks recommended to you. This will aid your mastery of the course. You may also need to visit some websites for additional reference materials that will facilitate your understanding of the course. Also, it is important you visit high profile ICT centers for additional insights into how multimedia function. Finally, you will need to cultivate quality time to rehearse what you learnt in the course on weekly basis. This will further enhance your knowledge of the course.

Facilitators/Tutors and Tutorials

Tutorials in this course will span through 24 hours. The dates and locations of the tutorials as well as the name and phone number of your tutor will be communicated to you once you are allocated a tutorial group. Your tutor will mark and comment on your assignments. Your tutor will also monitor your progress in the course and will be able to assist with your SAEs and TMAs. I therefore, encourage you to feel free to contact your tutor in case of any difficulty and ensure prompt submission of your assignments. Always attend your tutorials regularly and on time. Also ensure you always participate actively in class discussions.

Conclusion

This course is more of a practical based course. The course requires in-depth understanding of the principles underlying multimedia journalism and communications. You will therefore make the most out of the course if you cultivate the right attitude of mind of understanding how best the principles apply to the practice of multimedia communications.

Summary

This course guide is carefully packaged to give you tight insight into JLS 843 (Elements of Multimedia: Theory and Practice). The course is designed to equip you with rich conceptual and practical knowledge of multimedia journalism and communications. At the end of your studies in this course therefore, you would have learnt not only the conceptual/theoretical underpinning of the course but also, the strategic practical approaches to managing multimedia communications. However, your success in this course will depend more on the quality and quantity of time you put into your tutorials; the efforts you put into solving your SAE and TMA questions; and your strategic planning for engaged studying and revising of the entire course. I sincerely wish you successful journey through your studies in the course and the entire programme.

Recommended Text

1. **Using Information Technology** by B. K. Williams and S. C. Sawyer

2. **Mass Communication in The Emergent Information Society** by D. E. J. Konkwo

3. **Journalism Practice: News, Aesthetics, ethics and Laws** by L. C. Nwodu

4. **Contemporary Issues in Communication and Society** by I. S. Ndolo

5. **Media Technology: Issues and Trends** by O. Uwakwe

6. **Research in Communication and other Behavioural Sciences** by L. C. Nwodu

MAIN WORK

JLS 843
ELEMENTS OF MULTIMEDIA: THEORY AND PRACTICE

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MODULE 1: ICTs: THE STARTING POINT OF MUILTIMEDIA EXPERINCE.

The continuous advancement in Information and Communication Technologies (ICTs.) has opened and continues to open windows of opportunities in the way and techniques people communicate. Today, communication technology is moving very fast away from analogue to digital technology. One of the major off shoot of this deserving move from analog to digital communication is the introduction of multimedia technology in mass communication and journalism practice.

Since multimedia communication is a functional organ of ICTs, it is proper to kick-start this study with basic understanding of ICTs. This module will therefore equip you with knowledge of the meaning, nature and dimensions of ICTs. This will serve as a prelude to the study of the nature, uses, theories, and practice of multimedia journalism. The module will therefore treat the following units:

Unit 1: Meaning and Nature of ICTs

Unit 2: Major Components of ICTs

Unit 3: ICTs and Global Information Flow

Unit 1: Meaning and Nature of ICTs

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

> **3.1: Meaning of ICTs**

> **3.2: Uses and functions of ICTs**

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Information and Communication Technologies (ICTs.) according to Nwodu (2004), have enhanced global neighborhood. This implies that with the introduction of ICTs, different parts of the world have literally come closer to each other than before. Now, news and information circulate around the world in a matter of seconds via the ICTs. This unit will therefore explain the meaning, nature and essence of ICTs.

2.0: Objective

At the end of tutorial in this unit your will be able to:

> ➢ Define ICTs.
> ➢ Explain key issues in defining ICTs.

3.0: Main Content

3.1: Meaning of ICTs

Information and Communication Technologies (ICTs) are multifaceted in nature. It is "a generic name for a number of communication hardware used for instantaneous dissemination of information and social values across the globe" (Nwodu; 2007:89).

The communication hard-wares that comprise ICTs are broadly categorized into two. These are the telecommunication and the computer communications. The combination of the two according to Grandy (1989) is the force that has enhanced consistency in speedy global communications. Through these technologies massive news and information are spread round the globe in a matter of seconds. As Solo (1982: 224) puts it:

> These sets of technologies are moving into conjunction possible to be common components part of an integral functional system, tying the massive, low cost, global transmission of image, sound and recorded observation into low cost capability to store, organize, automatically interpret or otherwise programme the use of that which has been transmitted

This according to Nwodu (2007:90) means that ICTs facilitates the sourcing, collecting, processing, documentation, retrieval and accurate dissemination of news, data and lots of useful information between and among global citizens.

3.2: Key Issues in Defining ICTs.

This segment discusses the key issues in defining ICTs. From the definition of ICTs above it imperative therefore that ICTs involve:

i. The interface between telecommunications and computer assisted communications. This is why Nwodu (2007) explains that the operation of ICTs is based on electromagnetism which serves as an interface between computer and telecommunications.

ii. The combination of computers and telecommunication in information management has collapsed physical limitations and to a large extent, legal restrictions in news and information flow around parts of the world.

iii. The marriage of computers and telecommunication has enhanced clearer and simultaneous transmission of graphics/pictures, videos, sound and sundry information round the world with minimal friction which is at the root of multimedia communication.

iv. With this development, the collection, organization, storage, analysis, interpretation and retrieval of news/data have been made faster, clearer and cheaper with greater aesthetic values.

v. ICTs have enhanced greater interaction and participatory communication among peoples of the world (Nwodu; 2004).

4.0: Conclusion

Prior to the introduction of ICTs in global information and communication flow, nations adopted one form of control system or the order to check the quantity and quality of news and information flow in and out of there national boundaries. Then, strategies like jamming system were used to block any communication signal considered to be inimical to a nation's cultural health or national interest. Today, ICTs have opened the floodgate of information flow. News and information now flow effortlessly round parts of the world via computer-assisted communications and telecommunications. This is why as students of postgraduate Diploma in journalism and mass communication, you need in-depth understanding of the meaning and essence of information and communication technologies (ICTs).

Self Assessed Examination

What do you understand by ICTs?

5.0: Summary

This beginning unit x-rayed the meaning and essence of ICTs in global information flow. Thus, the definitions and key issues arising from thereof were discussed.

6.0: Tutor-Marked Assignment.

Define ICTs and explain the key issues arising from the definition.

7.0: References/Further Reading

Grandy, H. O. (1989) The Surveillance Society: Information Technology, Bureaucratic Social Control; *Information Gap Journal of Mall Communication, 39 (3).*

Nwodu, L. C. (2007) Using Information and Communication Technologies (ICTs) to Check Electoral Fraud in Africa, *Mass Media Review;* Vol. 1 No. 3

Nwodu, L. C. (2004) Technological Determinism and Media Practitioner's Perception of Cultural Influence of ICTs on Developing Nations; *The Nigerian Journal of Ccommunications,* Vol. 1, No 4

Solo, R. A. (1982) *The Positive State,* Cincinnati: South-West Publishing.

UNIT 2: Major components of ICTs

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

      3.1: Major Telecommunication Tools

      3.2: Computer Communication Tools

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

The previous unit discussed the meaning of ICTs. In discussing that, the components of ICTs were deliberately left out because it is too broad to be treated as a segment of a unit. This unit therefore is designed to expose you to the component of ICTs.

2.0: Objective

Tutorials in this unit will expose you to:

- ➢ The gamut technologies that make up the telecommunication family.
- ➢ Parts of computer communications

3.0: Main Content

3.1: Major Telecommunication Tools

Telecommunication is no doubt, the older genre of Information and Communication Technologies (ICTs). This is why most of telecommunication tools were derived from analog technologies. Telecommunication is however, one out of the two broad categories of ICTs. Therefore, it is natural that telecommunication should have sub-categories that make it up. The components of telecommunication therefore include but not limited to

telegraphy (now telex), teletext, telephone (which developed from analog to digital telephone/cellular phones like GSM), fiber optics, microwave, technology, wireless passing intercom system, satellite and cable networks. We shall further explain a few of these that are considered most relevant in the study and applications of multimedia journalism. These are:

Satellite

Satellite communication according to Nwodu and Ukozor (2003; 76) is "designed to carry television signals across borders by the way of international broadcasting via cable networks". Agba (2002) earlier observes that the power of satellite communication in shaping the image of the world was highly manifested during the Gulf war. Then, people who have access to satellite broadcasting watch up to date account of action in the battle field to the extent every scud missile fired was captured from the point it was fired to the targeted destination.

Satellite is therefore 'operates by receiving electronic messages from the ground 'up-link' on earth stations and re-transmitting them through 'down-links' to other earth stations' (Agba, 2001:35). According to Hollins (1984:1), it is the most significant piece of news hardware in the telecommunication revolution. With a pizza-size satellite dish on roof top, one can easily 'receive data at the rate of 400kbps from a communications satellite, a space station that transmits radio wave called microwaves from earth-based stations' (Williams and Sawyer, 2003:42). The import according to DeFleur and Davis (1988:255-6) is that satellite provide cheaper means of communicating business transaction over long distances from roof-top to roof-top. This has enabled easy transmission of pictures and sound via both fixed and mobile transmitters, foster electronic business meetings and what Benson-Eluwa and Kajing (2012) described as "direct-to-have networks"

Cable System

Cable system varies from other wireless transmission devices like radio and television devices because of its ability to relay information in both analog and digital forms. Hollins (1984:1) describes it as:

> …the vanguard of technological revolutions, the nervous system of an information centered society and a means by which the old limitations, in the radio spectrum will be overcome, allowing a tremendous expansion in our communication capacity.

To Ume-Nwagbo (1994:147), "of all mass-oriented communication systems currently in public domain, the cable system offers the greater access channels to the public". In this context, wire or cable connection is essentially used in the distribution of radio and or television news, programmes, images and sound from a given distribution centre. With the aid of satellite dish, the audience members now receive signals of any form directly from supper stations or networks.

Mobile Telephone

Mobile telephone has made news reporting and feedback mechanism very easy and faster. With the facilities in the user device, citizens are even active participants in information gathering and disseminating. Today, concepts like 'citizen journalism' and 'citizen consciousness' have emerged as perfect description of citizens' participation in news gathering and dissemination. The technology also serves as a potent tool for audience participation in media programmes like phone-in programmes.

3.2: Computer-Assisted Communication Tools

Oettinger (1989) describes computer communication as "compunication". Communication according to the scholar is a graphic description of:

> The nexus of computer and communication; computer accessing, processing and distributing bits of information, computers talking to each other; bouncing messages from earth stations …around the world.

Computer has the rare capacity to keep signals in its memory and provide audio and visual interpretation of such signals (Nwodu and Ukozor, 2003).

The hub of computer assisted communication however, is the internet described by scholars as 'mother of all networks". Internet is responsible for the evolution of concepts like information society; information age and information revolution.

According to Williams and Sawyer (2003:5), "the internet (NET) is a worldwide network that connects hundreds of thousands of smaller networks. These networks link educational, commercial, non-profit, and military entities". As a link between different computer networks in the world, the internet has wide variety of functional parts which perform verity of functions. Some of these internet offerings that have facilitated multimedia communications are:

i.   World Wide Web (WWW) which is "an interconnected system of computers all over the world that store information in multimedia form" (Williams and Sawyer; 2003:5).

ii. E-mail which was introduced in 1981 refers to a message transmitted via computer network that is connected to the internet. It is most commonly used mode of computer-assisted communication. This is why Williams and Sawyer (2003) argue that "one of the first thing new computer users learn is how to send and receive e-mail".

iii. Wireless Application Protocol (WAP) which is the interface between mobile phones and internet. WAP therefore enables easy and speedy delivery of information from the internet to mobile phone. This is why digital phones are often called WAP phones. According to Williams and Sawyer (2003:285), WAP is "…the main set of communications conventions for connecting wireless uses the world wide web. Both Bluetooth and Wifi use WAP, which require websites to strip out graphics and shorten stories".

It is pertinent to explain what we mean by Bluetooth and WiFi here. Bluetooth is a short range wireless digital means through which cell phones, PDA, Computers and peripherals are linked up to distances 30 feet for purpose of news and information sharing. On the other hand, WiFi according to Williams and Sawyer (2003:285) is:

> …shot-range wireless digital standards aimed at helping machines inside offices to communicate at high speeds and share Internet connection at distances up to 300 feet; it connects to a kind of local area network known as the Ethernet.

iv. Multimedia Message Service (MMS) which combines different forms of message – verbal and non-verbal, still and animated images and pictures, sound, video and text in a single communication experience. Multimedia is the main thrust of this course and as such, the details of the nature, theory and application shall be discussed in subsequent modules of this course.

v. Short Message Service (SMS) which is used to reach out to specific GSM user or user(s) with specific message. The message contents vary from personal to group interests which could be:

➢ Expression of love and or feeling
➢ Notice of meeting date, venue, time and material requirements.
➢ Invitation to social events like marriages, burials, conferences, anniversaries etc.
➢ Reminder to an on-coming event.

There are other computer-assisted communications that are internet based. Some of these mode of communications which time and space could not permit we discuss them here are online press room; online media conference, online data and information collection centre, to mention a few.

4.0: Conclusion

A study of multimedia communications requires sound knowledge of the meaning, forms and uses of ICTs. This is because ICTs are the forces that drive multimedia communications. This explains why we have taken time here to expose you to major components of ICTs in this unit.

Self Assessment Exercise

Mention and explain the two categories of ICTs.

5.0: Summary

This unit clearly explained various ICTs' components and applications. Thus, the elements of telecommunications and computer communications were discussed

6.0: Tutor-Marked Assignment

Mention and discuss various form computer communications known to you.

7.0: References/Further Reading

Agba, P.C (2001) *Electronic Reporting: Heart of the New communication Age;* Nsukka: University of Nigeria Press Ltd.

Hollins, T. (1984) *Beyond Broadcasting: Into the Cable Age;* London: BFI

Nwodu, L.C. and Fab-Ukorzor, N.T.(2003) New Communication Technologies and Global Information Flow: Realities and Options for Developing Countries; *Nigeria Journal of Research and Production* Vol 2 No 5.

Ottinger, A. (1990) The Information Evolution Building Blocks and Bustle Bundles", *Mass Programme on Information Resources Policy,* Harvard: Harvard University.

Ume-Nwagbo, E.N. (1994) "The Cable System: Statues and Prospects in Developing Economics", *Nsukka Journal of Humanities No7.*

Williams, B.K. and Sawyer, S.C. (2003) *using Information Technology: A Practical Introduction to Computers and Communications Boston: McGraw-Hill.*

Ajah, J. U. (2011) Information and Communication Technology and Contemporary Public Relations Practice in Nigeria, in I.S. Ndolo. (ed.) *Contemporary Issues in Communication and Society; Enugu: Rhyce Kerex Publishers.*

UNIT 3: ICTs AND GLOBAL INFORMATION FLOW

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: Concept of Information Flow.

    3.2: Global Information Flow Controversy

    3.3: ICTs Impact on Global Information Flow.

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

It is incontrovertible that the invention and uses of ICTs in information management has altered the pattern, volume and speed of global information flow. These technologies have made the transmission of radio and television signals, and the spread of data and graphics around the world most possible. It is important therefore that we understand clearly, how these technologies impact on global news and information flow. This is the essence of this unit.

2.0: Objective

At the end of tutorial in this unit, you are expected to learn;

- ➢ The meaning of Information Flow
- ➢ How ICTs drive global information flow and the attendant problems.

3.0: Main Content

3.1: Concept of Information Flow.

In organizational set up, we talk about information flow in terms of where information originates and where it is targeted. In that case information can flow from a superior to a sub-ordinate and vice versa, which is called vertical

flow of information. It can also flow horizontally when the information emanates from the one staff to another of equal cadre.

Building from the above, we can therefore conceptualize global information flow in terms of how news and information flows across different parts of the world via communication technologies. Precisely, global information flow refers to how news and information flow from one geographical region of the world to another (eg from the Northern hemisphere to the Southern hemisphere or from Developed nations to Developing nations and vice versa). It also refers to the patterns of international communications which could be free or restricted flow of information. It is free flow when there is no order in the quality and quantity of international news coverage. In other words, there is no control over what is to be covered, how it should be covered and the magnitude to be covered. On the other hand, restricted flow means imposition of order in international communication. By implication there should be control in global news coverage. This control therefore may require a kind of regulations on what should be covered including the aspect and slant of it to be covered.

3.2: Global Information Flow Controversy

It is pertinent to note that in the early 1980s, the call for restriction in world information and communication flow gained momentum. Mass communication and journalism scholars from developing nations called for the imposition of New World Information and Communication Order (NWICO).

This call which negates the Western free flow orientation threw up serious controversy between the scholars and practitioners in the developing nation and their colleagues in developing nations.

The bone of contention as articulated by communication scholars from developing nations then, were that:

     i.   There is imbalance in global news and information flow.

     ii.   This imbalance is in favour of the North who dominates global news and information to the detriment of the South.

     iii.   In view of this dominance, issues affecting the interest of the South (developing nations) are hardly reported in the Western media.

iv.   Only negative report about the South like hunger, HIV/AIDS, war, natural disasters are usually reported in the Western media as if nothing good ever happen in the South.

For these reasons and more, the developing nations, riding at the back of UNESCO, called for an order in global communication flow. Although MacBride Commission set up by UNSECO to ascertain whether imbalance actually exist in global news flow confirmed the plight of developing nations, nothing has been done to reverse trend till date. You can read more about this in UNSECO (1980), Nwosu (1990), Asante (1992), McChesney (1997), Nwodu and Fab-Ukozor (2003) and Udeze (2011).

3.3: ICTs Impact on Global Information Flow.

Mowlana (1984) reviewed international research with particular reference to global information flow and technology and found that:

i.   There has been a directional information flow from North to South.

ii.   Cultural and ideological distortion and biases have been predominant during the last several years.

iii.   The growth of technology is not necessarily increasing the access of all peoples to information nationally and internationally (Hester, Richstad, Agee, and Lule; 1985: 32-33).

The third point above holds a lot of lessons for us here. It means that though advancement in information and communication technologies constitute the wheel upon which global information flow revolves; increment in the technologies has not enhance global access to information and communication. Only those who have the means to acquire the enabling facilities gain access to global information. Incidentally, the developing nations have over the years grappled with low technological know-how and uses, epileptic power supply whereas electricity is needed to keep ICTs going wherever they exist; poor network and sundry problems that have hampered effective use of the technologies. Hester (1985:17) foresees these problems where he writes:

> …but there are some real dangers …to the revolution which is underway in communication technologies especially for citizens of the third world. These dangers may see an increase in the disparity between the third world and the

developed world in the ease and efficiency in communication.

The implication is that though the technology is increasing, various communities of the world are not benefiting from it equally. For instance, at April 2000, the number of internet users on-line in the whole of Africa was 2.6 million with Middle East trailing behind with 1.9 million. Asia/Pacific recorded 69.0 million, Europe 83.4 million; Canada/USA, 137.0 million and South America 10.8 million (see Dublin Consultancy Limited). Although the statistics has improved in recent times, the numbing question as Law (2000;38) puts it is whether each village in the developing nations has at least a single internet connection, accessible to all according to an agreed set of rules at affordable prices.

The above poser according to Nwodu (2007:93) is relevant given that over 95 percent of the bulk of internet users in Africa, Middle East and Latin America are mainly urban residents with insignificant few rural residents getting access at a higher cost. No doubt, Africa and other developing nations, as Edward Deng cited in *Communication 2002* (October/November, p.24) observes, need revolutionary access solution to face the Next Generation Network (NGN).

This is why the study of ICTs with particular reference to multimedia will remain relevant in mass communication and journalism education, training and research. And as trainee journalists, you need to understand the need for effective use of ICTs and multimedia in information gathering and dissemination to remain relevant in the contemporary global journalism practice.

4.0: Conclusion

Today, concepts like information super highway, information society, information overload etc have emerged as consequences of information revolution precipitated by the introduction and uses of Information and Communication Technologies (ICTs) in global news flow. Mass communication and journalism teachers, students, researchers and practitioners need adequate familiarity with "the characteristic strengths, and limitations of these new communication technologies" (Nwosu, 1990:38) to remain relevant in the contemporary global media practice.

Self Assessment Exercise

Explain the concept of information flow.

5.0: Summary

This unit dealt with an exploration of major influences of information and communication technologies (ICTs) on global information flow. In line with the objective of the unit therefore, the concept of global information flow controversy and how ICTs impact on global information flow were discussed.

6.0: Tutor-Marked Assignment

Discuss the controversy surrounding global information flow point out how ICTs impact on such flow.

7.0: References/Further Reading

Asanta, M. K. (1992) Association: An Alternative in the New Information Schism, in Okigbo, C. and Abubakar, Y. (eds.), *New Perspectives in International News Flow;* Lagos: Communication Research Projects.

Hester, A; Richard, J; Agee, W; and Luke, J. (1985) *Handbook for 3rd World Journalists;* Tunis: Joint Publication of Advanced Training of Journalists and Centre for International Communication Training Research.

Hester, A. (1985) The Communication Revolution: Dangerous to 3rd World Cultures?, in Hester, A; Richard, J; Agee, W; and Luke, J. (1985) *Handbook for 3rd World Journalists;* Tunis: Joint Publication of Advanced Training of Journalists and Centre for International Communication Training Research.

Law, C. E. (2000) Internet Update; *Communication Africa,* April/ May.

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MODULE 2: MULTI-MEDIA: AN HISTORICAL AND CONCEPTUAL OVERVIEW

A futurist was once quoted by Njoku (2009:1) as saying that "information has the magic wand to change cultures, influence thought and re-engineer human society". This statement no doubt, explores the relevance of information in human, infrastructural and physical development. It all suggests that information has "affected our attitudes and our world of application"(Njoku, 2009:1). This is where the idea of information society springs up. The implication is that modern man lives in a social environment that is enmeshed in information overload. In spite of the geographical divides that separate parts of the world, human beings are ever getting closer than before by sharing all sort of information even without physically coming together. This is the very motive behind the advancement in information technology – the wheel that propels information society. A study of the nature and dimension of information technology therefore is considered worthwhile in that it helps us to understand the dynamics of global information and data flow. This module therefore aims at acquainting you with the basic knowledge of multimedia technology. The module is couched in four units aimed at exposing you to the rudiments of multimedia communications. The units are:

Unit 1: History of Multimedia Technology

Unit 2: Definition and Explanation of Multimedia

Unit 3: Nature of Multimedia

Unit 4: Advantages of Multi-Media

Reference

Njoku, N. L. (2009) "The Information Society: A Brief Historical Perspective" in D. E. J. Konkwo (ed.) *Mass Communication in The Emergent Information Society;* Owerri: Alphabet Nigerian Publishers.

Unit 1: History of Multimedia Technology

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: History of Multimedia Technology

    3.2: The Nigerian Experience

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

The term 'multimedia' did not emerge from the moon. Like every other concept or idea, it has its root. This unit therefore, discusses the history of multimedia communications. You need this historical background to deepen your knowledge of the concept, what it represents and how it functions.

2.0: Objective

At the end of tutorial in this unit, you should be able to understand:

- ➢ How the concept originated
- ➢ The situation in Nigeria

3.0: Main Content

3.1: History of Multimedia Technology

The term, 'multimedia' originated from musical and performing art world. It was coined in July, 1966 by a singer and artist called Bob Goldsteinn who later changed his name to Bobb Goldesteinn. Then, Bobb used the term to describe his show business – "LightWorks at L'Qurism" situated in Southampton, Long Island.

Before Bobb's new approach to art making, the British artist, Dick Higgins had in 1964 brought to fore, a call to new approach to film art making. This new approach was termed by Dick as 'intermedia'(Zuras, 2010) which in my view, means series of media working together towards a common purpose – creation of greater impact.

So with the coinage, multimedia as first conceptualized by Bobb was used to describe a combination of verbal and visual accompaniment in musical performance. However, Albrino (1966) helped to formally introduce the concept 'multimedia' in journalism literature where he writes that Bobb Goldsteinn's "the 'Light works' is the latest multimedia music-cum-visuals to debut as discotheque fare".

Over time, the conceptualization of multimedia has undergone series of evolution to assume the present status. For instance, way back in the 1970s, any presentation that used a multi-projector timed to an audio track was viewed as a multimedia channel. But in 1993, the idea changed. According to Vaughan (1993:3), the idea of multimedia changed to "any combination of text, graphic art, sound, animation, and video that is delivered by computer". Vaughan (1993) further adds:

> When you allow the user – the viewer of the project – to control what and when these elements are delivered, it is *interactive media.* When you provide a structure of link elements through which the user can navigate, interactive multimedia becomes hypermedia.

Since then 'multimedia' has gained global attention - a common word in computer assisted communication that explains electronically delivered interactive communication that combine images (still and motion), audio, text, and graphics in a single communication experience. The concept became so ubiquitous in the 1990s to the extent the German Language society, *Gessllschaft fur deutsche Sprache,* recognized it as the "1995 word of the year" for being 'the central word in the wonderful new media world"(*Variety,* 1996).

3.2: The Nigerian Experience

Since its epoch, multimedia technology-cum-communication has been in greater use in Nigeria in recent time. However, most multimedia and journalism literature in Nigeria were silent as to when multimedia communication experience debuts in the country. What really dominated the literature as far as advancement in communication technology is concerned

were the facts about the introduction, application/uses and consequences of Information and Communication Technologies (ICTs). Emphases were therefore placed on telecommunications and computer assisted communications like the internet.

However, this apparent oversight does not mean that multimedia communications do not thrive in Nigeria. Late 1990's for instance, witnessed a harvest of wide application of multimedia in virtually all facets of human endavours in the country. Today, multimedia applications thrive well in almost every professional practice to include journalism, medicine, advertising, public relations, academic etc. The entertainment industry particularly, the music and other performing arts spheres are not left out. In fact, most live shows now thrive on the use of multimedia technology to the extent that holds great promise for the future.

Journalists in particular are making optimum use of multimedia approach to enhance the quality, aesthetic and credibility of their news reports. The technology offers practitioners wide latitude of opportunity to effectively combine text, audio, video, and graphics contents in a single communication experience. And these to a large extent, enhance news worthiness, acceptability and credibility by the audience members. In the broadcast industry, for instance, Nwodu (2009:158) writes:

> …the in thing now is digital broadcasting which allows for the transmission of audio, video, and other data without distortion or errors, since its description is not changed or disturbed by factors such as noise. Digital broadcasting is considered more fashionable than the rather very drab analogue system in view of the fact that it delivers well-defined highly qualitative audio and visual signals in addition to having the potentials for carrying wide range of multimedia services.

In fact, most broadcast stations in the country today have gone digital except some state owned stations that still operate on analogue. The same is the case with print media. Suffice it to say is the words of Fab-Ukozor (2009:146) that:

> … computer has simplified the cumbersome structure of editorial organization. Reporters today can write, typeset and send their stories to the editor using the computer.

4.0: Conclusion

Technology, no doubt is moving towards convergence and interactivity. This movement obviously has some implication in the multimedia training and professional practices. Multimedia technology (and communications) is one of such technologies that have affected the practice of journalism. We may not appreciate how these technologies impact on professional practices without understanding the origin. This is simply the purpose this unit is meant to serve.

5.0: Summary

We discussed here brief history of how multimedia concept began. Precisely, the concept was traced to a singer, Bobb Goldstainn who used the concept to describe his studio light works that added glamour to his musical performances. Also discussed here is a brief and the Nigerian situation with reference the epoch of multimedia uses in Nigeria.

Self Assessment Examination

Briefly explain multimedia experience in Nigeria.

6.0: Tutor-Marked Assignment

Discuss the history of the concept, multimedia.

7.0: References/Further Reading

Albrino, R. (1966) Goldstinn's Lightworks at South Hampton, *Variety*, August 10, Vol.213 No. 12 p.13 retrieved 07-10-13.

Fab-Ukozor, T. (2009) ICTs and Print Media Development: Newspaper in Perspective; in D.E.J. Konkwo (ed.) *Mass Communication in the Emergent Information Society;* Owerri: Alphabat Nigeria Publishers.

Nwodu, L. C. (2009) Mass Communication In An Era of ICTs-Induced Globalization: The Nigeria Experience in D.E.J. Konkwo (ed.) *Mass Communication in the Emergent Information Society;* Owerri: Alphabet Nigeria Publishers.

Variety, (1996) January 1-7; p.5 (07-10-13)

Vanghan, T. (1963) *Multimedia: Making it Work;* Berkeley: Ostorne / McGraw-Hill.

Unit 2: Definition and Explanation of Multimedia

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: Definition of Multimedia

    3.2: Issues Arising From the Definition

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

It is germane to begin this unit of multimedia elements and theory with clear understanding of the meaning of multimedia. This is necessary in view of the fact the peculiar nature of multimedia technology marks it out from other media genre known to you as students. This unit is therefore meant to expose you to the meaning and essence of multimedia communication.

2.0: Objective

At the end of tutorials in this unit, you will be expected to learn:

  ➢ Technical and definition of multimedia.
  ➢ Clear explanation of the technical/working definition multimedia.

3.0: Main Content

3.1: Definition of Multimedia

The term, multimedia ranks among the most essential offerings of Information and Communication Technologies (ICTs.) which Nwodu (2007) describes as the marriage of computer and telecommunications. Multimedia are therefore an aspect of ICTs that combines sound and visuals to deliver a message. It a product of "processing and presentation of information in a more structured

and understandable manner using more than one medium…"(Adum and Ekwugha; 2011:1).

Ilicheva (2009) perceives multimedia environments as consisting of "verbal and visual representations that if appropriately processed allow for the construction of an integrated mental model of the content". Multimedia environments therefore involve the integration of verbal and visual representations which when properly processed allow for effective mental depiction of the content.

3.2: Explaining the Definition

Implicit in the above definition is that a communication experience cannot easily pass for multimedia communication unless it is integrated with multiple contents in a communication exposure. By implication, a multimedia content often combine sound (music and other sound effects), text (written words of different styles) and visuals (graphics or animation, video and graphs or illustrations) in a single communication encounter.

This explains why Adelabu (2011:23) identifies multimedia tools as digital camera, digital phones, ipod and sundry technologies. The import is that the on-going transition from analogue to digital communication technologies is the driving force behind multimedia technology. With the digitalization of information and data, it has become possible to combine different forms of information (text, graphics, illustrations and images) together in a single communication experience.

The essence of multimedia approach to communication and or information sharing therefore is to facilitate audience ability to "view moving pictures, listen to sounds and read the report simultaneously" (Adelabu; 2011:23).

4.0: Conclusion

Global information and communication flow is undergoing intensive digitalization. This phenomenon is highly desirable. It is considered desirable given that it allows for multimedia approach to information and communication sharing across parts of the world. You therefore need depth knowledge of the concept and rudiments of multimedia to benefit from the wide latitude of opportunities offered by the technology.

5.0: Summary

This unit dealt with multimedia as a concept. In line with the objectives of the unit therefore, the definition of multimedia as key concept in this course was

treated and explained. The essence is to further equip you with basic knowledge of multimedia elements.

6.0: Tutor-Marked Assignment

Define and explain the concept, multimedia.

7.0: References/Further Reading

Adebayo, O. (2011) "One Hundred and Fifty Years of Journalism in Nigeria: Embracing Online and Multimedia Challenges" in D. Wilson (ed.) *Communication for Social Change and Development;* Uyo: ACCE Nigeria.

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Unit 3: Nature of Multimedia

CONTENT

1.0: Introduction

2.0: Objective

3.0: Main Content

      3.1: Text

      3.2: Graphics

      3.3: Animation

      3.4: Audio

      3.5: Video

      3.6: Interactivity

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

The definition of multimedia as stated in unit 2 above clearly suggests that multimedia deals with integrated content – a combination of verbal, visual and graphic contents in a single communicative exposure. This therefore clearly defines the nature or elements of multimedia. This unit therefore, is designed to teach you those elements that make multimedia unique form of communication. It is importance to note that the nature of multimedia as will be discuss here is the same as the elements of multimedia. Hence the two terms will be used interchangeably as they are treated as the same in this context.

2.0: Objective

At the end of tutorial in this unit, you will able to know:

    ➢ Various elements of multimedia.

> ➢ How the element impact on information sharing.

3.0: Main Content

3.1: Text

Text is one of the major elements or nature of multimedia. Text in this context refers to letters a, b, c, and so on. Letters are used to form words and words in turn, are used to form sentences that convey information in hand or type written form. In the multimedia journalism context, letters can be manipulated to achieve varying effects. It can also be used to emphasize, clarify and or beautify news and or information presentation by:

- ➢ Varying the type face
- ➢ Using a particular or combination of type sizes
- ➢ Using different colours
- ➢ Achieve varied effects like making the text to bounce, shadow, fade, blink or shaky depending on the desired effect.

3.2: Graphics

Multimedia also allows for the use of graphics in multimedia presentation. In this case, graphics like charts, photographs and drawing are used to digitally present news and information in a manner that enhances comprehension and appreciation of the news and information presented. Graphics representation often helps to reduce the number of text used in a message because it often allows for instanenours and vivid relay of information more than text. In essence, graphics also tell stories on their own with or without textual elements.

3.3: Animation

Animation is a form of virtual reality. It creates an illusion that still pictures and graphics can actually move. It is usually packaged in a manner that inanimate objects do actually move in virtual reality. This is what happens when the audience members watch cartoons. Here series of drawings are virtually animated to the extent they appear to audience members as images that can walk, run, fly, talk and do other things normal human beings do in real physical world. Animation therefore works better in multimedia broadcast journalism as it affords practitioners opportunity to emphasize news presentation by manipulating the inanimate objects.

3.4: Audio

The audio aspect of multimedia environment refers to the use of sound and speeches in communication – communications that appeal to sense of hearing. It could be music, spoken words, and other sound tracks. According to Adum and Ekwugha (2011;p.3) "audio for multimedia could be obtained by capturing the sound using a microphone, CD-Rom, radio, musical device or any other audio input device that is plugged into a port on a sound card". In multimedia environments, sound could be used to achieve a number of effects to include:

➢ Speech

➢ Audio effects like applause, booing, shouting, clapping, singing, etc.

➢ Ambient or background sound like the roaring of sea, closing and opening of the door, dashing object on the floor, groaning, screeching of car tier, etc.

➢ Music which is rhythmic organized sound embellished with words arranged with song.

3.5: Video

Video in this context is "photographic images that are played back at speed of 15-30 frames per second and provide the appearance of full motion" (Adum and Ekwugha; 2011:3). It differs from graphics in that here, real photographs of the objects are taking while in motion. The photographs which are captured while in motion are first digitalized if taken by analogue device. But where digital camera was used in capturing the scene (or images) they do not need further digitalization that follows thereafter. Next is the editing of the captured images. Editing here is facilitated by the use of special video production devices (hardware and software). These devices allow for screen blending of different multimedia contents in a single presentation. In other words, it allows for the incorporation of text, sound and image in a harmonious manner that provides eye and ear comfort during the news presentation.

3.6: Interactivity.

Interactivity is certainly one of the major directions of communications development. According to Williams and Sawyer (2003:20) interactivity is about two-way communication; a user can respond to information he or she receives and modify the process". The scholars further agree that:

…there is an exchange or dialogue between the user and the computer or communication device. The ability to interact means users can be active rather than passive participants in the technological process.

The interactivity nature of multimedia journalism therefore allows the audience to effectively participate in shaping media content. In recent times, most broadcast stations can be tracked through internet-based softwares like the *twitters, Youtube, facebook*, etc. Audience members can explore any of these to receive radio or television signals as well as make input in a radio or television news progamme.

4.0: Conclusion

Multimedia as the name implies, serve multiple purposes. It combines many features to shape a single communication experience. These features, nature or elements as discussed in this unit are text, audio, images, video, animation and interactivity. Students should strive to master these elements of multimedia and how they function.

5.0: Summary

This unit treated various aspects of the elements of multimedia as part of the basis of multimedia study. From the discussed elements, it is obvious that multimedia is mainly associated with electronic devices.

6.0: Tutor-Marked Assignment

Identify and explain the six basic elements of multimedia.

7.0: References/Further Reading

Adum, A. N. and Ekwugha, U. P. (2011) "Multimedia Literacy: A Communication Imperative for a Developing Society: in D. Wilson (ed.) *Communication for Social Change and Development;* Uyo: ACCE Nigeria.

Williams, B. K. and Sawyer, S. C. (2003) U*sing Information Technology: A Practical Introduction to Computers and Communications Boston: McGraw-Hill.*

Unit 4: Advantages and Uses of MultiMedia

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: Multimedia and Advertising practice

    3.2: Multimedia and Public Information

    3.3: Multimedia and Entertainment

    3.4: Multimedia and Education

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Every media technology or content has a unique purpose it serves. So it is with multimedia technology and its combination of contents. This unit is therefore designed to briefly teach you some of the advantages of multimedia as they pertain to mass communication practice.

2.0: Objective

At the end of tutorial in this unit, you should be able to know the benefits of multimedia journalism.

- ➢ Multimedia applications
- ➢ Uses of Multimedia

3.0: Main Content

3.1: Multimedia and Advertising practice

Advertising is a professional practice that involves the production of advertisement, - that is, commercial message. Most advertisements are usually packaged with combination of textual and graphic contents. By implication, a piece of advertisement meant for broadcast medium usually requires speech,

sound and demonstration and these are at the root of multimedia communications. Multimedia therefore help to facilitate the work of advertising professionals particularly those in creative department of advertising agencies. Multimedia therefore helps to combine spoken and written words; graphics and any form of demonstration (no matter how dangerous) into a single simulated advertisement that can appeal to the target audience members' sense of reality. Multimedia technology has enhanced advertising practice by enabling the simulation of demonstration that are impossible in real life most possible.

3.2: Multimedia and Public Information

Research evidence has shown that modern media consumers are becoming more active than before (Nwodu, 2006:73). This has serious implication in public information packaging and delivery. Targets of public information delivery now need facts to convince them that the content of public information is authentic and credible. For this reason, public information is no long embellished with rhetorics or words alone. It is now rooted on verifiable data, facts rather than fiction or prose-like verbal presentation. It is often presented with good blend of verbal, graph, charts, and maps (where necessary). Multimedia has made the combination of all these not only possible but also interesting and with less friction.

3.3: Multimedia and Entertainment

One of the boring aspects of the global economy in modern times is entertainment. Citizens of the world are fast realizing the importance of getting entertained, escape from the ordinary and avoid much stress. The entertainment industries are not oblivious of this development. In Nigeria today for instance the industry is booming to the extent different genre of entertainment are booming. Multimedia has helped and is still helping to add glamour to entertainment production. With multimedia, the entertainers can now achieve different kinds of effects including making an object appear larger, fly or give impression of a ghost depending on the kind of effect desired. With multimedia's ability to create virtual reality, the unimaginable can be created and made to appear real before the targets.

3.4: Multimedia and Education

Scholars have over the past two decades found strong link between multimedia and learning. Ilicheva (2009:3) for instance found that "students learning is greatly enhanced when each student's prior knowledge is made visible (that is, cued from long term memory into working memory. It is at that point the

student has the opportunity to correct misconceptions built on prior knowledge, and create schemas of understanding around a topic".

The implication is that through multimedia communications students tend to deepen their knowledge of a subject. The communication therefore offers a window of opportunity to organize relevant facts, theories and applications that ended a topic or course in a graphic presentation that enhance learning. Education is therefore made easy by organising ideas into a graphic framework or schema. The in thing is simply: students learn from words and pictures than from words alone (Ilichera, 2009:4).

4.0: Conclusion

Multimedia communication serve a lot of functions in various field of learning and professional practice that the advantages and applications cannot be exhausted in a unit. Suffice it to say in the words of Adum and Ekwugha (2011:5) that multimedia communication have the potential of increasing productivity and efficiency by reducing unproductive travel time, preventing meeting days, creating shorter and more structured meetings, allowing for greater reach of a message since individuals can obtain information when it is convenient for them, and faster exchange of information.

5.0: Summary

This unit discussed the advantages of multimedia communications. Since, the advantages cannot be exhausted in a volume, what we have done is to explore the advantages with particular reference to media practice and learning. The unit therefore discussed the relevance of multimedia in the areas of advertising, public information, entertainment and education.

6.0: Tutor-Marked Assignment

Mention and discuss the relevance of multimedia in media practice.

7.0: References/Further Reading

Adum, A. N. and Ekwugha, U. P. (2011) "Multimedia Literacy: A Communication Imperative for a Developing Society: in D. Wilson (ed.) *Communication for Social Change and Development;* Uyo: ACCE Nigeria.

Ilicheva, S (2009) "Cognitive Functions of Multimedia Learning" www.nationalresearchuniversityofinformation.com 25/09/13.

Nwodu, L.C. (2006) Research in Communication and other Behavioral Sciences; Enugu: Rhyce Kerex Publishers.

Williams, B. K. and Sawyer, S. C. (2003) U*sing Information Technology: A Practical Introduction to Computers and Communications;* Boston: McGraw-Hill.

MODULE 3: THEORIES OF MULTIMEDIA

Broadly defined, a theory is a "set of interrelated generalizations, combined in such a way that they form a logical system of explanation in which one generalization does not contradict another" (DeFleur et al, 1971:196). It is simply a "set of related propositions that presents a systematic view of phenomenon by specifying relationship among concepts" (Wimmer and Dominick; 1987:11). A good theory should clearly explain why a particular concept should behave in a particular way. This is why Griffin (1991:4) argues that "a good theory explains an event or behaviour. It brings clarity to an otherwise jumbled situation. It draws order out of chaos".

A good theory must therefore clarify confusing situations. It should of necessity, "ventilate a situation or event that appears nebulous to the extent that would guarantee concrete, precise and detailed understanding of the situation or event" (Nwodu; 2006:32). In this module therefore we shall be discussing theories that are related to our understanding of multimedia communications. In order words, various units that sum up the module will treat one form of multimedia theory or the other. The module shall therefore discuss the following units.

Unit 1: Paivio's Dual Coding Theory

Unit 2: Baddeley's Working Theory

Unit 3: Engelkamp's Multimodal Theory

Unit 4: Sweller's Cognitive Load Theory

Unit 5: Mayer's Multimedia Theory

Unit 6: Some Communication Theories Relevant in Multimedia Journalism Practice

References

DeFleur, M. L.; D'Antonio, W. V.; and DeFleur, L. B. (1971) *Sociology: Man in Society;* Illinois: Scott, Foresman and Company.

Griffin, E. A. (1991) *A First Look At Communication Theory*; New York: McGraw-Hill, Inc.

Nwodu, L.C. (2006) *Research in Communication and other Behavioral Sciences*; Enugu: Rhyce Kerex Publishers.

Wimmer, R. D. and Dominick, J. R. (1987) *Mass Media Research: An Introduction;* California: Wadsworth Publishing Company.

Unit 1: Paivio's Dual Coding Theory

1.0: Introduction

2.0: Objective

3.0: Main Content

   3.1: Background of the Theory

   3.2: Major Postulations of the Theory.

   3.3: Paivio's Dual Code Theory and Multimedia

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Multimedia theories according to Ilicheva (2009), provide empirical guidelines that may help us to design multimedia instructions and more effectively. This unit is designed to teach you one of those theories that help us to understand how multimedia communications work. The theory we are going to discuss in this unit is called Paivio's Dual Coding.

2.0: Objective

Tutorials in this unit, it is hoped will equip you with:

   ➢ Knowledge of the theory.
   ➢ How it applies to multimedia experience.

3.0: Main Content

3.1: Background of the Theory

Theories do not emerge from the moon. Every theory therefore must have somebody or group of individuals who theorize it. The same is the case of Dual Coding Theory. The theory is one of the theories that are grouped under multimodal theories otherwise called theories of cognition.

The proponent of the theory is Allan Paivio – the reason it was named Paivio's Dual-Coding theory. The theory is concerned with the clarification of how visual and verbal information are processed and presented in most meaningful manner.

3.2: Major Postulations of the Theory.

Paivio's Dual-Coding theory as earlier mentioned emphasizes the process of information processing with particular reference to visual and verbal contents. According to Ilicheva (2003) the theory postulates that:

> …both visual and verbal information are processed differently and along channels with the human mind creating separate representations for information processed in each channel.

Sorden (2005) adds that both visual and verbal codes that represent given information often serve as a veritable tool for organizing incoming information into a body of knowledge. By extension, the body of knowledge can be acted upon, stored and retrieved for further use.

3.3: Paivio's Dual Code Theory and Multimedia

We have noted in module 2 that multimedia combine different forms of information (visual, verbal, graphics etc) in a signal communication experience. This theory therefore helps to explain how best to use multimedia elements to achieve and or enhance meaning.

In deciding verbal cue that will combine with visual element in a given multimedia communication, the message designers or encoders of necessity, need to carefully select visual cue or codes that blend with the verbal cue or codes. In other words, there should be agreement between the visual code and the corresponding verbal code to make meaning or clearly understandable representation.

It is also pertinent to note that in combining verbal and visual codes to represent an idea, the encoder must carefully ensure that he/she knows where the limitations lye. This is because if the verbal and visual cues or both

become multiple, they will certain confuse the audience by confounding rather than enhancing the meaning.

The coding of both the verbal and visual cues must therefore be in measures that are commensurate. This is the only way, according to the theory one can achieve clarity in multimedia communications. Buttressing this point, Ilicheva (2003) says "humans have difficulty simultaneously attending to multiple auditory or visual cues, depending on expertise, with the task or prior knowledge with the subject area". The theory therefore presupposes that, to match a word with visual element the word and the visual will represent similar idea not opposing idea. For instance, the words 'burning fire' should best be visually represented in a multimedia news package with 'ferocious tongue of fire' only to be effective.

By the time it is combined with tongue of fire and amber of fire, you create multiple cues that may blur the intended meaning and by so doing, confuse your audience. The knowledge of this theory therefore, will help multimedia journalists to fathom how to choose appropriate words to vividly describe a situation and how to blend such words with suiting and corresponding visuals that aid audience news consumption and appreciation. When the visual and verbal elements correspond rather than contradict each other, the multimedia news becomes appealing, interesting and impactfull to the extent the audience what to learn most from the news and information..

4.0: Conclusion

Learning becomes an interesting exercise when representations of abstract ideas are made vivid, concrete and exciting. So it is with news item that is properly garnished with visual and verbal elements that fit and or correspond. Multimedia communications try to make abstractions vivid rather than vague. As such, dual coding of an idea in terms of visual and verbal representation, no matter how abstract they may seem, should be well organized in such a way that when the idea sticks, it can become an identifiable, easy to store and retrievable knowledge. This is the main thrust of dual coding theory.

Self Assessment Exercise

Explain the background to Paivio's Dual Coding Theory.

5.0: Summary

This unit discussed the background and major postulation of Paivio's Dual Coding theory. It is also discussed how the theory applies to multimedia communications and journalism.

6.0: Tutor-Marked Assignment

Discuss the major premise of Paivio's Dual Coding theory pointing out its relevance in multimedia communications and journalism practice.

7.0: References/Further Reading

Ilicheva, S (2009) "Cognitive Functions of Multimedia Learning" www.nationalresearchuniversityofinformation.com 25/09/13.

Sorden, S.D. (2005) A Cognitive Approach to Instructional Design for Multimedia Learning; *Informing Science Journal,* 8, p 263-279.

Unit 2: Baddley's Working Theory

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: Introducing the Models

    3.2: Main Thrust of the Model.

    3.3: Lessons from the Models

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

A model according to Summers et al (1998:917a) is a "simple descriptions of a system or structure that is used to help people understand similar systems or structures". To Deutsch (1952:356) it is a "structure of symbols and operating rules which is supposed to match a set of relevant points in an existing structures or process". You may therefore ask: why the inclusion of this model in a module meant to discuss theories of multimedia? The question becomes relevant considering the fact that models differ from theories.

However, the inclusion of the model in this module is justified given that both theories and models help us to understand a very complex phenomenon or process. While models use simple abstraction to offer symbolic description of a concept and/or a natural phenomenon, a theory offers an explanation of the relationship that exist among the concepts (Nwodu, 2006). It is for this reason that this unit is designed to discuss Baddley's Model of work memory to enhance our understanding of multimedia communications.

2.0: Objective

At the end of tutorial in this unit, you should be able to explain:

- ➢ What the model is all about.
- ➢ How the model applies to multimedia communication experience.

3.0: Main Content

3.1: Introducing the Model

The proposition of working memory model began in 1974. Then, Alan Baddle and Graham Hitch tried to capture in more concrete term, the short-term memory. The interest was primarily to fathom what can make communication content memorable in the short-term. In other words, emphasis was on how to make given communication impactful to the extent the targets can memorise the content within few moments of exposure. The search for the how therefore, led to the evolution and validation of what we know today as Baddley's working model which we are going to discuss below.

3.2: Main Thrust of the Model.

On daily bases, people get exposed to numerous and diverse communication contents. Incidentally, not all the content one gets exposed to that is stored. Certain things can make news or a bit of information to be unique to the extent the content can be easily memorized faster than other contents. Baddley and Hitch's original model aimed at understanding what makes a message content more memorable than the others. The model is therefore composed of three major components. These components are:

i. The central executive which, acts as supervisory system and controls the flow of information from and to its slave system (Ilicheva, 2003). The scholar further argues that the slave system in this context "are short-term storage systems dedicated to a content domain (verbal and visual-spatial, respectively).

ii. The phonological loop which is concerned with the verbal content of the information and the visual-spatial sketchpad which refers to the visual element representing the information.

iii. The episodic buffer which explains the experimental findings with the dual-task model. The emphasis here is on performance. Thus, the performance of two simultaneous tasks based on two separate perceptual domains - visual and verbal tasks are to large extent as efficient as when each of the performances is done in isolation of the other.

3.3: Lessons from the Model

The implication of the model is clear. It simply means that perceptual domain is very important in making given information memorable. The import in the context of multimedia communications therefore is that in designing an information that require verbal and visual spatial slaves (codes), the designer must ensure that the perceptual domain of each of the codes must vary. When the perceptual domain of the verbal content varies from the perceptual domain of the visual content, the performance level will be high to the extent that would enhance memorability.

However, where the perceptual domain for the verbal element and the visual element are the same, the efficiency in performance will be low. Baddley (2003) therefore submits that when people are made to carry out two tasks simultaneously using the same perceptual domain, performance is less efficient than when performing the tasks individually.

The lessons derivable from this model as far as multimedia communication is concerned are:

i. Designing multimedia content that combines verbal and visual contents require that each of the contents should reinforce rather than contradicting each other.

ii. If the two tasks are to be carried out simultaneously, then there is need to weave different perceptual domain around them to enhance efficient performance and by extension, achieve higher message or information memorability.

The implication of the above is that visual and verbal contents of multimedia communications should be used in a manner they would complement each other. This is done by ensuring that each element tells specific aspect of the same story in a manner that complements the other rather than repeating and or contradicting each other. If for instance, the verbal element tells the story of project commissioning by the President, the visual element should simply show the President cutting the tape as a dipiction of actual project commissioning.

4.0: Conclusion

According to Nwodu (2006:20), by pointing out the similarities and linkages or combinations between organized data (information), a model helps in drawing attention to a phenomenon that is until hitherto, not perceived. Thus,

Baddley's working memory model ranks among the models that have helped our understanding of abstract ideas around us. No doubt, it has helped us to understand how communicative tasks (verbal and visual) combine to bring out efficiency in performance via different perceptual domains.

Self Assessment Exercise

Explain the differences and similarities between theory and model.

5.0: Summary

This unit discussed Baddley's working memory model. In doing this, the meaning of model; the main thrust of Baddley's working model; and the lessons derivable from the model were discussed.

6.0: Tutor-Marked Assignment

Explain the three components of working memory model and stress the implications in multimedia journalism practice.

7.0: References/Further Reading

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Unit 3: Engelkamp's Multimodal Theory

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: The Theory

    3.2: Implication of the Theory to Learning.

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Most multimedia theories focus greater attention to explaining the interface between words and pictures. Emphasis therefore was more on how to combine visual and verbal elements to enhance meaning and learning and by extension, news appeal. Engelkamp's multimodal theory is however, concerned with capturing the missing link. This missing link is action. The theory therefore is concerned with explaining role actions (demonstrations) play in instructions and learning? This is the essence of this unit.

2.0: Objective

Tutorial in this is designed to equip you with:

- The theoretical underpinning of multimodal theory.
- The impact of the theory on learning and communications.

3.0: Main Content

3.1: The Theory

According to Reed (2006:90) "the role that action plays in instructions has been understanding and is only recently attracting(sic) greater interest among cognitive scientists". Engelkamp is one of the cognitive scientists that is well attracted to this aspect of inquiry.

Engelkamp's multimodal theory therefore provides well informed theoretical insight into clear understanding of the relevance of action in instructions and information sharing as well as retention. According to Engelkamp (1998) media content that is embellished with actions tend to stick in the memory more than the one that merely emphasizes words and pictures. After series of empirical studies on the subject, Engelkamp (1998) concludes that action (enactment) gains far superiority over other conditions of instruction. He identifies such actions as but not limited to the following:

➤ Short versus long lists.
➤ Pure versus mixed lists.
➤ Real versus imaginary objects

Engelkamp's experimental work on multimodal theory according to Reed (2006:90) therefore consisted of presenting participants with a list of 12 to 48 action phrases such as 'nod your head' or 'bend the wire' followed by the free recall phrases, the action calls for acting out the phrases.

Simply put, the theory emphasizes that verbal and visual input to learning are facilitated by enactment (action). The theory therefore helps us to understand "the relation of verbal and visual input to enactment and to the conceptual system (Reed; 2006;90). This is illustrated below.
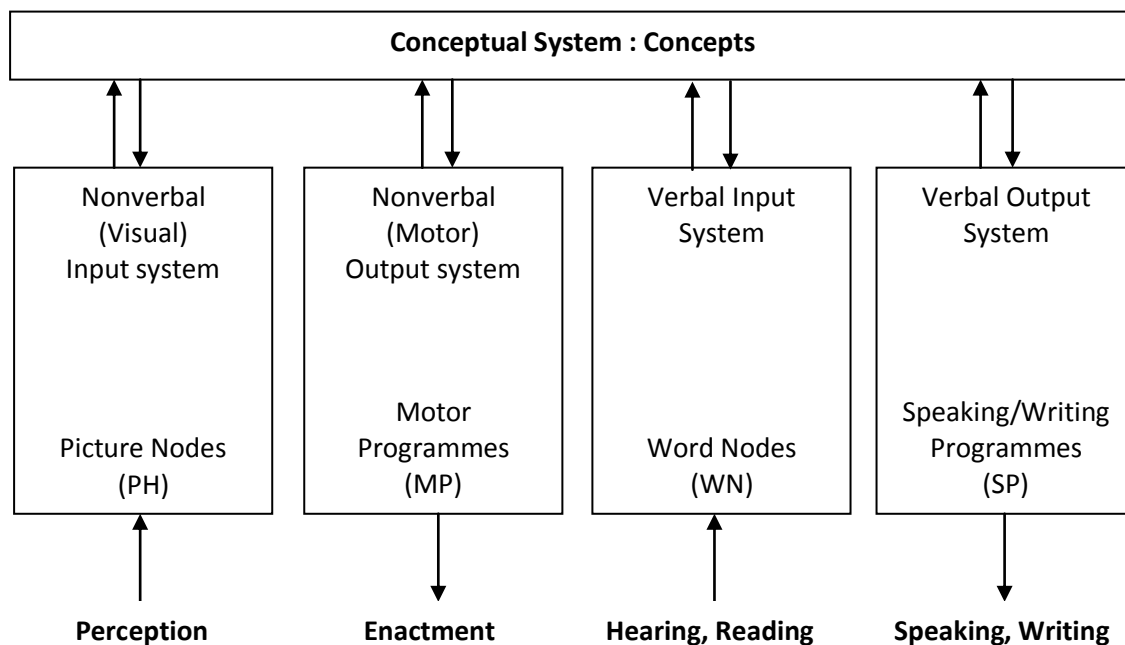

Figure 1: Illustration of Engelkamp's Multimedia Theory (Source: Engelkamp: 1998:36).

3.2: Implication of the Theory to Learning

Figure one above offers a graphic picture of Engelkamp's multimodal theory. It simply shows that multimodal theory operates on two differing input and two differing output systems. Reed (2006:90) puts it more succinctly where he says that the theory differentiates between two modality - specific entry systems and two modality-specific output system. Reed (2006) further adds:

> The two input system consist of the visual system (pictures, object, events) and the verbal system that are inherent in the other architectures. The major new contribution is the relation of verbal and visual input to enactment and to the conceptual system.

The theory relates more to learning and comprehension. The implications of the theory to learning and comprehension therefore are that enactment increases:

i.   Ability to recall with easy because of the motor-movement similarities of the enactive clustering.

ii. Clarification of semantic similarities of conceptual clustering (see Reed; 2006; Koriat and Pearlman-Avnion, 2003).

By implication, the visual movement must be compatible and consistent with the actual action phrase expressed in order to be effective. For instance, there will be confusion if the action phrase "close the door" and the motor-movement is showing someone "opening" rather than "closing" the door.

The implication of the theory therefore is that meaning of any action phrase can easily be clarified, emphasized, deepened and recalled if the motor-movement (that is action taken) is consistent with the command. The implication of the theory to multimedia journalism practice is clear. In blending visuals and verbal components of news contents, multimedia journalists must not ignore to emphasize the action component. In reporting fire incident for instance, it will not be enough to just report that a house was gutted by fire and simply show the house being ravaged by fire. The story will be the memorable if the multimedia journalist is able to capture action being taken to put off the light. That if captured will make the story more memorable.

4.0: Conclusion

Journalistic writings require lots of clarity, precision and accuracy. When this is the case, piece of writing when published or aired will certainly boost audience understanding and believability of the story. Knowledge of Engelkamp's multimodal theory is therefore relevant for multimedia journalism writings in that such knowledge is required to blend verbal and visual story elements in such a way it can play up the actions that embed the story. This will no doubt, enhance audience interest in the story and by extension, make the story memorable.

5.0: Summary

This unit discussed multimodal theory of multimedia. In consonance with the purpose of the unit, the major premise of the theory and its implication to learning was discussed and illustrated.

6.0: Tutor-Marked Assignment

Explain Engelkamp's multimodal theory stressing the theory's importance to learning vis-à-vis journalism practice.

7.0: References/Further Reading

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Unit 4: Seller's Cognitive Load Theory

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

   3.1: Understanding Cognitive Load Theory

   3.2: The Theory

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Paivio, Baddley and Engelkamp's works discussed in the previous units of this module have some implications to instructions. Sweller's cognitive load theory represents a conscious effort to articulate the instructional implications of the work. This unit therefore discusses Sweller's cognitive load theory with emphasis on its instructional implications.

2.0: Objective

After tutorial in this unit, you are expected to learn more about

   ➢ -   The Theory
   ➢ -   Its instructional implication

3.0: Main Content

3.1: Understanding Cognitive Load Theory

The theory offers understanding of the instructional implications of a limited – capacity working memory. Cognitive load according to Ilicheva (2003) therefore is "a term that refers to the load on working memory during instruction". Continuing, the scholar identified the main or purpose of

instruction as teaching learner's problem solving skills, thinking and reasoning skills (including perception, memory, language etc).

By implication, cognitive load theory is a theoretical construct that explains among other things, how to aid learners to develop informed skills with particular reference to:

   i.   Learning superior skills for solving tasking problem.

   ii.   Learning superior skills for thinking out bright ideas that help to solve communication problems.

   iii.   Learning superior skills for proper reasoning – that is developing sense of logic.

3.2: The Theory

The theory according to Sweller cited in Ilichera (2003) has two major postulations with reference to instructional techniques and information processing. These major postulations are:

   (i)   That cognitive load is reduced by the use of dual mode (visual-auditory) instructional techniques; and

   (ii)   That the limited capacity of working memory is increased if information is processed using both the visual and auditory channels.

The import according to Paas, Renki & Sweller (2003) is that cognitive load theory is designed to provide guidelines aimed at assisting in the presentation of information in such way that enhanced learner activities and by so doing, optimize intellectual performance. To facilitate learning therefore the use of schemas are considered veritable tools or unit of analysis for the design of instructional materials.

According to Ilichera (2003) intrinsic, extraneous, and germane cognitive loads form an equation in which the sum total of the three cannot exceed working memory resources if learning is to occur. It is on this strength that the theorist isolates several instructional design techniques imperative for effective information processing based on cognitive theory.

In accordance with the instructional design principles therefore, Sweller (2005) maintains that design whether visuals or audio or both should be structured to achieve specific effects. These effects include but not limited to:

i.   Goal-Free Effect – the instructional must be designed to achieve intended goal.

ii. Worked Example Effect – it should be meant to demonstrate a given action capable of facilitating learning.

iii. Completion Problem Effect – the design must be a complete work plan capable of solving specific work problem.

iv. Split-Attention Effect – It must have diverse attention getting devices.

v.   Modality Effect – Modes of presentations must agree, that is, be in harmony with each other.

vi. Redundancy Effect – It must be capable of repeat exposure.

vii. Variability Effect – Information to be processed must vary e.g. visual, verbal and textual codes.

The import is that multimedia journalism site(s) must show case varied information that is capable of meeting diverse audience members' information needs. The information should also be able to achieve different kinds of effects on the audience members. This is true given that as the audience members as differ in their needs and taste, so their information needs differ. This is in line with the theory of uses and gratifications.

4.0: Conclusion

When properly processed and reinforced with matching instructional schemas, information can enhance learning. By implication, the rate of learning is enhanced when instructional materials and schemas are properly designed and presented. This is so since such design can easily linger in the minds and memories of the learners. Learners therefore easily forget what they learnt when nothing about what they learnt strike their memories. To make learning interesting and memorable therefore, instructional materials should be designed to achieve specific or combination of effects as discussed in this unit.

5.0: Summary

This unit treated one of the instructional theories of multimedia. Precisely, it discussed Sweller's Cognitive Load Theory. In consonance with the object of

the unit, theoretical postulations and the implications in information processing were discussed and explained in details.

6.0: Tutor-Marked Assignment

Cognitive Load Theory refers to the load on working memory during instruction. Explain this taking into consideration, the thoretical premise and its effects on Information processing

7.0: References/Further Reading

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Unit 5: Mayer's Multimedia Theory

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Mayer's Multimedia Theory is also called Cognitive theory of Multimedia Learning (CTML). In fact, most multimedia literature use the later name more often than the earlier one. The theory tries to explain the Science of learning and the Science of instruction. While the Science of learning is concerned with explaining how people learn, the Science of instruction explains how to design effective didactic instructional material.

2.0: Objective

At the end of tutorial in this unit, you should be able to:

➢ Be familiar with the main postulation of the theory.
➢ Be familiar with the key concepts eminent in the theory.

3.0: Main Content

3.1: Basic Assumptions of Multimedia Theory.

The cognitive theory of Multimedia Learning is hinged on three basic assumptions which are:

i.   The information process flows in two separate channels. The channels are auditory for verbal and sound related information, and visual for all that appeals to the sense of sight.

ii.   Each channel has limited capacity which implies that each channel is structured by nature to receive limited or specific information. For instance the visual channel is limited by its very nature to receive verbal stimulus or information and vice versa. This limitation also extends to quantity of information which the working memory can hold at a time, since we retain a chunk of information at a time, we are therefore limited to choose where to allocate cognitive resources.

iii.   Learning involves active engagement which entails active process of filtering information, selecting, organizing and interpreting the information so selected.

3.2: The Principles Underlying the Theory

The Cognitive Theory of Multimedia Principle states that "people learn more deeply from words and pictures than from words alone" (Mayer, 1998:47). By implication, learning is more effective when words combine with pictures than when only words serve as the instructional material.

Mayers (2008) isolates ten principles of multimedia instruction. These principles are further classified into three broad categories which are:

(a) Five Principles for Reducing Extraneous Processing, which are:

1. Coherence Principle which states that people learn better when extraneous materials are excluded from Multimedia lesson.

2. Signaling Principle which states that people learn better when essential words are highlighted in a multimedia lesson.

3. Redundancy Principle which posits that people learn better from animation with narration than from animation with narration and text "except when the onscreen text is short, highlights the key action described in the narration, and is placed next to the portion of graphic that it describes" (highlight added by Mayer and Johnson, 2008).

4. Spatial Contiguity Principle which emphasizes that people learn better when corresponding words and pictures are presented near rather than far from each other on the page or screen.

5. Temporary Contiguity Principle which states that people learn better when corresponding narration and animation are presented simultaneously rather than successively (i.e. words are spoken at the same time they are illustrated in the animation).

(b) Three Principles of Managing Essential Processing, which are:

1. Segmenting Principle which stresses that people learn better when a narrated animation is presented in learner-paced segments rather than as a continuous presentation.

2. Pre-training Principle which states that people learn better from a narrated animation when they already know the names and characteristics of essential components.

3. Modality Principle which emphasizes that people learn better from graphics with spoken text than graphics with printed text.

(c)   Two Principles for Fostering Generative Processing, which involves:

1. Multimedia Principle which states that people learn better from words and pictures than from word alone. This allows people to build connections between their verbal and pictorial models.

2. Personalization Principle which maintains people learn better from a Multimedia lesson when words are in conversational style rather than formal style. If people feel as though they are engaged in a conversation, they will make more efforts to understand what the other person is saying (Wilttrock, 1974; Moremo and Mayer, 2004; and Mayer, Fennell, Farmer and Campbell, 2004).

3.3: Pitfalls of CTML

Cognitive Theory of Multimedia (CTML for short), as seen from the above holds a promise for the use of multimedia in learning and information management. However, the theory is not entirely free from certain pitfalls. Scholars have over time criticized the theoretical principles as having some snags that are considered serious.

Asteleitner and Wiesner (2004) for instance have criticized the theoretical principle as lacking essentially in the area of motivation. The scholars argue that Mayer failed to consider motivational elements as indispensable factor impacting on learning and consequently, affect cognitive load. The contention

is that when people are properly motivated, they are likely to learn more to justify the benefit derived from motivational input.

Another major criticism against the theory is that it concentrated on animation and narrative audio. It therefore failed to consider video and non-narrative audio which are essential elements of multimedia. Based on this snag, Gall and Lohr (2004) doubted the applicability of Mayer's principles of multimedia instruction in other areas even as Reed (2004) raised a concern over the claim that no effort was made to explain the integration process among the theoretical principles.

The numbing questions arising from this apparent lack of explanation for the integration process according to Reed (2004) are:

(i) How the verbal and visual representations are combined with prior knowledge in the working memory?

(ii) Are the two representations merged to either verbal or visual, or does it take some other abstract form?

These snags notwithstanding, it is not in doubt that Mayer's CTML is the most elaborated theoretical framework that helps to explain how multimedia communications enhance learning and information management and diffusion.

Self Assessment Exercise

In spite of the detailed nature of cognitive Theory of Multimedia Learning, experts believe the theory is froth with some snags. Identify and explain the snags.

4.0: Conclusion

Learning is a serious business. Yet, learning can be drab, dull and uninteresting if instructional materials are not well developed and or properly organized. The Cognitive theory of multimedia Learning offers well defined principles imperative for effective teaching and learning. The application of the theory to news and information management therefore will help audience of multimedia communications to appreciate news and information contents that are well narrated and embellished with fitting illustration and pictures.

5.0: Summary

The unit explains in simple language what Cognitive Theory of Multimedia means. It also dealt with the principles of CTML that enhance learning and concludes with the major criticisms against the theory.

6.0: Tutor-Marked Assignment

Identify the ten principles of the cognitive theory of Multimedia Learning and explain the implications of each of the principle to how people learn using multimedia information.

7.0: References/Further Reading

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Unit 6: Some Communication Theories Relevant in Multimedia Journalism Practice

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

 3.1: The Relevance of multimedia theories in Journalism Practice

 3.2: Review of Communication Theories Relevant in Multimedia Journalism

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

We noted at the beginning of this module that theories clarify our understanding of nebulous ideas. So, when we learn theories, we do not learn for learning sake. We learn to understand the philosophy behind a phenomenon. In this unit, therefore, you are going to study the relevance of the multimedia theories already learnt to multimedia journalism practice. You will also learn some communication theories that will help to enhance your knowledge of multimedia communication.

2.0: Objective

At the end of tutorial in this unit, you would have learnt:

> ➤ Uses of Multimedia theories in Journalism practices.

> ➤ Few communication theories imperative for multimedia jouirnalism practice.

3.0: Main Content

3.1: Multimedia theories and Journalism Practice.

Big time print and broadcast stations are fast repositioning their stations to meet global reach, taste and standards. For this reason news reporting has advanced beyond traditional media outlets to the use of new media (including multimedia) to produce and disseminate interesting stories.

Multimedia journalists are therefore, hyper mobile more than the traditional itinerant journalists or reporters know for driving round or combing the town in search of news. Today, multimedia journalists use multimedia enabled tools like digital camera, digital audio and video recorders and WiFi laptop computers to hunt for and package information and images that are news worthy. When they hunt down any, they effortlessly upload the news item and the accompanying images-cum-actions in the reporter's personal or group blogs, from where the audio, visual and textual news spreads.

The implication therefore is that multimedia journalists need to be conversant with theories of multimedia. This is necessary given that it takes clear knowledge of the philosophy behind multimedia communications to be able to design websites and blogs in a manner that will not only allow for the spread of visual, verbal, textual and graphic news and information easily but also making the blogs and websites appealing and attractive to the audience.

Since again, multimedia content is largely consumed online, there is need to ensure that the visual, textual, verbal, graphic and motor (actions) elements that combine to make a single multimedia communication experience are well blended to the extent, none should contradict the other. Knowledge of the theories therefore requires that multimedia journalists should therefore embellish their stories with:

- ➢ Verbal elements that are vivid
- ➢ Visual elements that are clear and fitting
- ➢ Illustrations/graphics that are not boring and drab
- ➢ Actions that are compatible with the visual and verbal elements.

3.2: Some Communication Theories Relevant for Multimedia Communication Experience

It is important to end our tutorial in this module and unit with brief insight into some communication theories that are relevant for multimedia experience. Some of these theories are:

Gate-keeping Theory

The theory according to Nwodu and Nwodu (2012) is traceable to Lewin (1947), a psychologist who studied how the "theory of channels and gate

keepers" affects social change. Although the theory was developed in the area of psychology, White (1950) adapted and applied the theory to the study of news flow in the editorial unit of newspaper organization. The interest was to understand what guides newspaper wire editors' selection of news.

Applied to journalism with emphasis on information flow, the theory presupposes that "a number of stop gates exist in the process of news reporting which potential news events or items must pass through…" (Nwodu and Nwodu; 2012:46). These gates, Nwodu and Nwodu (2012) further emphasize are:

➢ The source who decides on the nature, quality and quantity of information to volunteer to journalists.

➢ The reporters who decide on which event to report, what and how it should be reported against others numerous events taking place at the same time and which also, demand attention.

➢ The sub-editor who decides which of the numerous reports coming into the newsroom to edit and use, what to cut off or re-shaped and several other editorial decisions.

➢ Editor/Editor-in-Chief who takes final decisions on choosing from an array of news items, few that can make the news of the day.

Applying this to multimedia journalism would mean that a number of stop gates also exist in the process of selecting multimedia news contents. Care therefore needs to be taken to ensure that there is harmony between the visual, verbal, textual, graphic and other multimedia elements that could combine to make up a given communication experience.

Innovation Diffusion

Rogers and shoemaker (1971:19) defined innovation as "an idea, practice or object perceived as new by an individual". Diffusion on the other hand is "the process of spreading of a given new ideas or practice over time, via specific channels through social structure such as neigbourhood, a factory or a tribe" (Katz, 1963:77).

Thus, the amalgam, 'innovation' and 'diffusion' involves "conscious exposure to, adoption, and performance of new idea, practice or object and the process of sharing the new ideas with others by the adopters' (Nwodu, 2006:103). The theory therefore explains the process of adoption of new ideas by potential

adopters. The kernel of the theory is that targets of social change do not usually adopt new ideas at the same time and frequency.

Once a new idea is introduced, there are those who adopt the ideas earlier enough upon introduction, and those who adopt later. Since this segment is not meant to delve into the nitty-gritty of the theory, it will be proper to briefly state the import of the theory to multimedia journalism.

In all respect, multimedia journalism is an innovation in journalism practice. It is a brand of journalism that has deviated from the traditional use of reporter's diary, pen or pencil, midget and note pad to gather and report news. The innovation has brought into fore, digital journalism - use of digital technology to gather, process and disseminates multimedia contents (verbal, visual, audio, textual etc elements) to produce and disseminate news. To remain relevant in the new approach therefore, journalists need to adopt the new technology in the discharge of their professional responsibilities and duties. As technology is changing, journalists need to respond to that change by ensuring conformity to the new technology.

Technological Determinism Theory.

Technological Determinism is one of the theories that easily come to mind when discussing communication technology. The theory according to Nwodu (2004:73) probes 'the causal relationship between media technology and culture'. Propounded by Canadian scholar, Marshal McLuhan, the theory stipulates that technology more than any other factor influences social behavior to change. According to Agbanu (2013: 179) technological determinism states that 'technology shapes how individuals in a society thinks, feels, acts and how a society behaves as it moves from one technological age to the other:.

By implication, multimedia technology not only influences the way modern journalism is being practiced, it also influences the way audience members receive, appreciate, interpret and evaluate multimedia journalism contents.

4.0: Conclusion

Technological is fast changing the way we do things – both as individuals and as professionals. For us to understand and appreciate technological innovations and to effectively apply such innovations in the discharge of our professional duties and responsibilities, it is important to also understand the theoretical understanding of such technology. That is what we have done in this unit.

Self Assessment Examination

Explain in your own way the gate-keeping theory stating how it applies to multimedia journalism practice.

5.0: Summary

This unit discussed some communication theories that are relevant to our knowledge of multimedia journalism. Specifically, the gate-keeping theory, innovation diffusion and technological determinism theories were discussed. Also discussed in this unit is their relevance in multimedia journalism practice.

6.0: Tutor-Marked Assignment

Discuss the relevance of innovation diffusion and technological determinism theories in multimedia journalism practice.

7.0: References/Further Reading

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MODULE 4: FUNDAMENTAL MULTIMEDIA JOURNALISM:

Journalism, in its simplest form, is a profession for news managers. It is all about the gathering, processing and distribution-cum-dissemination of news and information. The patterns of news gathering, packaging and dissemination have over time, undergone and is still undergoing tremendous changes. These changes no doubt, affect the technology of news gathering as well as the technology and forms of news presentation. It is not out of place therefore that the introduction of multimedia journalism will mark a shift from traditional mode of news gathering and presentation/dissemination to entirely a new mode that combines a number of contents in a given communication experience. This remarkable shift has made multimedia journalism most relevant and widely acceptable among practitioners and news consumers called the audiences. This module is therefore designed to explore different dimensions of multimedia journalism with particular emphases on the concept, forms and technologies. In line with the object of the module, the following units shall be explored:

Unit 1: Understanding Multimedia Journalism

Unit 2: Trends in the Use of Multimedia News

Unit 3: Characteristics of Multimedia/Online Journalism

Unit 4: Major Multimedia Journalism Technological tools.

Unit 1: Understanding Multimedia Journalism

 Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: Conceptualizing Multimedia Journalism

    3.2: Characteristics of Multimedia Journalism

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

The need for news and information cannot be over emphasized. From the epoch of traditional journalism to modern times, information gathering and dissemination have continued to evolve to the extent we can talk of interactive communication. It is this interactivity which is lacking in traditional journalism practice that has given multimedia journalism significant edge over the former. In this unit, you will be taught the meaning and nature of multimedia journalism as a distinct form of journalism practice.

2.0: Objective.

At the end of tutorial in this unit, you would have learnt.

➢ The meaning of multimedia journalism.
➢ What distinguishes multimedia journalism from traditional journalism practice.

3.0: Main Content

3.1: Conceptualizing Multimedia Journalism

The term, multimedia, has been severally defined and explained in previous modules and unit of this course. The interest here therefore, is not to regurgitate those definitions and explanations. This segment is rather meant to explore what the amalgamation of 'multimedia' and 'journalism' meant.

In other words, when we add 'journalism' to 'multimedia' to derive another concept of 'multimedia journalism', what do we mean? The import therefore, is that the concern here is to explain what multimedia journalism means to journalism practitice and the practitioners. The question, simply put however is: what is multimedia journalism? Dauze (2003) offers two distinctive ways of defining multimedia journalism as:

➢   Presentation of news story package on a website using two or more media format such as (but not limited to) spoken and written word, music, moving and still images, graphics, animations including interactive and hyper textual elements. In this case, as Nwodu (2007) points out, a web site is created and serviced specifically for

continuous uploading of current news, information and other relevant data (images, graphics and animations) for the purpose of meeting information needs of those who log on to the website.

➢ The integrated (although not necessarily simultaneous) presentation of a news story package through different media, such as (but not limited to) a website, a usenet newsgroup, e-mail, SMS, MMS, radio, television, tele-text, print newspaper and magazine. The emphasis is on the use of multimedia channels or outlets to package and present news story. This is often regarded as horizontal integration. It is considered horizontal integration in the sense that it entails the sharing of similar multimedia content via a combination of independent media organs that are highly digitalized.

3.2: Characteristics of Multimedia Journalism

The above definitions of multimedia journalism clearly point to the fact that this brand of journalism allows for continuous media convergence.

Convergence continuum here assumes that sooner than later, all media organizations moved towards a stage where integration of different parts of the news-making process (including audio, video, text, images, graphic, but also marketing, cross-promotion, sales, redistribution and interactivity with publics) is achieved. The convergence nature of multimedia journalism technology has however influenced the direction of development in communications. Williams and Sawyer (2003), and Nwodu (2007) agree that communications development with emphasis on multimedia journalism is tending towards three major directions which characterize it. These are:

i. Connectivity which is the ability to connect computer to one another by communication line and by so doing, provide online information access.

ii. Interactivity which is a live-way communication that allows a user responds to information received and modifies the process. Through this way the user contributes to information sourcing, gathering and sharing.

iii. Multimedia presentation of information in more than one medium such as text, video, sound and animation in a single integrated communication. The end point according to Nwodu (2007) is that multimedia journalism-cum-communication has symbolized itself as

the converging points where social, cultural and scientific news, data and other relevant information are shared between and among individuals, nations, organizations (particularly media organizations) and industries.

4.0: Conclusion

It is incontrovertible to note that the core of journalism practice is the process of news and information gathering and dissemination using the instrument of mass media. This process is fast changing with the introduction of multimedia approach to journalism practice. In this brand of journalism therefore, verbal (audio), visual, graphic and animated contents are conveniently combined to achieve special effects in a single communication experience.

Self Assessment Examination

What does multimedia journalism mean to you?

5.0: Summary

This unit discussed the concept of multimedia journalism. It also explained the characteristics of multimedia journalism with emphasis on connectivity, interactivity and multimedia communication.

6.0: Tutor-Marked Assignment

Define multimedia journalism and explain the factors that characterize it.

7.0: References/Further Reading

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Unit 2: Trends in the Use of Multimedia News and Information Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: More about Media Convergence

    3.2: Trends in Multimedia News Production

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Arguably, the consumption pattern of the product of journalism (news and information aspects of the products) is undergoing drastic changes. The cause of this habit and expectation changes is obviously the on-going advancement in communication technologies. Today, reading newspapers, magazines and books; listening to radio; and watching televisions and movies online are considered more fashionable than the traditional approach to media consumption.

In fact, media historian, Stephens (1998) observes that media sphere is witnessing a sporadic "rise of the image, and fall of the word". This according to Deuze (1999) implies that "our understanding of events and the way we perceive the world around us are increasingly contextualized by the manipulation of high speed editing of images and video". The kernel of the matter therefore is that media exposure is highly becoming an online phenomenon. This obviously poses a challenge to the traditional approaches journalists use to get news and information across to the audience members. The essence of this unit is to discuss these new trends in the use of multimedia news and information.

2.0: Objective

At the end of tutorial in this unit you will be able to learn more about:

- ➢ The shifting pattern of media consumption
- ➢ How journalists and their media are responding to this shifting pattern.

3.0: Main Content

3.1: More about Media Convergence

The shift towards "voluntary engagement" by media audience may be understood better by refreshing your mind on media convergence which Roger Fidler cited in Agbanu (2013) termed "media morphosis". Media convergence is therefore a handy term for describing the dynamic and the increasing inter-reliance or interdependence among various mass media forms and organizations. As Biagi (2003) cited in Agbanu (2013: 145) notes, media convergence theory involves:

  i. Economic convergence in which several media organizations decide to legally come together either as mergers or acquisition for purpose of dominating the market share in the industry.

  ii. Digital convergence in which, media organizations are linked or intersected via integrated digital technologies for purpose of achieving a well integrated conglomerates and by extension, enhance multimedia information sharing and open access.

According to Shade (2003), media convergence "is the artful combination of texts, images and time-based media (sound and motion video) on a single digital platform, delivered for interactive use by consumers - typically via the web". The implication is that both professional (and non-professional) communicators and the communicatees are now tied or glued to digital information technologies. Agbanu (2013:147) puts it this way: "presently, all the devices people use for communication and all the kinds of communication have started crashing together into one massive mega media industry".

3.2: Trend in Multimedia Usage

As noted above, print media readership and electronic media listenership and or viewership have become more of an online phenomenon than before. This emerging development have therefore turned most contemporary media users (in this context, journalists who cull their stories from other media sources and audience members who get informed via online sources) into what BIGresearch (2002) termed 'multitaskers'.

Multitaskers therefore, become a handy terminology for describing the chain or web of trends that lie on the way in which people access information under this "changing ritual of media usage" (BIGresearch, 2002). According to Deuze (2003), people become increasingly engaged in the consumption and production of information in different media simultaneously stressing that:

> We watch TV (with the sound muted in order to be able to have a phone conservation, browse through a newspaper or magazine, and type inquiries in search engines on topics we feel are relevant to us - all at the same time.

So multimedia journalism do not only offer the audience members multimedia contents but also turn them into multitaskers who have to go through a series of simultaneous activities (visual, verbal, audio, textual and motor) in order to access and consume news and information.

This multitasking approach to multimedia usage has two peculiar problems. One as Zerbra (2003) observes is the apparent difficulty most users experience while accessing, using and interacting with online multimedia information. This is why Deuze (2003) argue that using and understanding digitized visual information is difficult. This difficulty may therefore, arise either because of lack of technical know-how on the side of the users (both journalists and their audiences) or mechanical faults. Whichever is the case, the fact remains that the approach poses a problem which multimedia journalists should brainstorm on how to fix the problem.

The second major problem or challenge lies on the fact that "a listing of media usage habits ignores the reality that people are becoming increasingly active participant in media production. For this reason, they want to be part of the journalistic activities that culminate in the construction of meaning, gathering, production and dissemination of news and information as is the case with citizen journalism. The snag here is that the audience definition of news worthiness and or technical approach to news production will be at variance with standardized professional view. To solve the problem, Deuze (2004) suggests the recombinant realization of:

i. Their ritualized preference to be perfectly happy to lean back and consume anything that is offered to them by mass media through existing channels in a multitasking way.

ii. Their willingness and ability to at times, actively engage in the news demand context multiple perspectives on topics of interest and

participate in all kinds of collaborative storytelling (ranging from participation in polls, mailing, listening, discussion forums and chat sessions to publishing their own web-sites, contributing their news or views on the news of individual or group weblogs, disinter-mediating journalists by going directly to sources of the news and so on).

4.0: Conclusion

Multimedia journalism is pointing towards participatory way of doing news work. It has ushered a brand of journalism in which convergence of users and producers of news (including news organizations, departments and technologies for news gathering) is the in thing. In this case, everyone is a potential news carrier, news reporter, news commentator and news consumer. Modern journalism scholars, researchers, practitioners, and students must of necessity key into this usage ritual trend in order to remain relevant in this evolving brand and era of journalism practice.

5.0: Summary

This unit was designed to teach you the emerging trends in the use of multimedia news. To this end, the institutional, technological, organizational, and producer/user dimensions of convergence were tightly discussed. Also, the trend in multimedia news was discussed. You are advised to read the avalanche literature in this evolving area of journalism practice for greater insight.

6.0: Tutor-Marked Assignment

What do you understand by the concept 'multitaskers'? Explain how the concept relates to the web of trends affecting access to and uses of multimedia news.

7.0: References/Further Reading

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Unit 3: Recipes for Multimedia News Production.

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

News is at the core of journalism practice. Irrespective of the brand of journalism, news remains the major article in trade. Journalists therefore exhibit greater care and skill in gathering, packaging and dissemination of news. Multimedia journalism is therefore, not an exception to this professional norm. In this unit, effort shall be made to expose you to the rudiments of news gathering and reporting in the context of multimedia journalism practice.

2.0: Objective

Tutorial in this unit aims at exposing you to multimedia news production. It is therefore expected that at the end of the tutorial in this unit, you will learn multimedia technique for:

   ➢ News gathering
   ➢ News production.

3.0: Main Content

3.1: Gathering the News

Way back in 1852, the famous editor of the *Times* (John Thaddeus) was quoted as saying: "the first duty of the press is to obtain the earliest and most intelligence of the events of the time and instantly, by disclosing them, make them the common property of the nation… the press lives by disclosure" (Thaddeus cited in Hodgson; 1984).

What the above witty statement means is that journalists are like the sniffer dog trained to find out hidden explosives wherever they may be by smell. By implication and by the nature of training received, journalists are meant to sniff out latest happening in town and bring such happening to the attention and knowledge of the public called audience members. The process of news gathering is therefore very crucial to professional journalists. In gathering the multimedia news therefore, the journalists or reporters need to follow certain steps to be successful. The steps are but not limited to:

i.   Develop a sense of news judgment to know events, actions, images, and statements that are news worthy.

ii.   Focus attention on the aspects of the actions, images and statements that are more likely to attract greater audience interest. According to Nwodu (2006), place an eye on the unusual and emphasize that unusual in your report.

iii.   Identify and maintain links with other multimedia news sites (like Usenet) for sustained exchange of both emerging and emerged events as well as other relevant data/information.

iv.   Always be armed with the necessary multimedia tools so as to be able to capture (both in words and pictures) the unexpected. Most events that attract the interest of multimedia journalists often happen unexpectedly. So, if a journalist is not well prepared for the unexpected, he/she will miss the juicy aspect of the occurrence. That is why you need to be combat ready like a gallant soldier.

v.   Organizations often use cyberspace for news releases and announcement of press conferences. Identify such cyberspaces belonging to institutions around your locality. The essence is for you to know organizations within your locality and to gather and upload information about happenings within the organizations promptly.

3.2: Packaging the Multimedia News

News packaging in multimedia environment is more tasking than that of the traditional mass media news package. In newspaper report for instance, all the reporter needs to do is to write his/her story on a piece paper or Microsoft word and send to the editor either through fax or e-mail respectively. In this case, photographs are simply scanned and sent online as e-mail attachment.

In the context of multimedia, the textual form of the story, the audio, the video and or other graphic elements are packaged electronically and sent at once as a single communication experience. For this reason, the textual or audio elements are usually packaged in such a way they will complement rather than repeating the visual component of the story. In packaging the multimedia story therefore, the elements shall complement each other, telling distinctive aspects of the story without contracting each other. Assuming the President of the Federal Republic of Nigeria (Dr Goodluck Ebele Jonathan) welcomes the President of US in his office. Assuming that in packaging the news story about the event, a multimedia journalist needs to work with:

➢ A news story of ten paragraphs

➢ Two photographs – one showing the Nigeria Presidents in a handshake with the US Presidents and the second photograph revealing the two Presidents seated with the flags of their countries respectively displayed at the background (each behind the respective leaders).

The multimedia reporter will make the news appear drab if he/she begin to explain the action in the photographs in his/her textual report. For instance, it is wrong to report that President Goodluck Jonathan had a hand shake with US President when the audience can effortless see the action in the accompanying photographs. All the news writers need to do is write a brief cutline under the photograph. eg
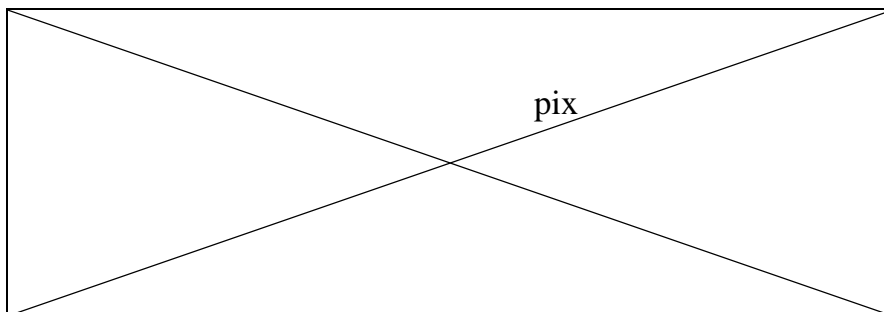

Figure 2: President Jonathan in a handshake with President Obama

Since multimedia news combines audio, video, textual, visual and graphic elements in a single communication experience, there is need to avoid verbosity in the textual component of the news. Too much detail may not be

necessary in writing the news. The reason is that other accompanying elements in the news also help to tell the story. Therefore too much detail may result in using words to repeat messages already emphasized in the accompanying photograph and or other visual elements.

By implication, the multimedia news should be brief, simple and interesting to attract and hold attention. In addition to these, the writer is advised to ensure that other basic rules of news writing apply to multimedia news writing.

3.3: Tips for Multimedia News Writing

We deliberately avoided going into the tasking nitty gritty principles and process of news writing and reporting here. The reason is obvious. One of the conditions for studying multimedia journalism at this level is that one would have taken at least, courses in news writing and reporting at the undergraduate studies. You are therefore implored to revisit the tutorials you had in those basic courses.

However, emphasis on this unit is to offer a few tips we considered imperative for excellence in multimedia journalism. The tips are:

i. Do not use pictures for the fun of it. Ensure they justify their use by helping to tell the news.

ii. Captions for photos must be apt and must according to Newsome and Carrell (2001) carry information that relives the story of some details.

iii. Present statistic and related data in a glamourised manner that fascinate rather than bore the audience. The more simplified the better. Most times, it could be more attractive when presented in charts (bar or pie) than in tables fully inundated with boring figures.

iv. Ensure pictures and video are taken and well presented in a manner that will not leave the audience guessing or confused.

v. Ensure the combination of audio, visual, textual and graphic elements blend well in a manner that will provide eye comfort, pleasing sound and enthralling video to the readers, listeners and viewers.

vi. In making the multimedia news entertaining, ensure that the entertainment content does not overshadow the news content to the extent audience simply get entertained and miss the news.

vii.   Where you have a personal or group blog ensure the blog is continuously updated with current and interesting news in order to always attract, hold and sustain audience attention.

viii.   Always give priority attention to soft news (human interest stories) known to appeal to people's sense of curiosity, sympathy, skepticism and or amazement (Dominick; 2000). Stories embellished with video clips and pictures as well as audio recording of people's life style (especially social and sexual life), kaleidoscope (or city life), rape (especially by highly placed individuals), teenage pregnancy, as research has shown tend to attract audience attention to multimedia contents more than hard news (Nwodu, 2006).

ix.   Always look for a scoop. You audience are always interested in news items that are new, distinct and unique.

x.   Use simple, non-misleading and brief headlines to couch your story. The simpler and shorter the better.

xi.   Always use simple style of writing to craft your news. Your audience needs to take more in every multimedia communication experience. To facilitate non-confusing textual, audio, visual etc exposure, you need to adopt simple writing style. This style according to Nwodu (2006) makes room for smooth, convenient and pleasurable exposure to multimedia news. Nwodu (2006: 107) further says simple style of writing "creates room for brevity in writing by ensuring that every vocabulary, diction, syntax, phrase, imagery and sentence length is not only simple and short but also, plays significant function in the overall sentence structure".

XII.   Where action photos (still and or motion) are not available, convey your story with literary style by choosing words that are capable of evoking audience members' senses of imagery and aid them to visualize the situation you are reporting. Effective creation of mental pictures in the minds of the targets helps to sustain audience attention to the news.

4.0: Conclusion

Reporting for multimedia channels is not an easy task. It requires a journalist to go a step further to craft stories that combine several elements in a single

communication experience. In doing this, care must be taken to ensure that the elements blend well without contradiction and or confusion.

Self Assessment Examination

Explain the tips you need to know to function well as a multimedia journalist.

5.0: Summary

This unit treated basic principles you need to function well in multimedia news production. It explored specific areas like the process and principles of multimedia news gathering, the process of news packaging and tips for multimedia news writing.

6.0: Tutor-Marked Assignment

Explain the process of news packaging in a multimedia scenario.

7.0: References/Further Reading

Dominick, J.R (2002) T*he Dynamics of Mass Communication: Media in the Digital Age;* Boston: Mc Graw Hill Company.

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Unit 4: Major Multimedia Journalism Technologies/Tools.

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

3.1: Data Gathering and Entry Devices

3.2: Data Processing and Delivery Devices

3.3: Data Receiving Devices.

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

The contents of multimedia journalism like the conventional journalism contents undergo some processes before reaching the audience. Gathering, packaging, delivery and reception of such contents therefore require special tools. In other words the multimedia journalists require special tools to gather and package their stories. The audience members also need special tools to receive message targeted at them. The question therefore is: what are these tools? The essence of this unit is to briefly x-ray those tools that make multimedia journalism practice possible.

2.0: Objective

At the end of tutorial in this unit, you are expected to learn:

➢ Multimedia tools for information gathering.
➢ Tool for receiving multimedia signals.

3.0: Main Content

3.1: Data Gathering and Entry Devices.

A number of digital data gathering and entry devices exist. Some of these devices that are important in multimedia journalism practice are:

Digital Camera: This is one of the essential tools for multimedia journalism information gathering devices. Before the invention of digital cameras, motion images or pictures were usually taken in multiples. The analogue videotapes are therefore taken in sequence using chemical films which uses 24 frames per second as a minimal required to "eliminate the perception of moving frames and make the image appear visually fluid to the eye" (Williams and Sawyer; 2003:231).

Today, the presence of digital camera has enabled the digitalization of video shots to the extent the shots can be stored in computer memory and easily displayed in computer screen. It is important to note that the speed of the computer determines the frame rates, that is, how smooth or jerky the movement of the shots will be when displayed.

In contrast to the use of film as is the case in analogue camera, digital camera therefore uses "a light–sensitive processor chip to capture photographic images in the digital form on a small diskette inserted in the camera or on flash-memory chips". As one of the key data capturing and entry devices in multimedia journalism, digital camera allows for captured bits of digital information to be easily copied into a computer hard disk where it can be manipulated as desired and or printed (in case of digital still photographs).

Scanning Device-Image Systems: While digital camera is used for taking or gathering images (both motion and still images) in digital form, so the scanner "uses light-sensing equipment to translate images of text, drawings, photos and the like into digital form" (Williams and Sawyer; 2003:226). The scholars further explain, "the images can then be produced by a computer, displayed on a monitor, stored on a storage device, or transmitted to another computer".

It is imperative to note that scanner is a higher level of photocopy machine. However, they differ in the sense that while scanner creates electronic files for storing scanned items, photocopy machine produces paper copies of photocopied items. However, imaging system (also called image scanner or graphic scanner) is a brand of scanning device which "converts text, drawings, and photographs into digital form that can be stored in a computer system and then manipulated, output, or sent via modem to another computer"(Williams and Sawyer; 2003:227). Expanding on this, the scholars add:

> The system scans each image – color or black and white – with light and breaks the image into rows or color dots,

which are then converted to digital code called a bitman. The more bits in each dot, the more shades of gray and the more colors that can be representation.

The imaging system therefore helps in capturing textual, graphic and photographic contents in digital manner that allows for easy manipulations for multimedia uses.

Auditory Input Device: This device allows for smooth recording of analogue sound and conversion of same into digital form. It is a data gathering device that gathers analogue sound in a continuous variable wave within a certain range of frequency. When the continuous variable waves are fed into computer as digital sound comprising of 0s and 1s, the sound can now be manipulated to produce the desired sound effects. The audio-input devices according to Williams and Sawyer (2003:230) are therefore used essentially to "produce digital input for multimedia computers".

3.2: Data Processing and Delivery Devices

When multimedia data-cum-information are gathered, the next thing is to process and deliver them to the audience members. The process is done essentially with computers and also, delivered or disseminated or uploaded (as the case may be) with the aid of Internet-enabled computers. With computer therefore, the digital textual, visual, audio and graphic data gathered and stored in the system are processed in the manner they ought to be. This processing has to be done with expertise to make the multimedia news to be produced at the end of the processing appear attractive.

However, it is important to re-emphasize that computer (particularly, Internet-enabled computer) is the major tool for processing multimedia news. The computer software like Page Maker allows for page design for online newspapers and magazines. With the appropriate software, text, graphs, pictures and other online newspaper contents can be synchronized and produced in a fascinating manner that attracts and holds attention.

In the case of broadcasting, the device allows for the synchronization of audio, visual, textual and graphic elements in a single communication experience.

3.3: Data Receiving Devices

Multimedia journalism signals and or news are usually received electronically with devices that have the enabling facilities. Some of these devices include but not limited to:

i. Internet enabled computers which allow for Internet broadcasting and online newspapers. In this case, audience members simply log on to a specific medium's website to enjoy continuous multiple news reports, news photos and newsy video clips.

ii. Mobile phones which double as news gathering and news receiving devices. According to Agu (2011:129), mobile phones serve as veritable instrument that "enhances performance and effectiveness". The scholar adds that the device has made live reporting possible as it has created a "new way of broadcasting in awakening new citizen consciousness". The device enables convenient sound and image recording and uploading either in personal blogs, or the public sphere.

Apart from serving as news gathering device, the mobile phones have doubled as news receiving device – serving multiple functions. Today, people listen to radio, watch television and read multimedia news using their mobile phone enabled handsets. The recent MTN Nigeria powered multimedia news delivery in the users' handsets which combine textual and still photographic news serves as a typical example. Related to this is the satellite videophone which modern journalists use extensively to broadcast and receive reports to and from their networks. This device help journalists to capture, deliver and also receive news and pictures from remote locations at a minimal cost. Other telephones associated with multimedia information receiving devices according to Williams and Sawyer (2003:40-41) are:

> Integrated Service Digital Network (ISDN) which consists of hardware and software that allow voice, video and data to be communicated over traditional copper-wire telephone lines.

> Digital Subscriber Line (DSL) which uses regular phone lines to transmit and receive data in megabyte per second.

iii. Cable modem which transmit out going data at 500 kbps and incoming data at 10mbps. It connects a personal computer to a cable TC system that offers Internet connection thereby facilitating the reception of news and other multimedia data via cable networks.

4.0: Conclusion

Journalism profession is moving far away from the traditional approach in which itinerant journalists roam the city with pen, reporter's diary and archaic analog still camera. Today, news gathering, news processing and news dissemination devices as well as news receiving devices are tending towards holistic digitalization. It is imperative therefore, that journalism educators, researchers, practitioners and students should be conversant with the nature and uses of these devices in order to remain relevant in the profession.

5.0: Summary

This unit dealt with the major multimedia technologies imperative for multimedia news processing. Precisely, the technologies used in the gathering, processing and receiving multimedia news and information were extensively discussed in this unit.

Self Assessment Exercise

Mention and explain the multimedia news and data receiving devices known to you.

6.0: Tutor-Marked Assignment

Discuss the relevance of computer and mobile phones in processing and delivering of multimedia news and information.

7.0: References/Further Reading

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MODULE 5: RESEARCH, ETHICAL AND LEGAL ISSEUES IN MULTIMEDIA JOURNALISM

Multimedia journalism no doubt, posses a number of challenges to traditional approach to journalism practice. While some of these challenges are ethical challenges, some are legal challenges. Again the emergent multimedia journalism practice has also raised a number of new research interests in journalism knowledge, practice and inquiry. All these and more are at the root of discussions in this module. The questions this module seeks to provide answers to are: What are the emerging research agenda in the emergent multimedia journalism era? What are the attendants ethical and legal challenges arising from multimedia journalism practice with particular reference to Nigerian social environment? The essence of this concluding module is to expose you to the research, ethical and legal issues and by so doing, stimulate scholarship in these important aspects of multimedia journalism practice. To fulfill the aim of this module therefore, discussions here shall span through four units as follow:

Unit 1: Research Interest in Multimedia Journalism

Unit 2: Ethical Issue in Multimedia Journalism Practice

Unit 3: Appraising Legal Issues in Multimedia Journalism Practice

Unit 4: Epilogue: Problems and Prospects of Online Journalism in Nigeria

Unit 1: Research Interest in Multimedia Journalism

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

   3.1: Research: Brief Conceptual Overview

   3.2: Need for Research in Multimedia Journalism Practice

   3.3: Areas of Research Interest in Multimedia Journalism

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Research is no doubt, relevant in every aspect of professional practice. This is so because research helps professionals to gain deeper knowledge of their profession and the attending challenges. This is why this unit is designed to expose you to research interests in multimedia journalism practice.

2.0: Objective

At the end of tutorial in this unit, you will gain:

- ➢ Refreshing knowledge of the rubrics of research.
- ➢ Understanding of the relevance of research in multimedia journalism.

3.0: Main Content

3.1: Research: Brief Conceptual Overview

Many scholars have over the years, offered a number of definitions of research. We shall consider a few of such definitions here to serve as guide to our discussion. These are:

  i.   Research is a systematic, controlled, empirical and critical investigation of hypothetical proposition about the presumed relations among natural phenomenon (Kerlinger quoted in Wimmer and Dominick, 1987:8).

  ii. Research is the process of arriving at dependable solutions to problems through planned and systematic collection, analysis and interpretation of data (Osuala, 1987:1).

  iii. Research is a serious study of a subject, which is intended to discover new facts or test new idea (Summers et al, 1995:1205).

There is a commonality in the above definitions. The commonality according to Nwodu (2006) is that research is all about systematic probing of the relationships existing between variables. Research therefore, could be:

a. Pure research which is knowledge-based or driven research with primary interest in solving academic problems and or adding to theoretical knowledge.

b. Applied or decision-making orientated research which is industrial-driven with the aim of providing solution to specific problem facing an industry.

Irrespective of the nature, research plays important functions in human endavours. The functions are summarized as follow:

i.   Research offers systematic approach to our understanding of why things happen or fail to happen in certain ways through critical observation; objective questioning of dynamic phenomenal behaviours; and systematic gathering and organizing of observable facts.

ii. Research enables us to assign meanings to observable facts and offer informed interpretation of the implications of the outcome of research effort.

iii. Research is cumulative and as such, every research work builds on the strength of previous studies. This cumulative nature helps us to draw from past knowledge to understand the present and by extension, predict the future.

iv. The outcomes of research not only have futuristic (predictive) values, it also offers theoretical explanation of the "consistency in behavior, situation and phenomenon" (Wimmer and Dominick, 1987:11).

3.2: Need for Research in Multimedia Journalism Practice

Multimedia journalism as we have severally pointed out in this course is all about telling stories with technology. It is therefore, a new addition to the string of news reporting approaches outside the traditional media outlets. It provides new technique for both media producers and the media consumers (audience members).

It is natural that this new technique will certainly pose new challenges in journalism practice. No matter how we may pretend, we may not understand these challenges until we are able to build a body of multimedia journalism knowledge through research. As key to unlock hidden knowledge, research is

therefore needed in the field of multimedia journalism to achieve a number of goals to include:

i. Expand and enhance the frontier of knowledge of multimedia and journalism practice beyond what is known presently.

ii. Understand and clarify emerging issues, developments and trends in multimedia journalism practice, training and scholarship.

iii. Question and understand how various elements of multimedia combine or fail to combine and how such combinations affect audience members' consumption of multimedia news and information.

iv. Understand the difficulties or otherwise the audience members encounter in the process of accessing and utilizing multimedia news and information.

v. Develop multimedia journalism-orientated theories and models that can further help facilitate our broad view of this emerging body of professional knowledge and practice of multimedia journalism.

vi. Understand the extent of cohesiveness or otherwise, is the synergy between different companies, newsrooms or departments that converge and share information in multimedia environment and how such synergy or convergence has affected the nature of information flow.

vii. Understand better, what should be the practicable and realistic ethical and legal underpinning of this emerging technology-driven brand of journalism.

viii. Understand how practitioners are responding to the emerging shift from "individualistic single-media journalism to team-based collaborative multimedia journalism" (Deuze, 2004) which multimedia journalism represents.

In all, both pure and applied researches are needed to standardize the knowledge and practice of multimedia journalism as well as the issues arising from the practice.

3.3: Areas of Research Interests in Multimedia Journalism

Research in traditional mass media and journalism focus essentially on analysis of media content and survey of what the media do for people as well as what people gain or derive from media exposure. Such researches according to Nwodu (2006:125-128) have concentrated on:

i. Audience profile research which bothers on fathoming the demographic and psychographic profile of mass media audience members.

ii. Item-selection process which entails determining and selecting media contents that will hold greater interest to the audience members.

iii. Uses and gratifications studies which focuses on understanding what motivates the audience to deliberately seek out for media information – that is what the audience members look out for in media contents.

iv. Content analytical inquiry of how issues are covered in the media with emphasis on the quantity and quality of coverage given to the issues. Attention is usually placed on the number of mentions an issue received in the media, how the issue was framed in the media via prominent positioning among other things.

v. Editor-reader comparison researches which try to evaluate editor's perception or assessment of their news medium against public assessment of the same media.

Since multimedia journalism is more of technology-driven kind of journalism, it follows that it will come with its own areas of research interests. Plausibly, all of the above are also part of the research interest areas in multimedia journalism. There are however, other emerging research interests. We shall therefore, discuss these additional areas of research interests here. But it is important to note that the points we are going to raise do not contradict the traditional areas of research interests already discussed in this unit. Thus the additional research interests are:

i. Basic multimedia journalism research which should focus attention on but not limited to:

- Standardized principles, theories, laws, ethics, visual framing and styles of reporting news with greater efficiency and reliability in the context of the changing media landscape.

- Evolution of concrete and universally acceptable skills, workflows and distinct forms or types of writing for multimedia as an emerging area of journalism practice.

- Investigate how best to develop and sharpen trainees' ability to gather and report news using multimedia format, identify the militating factors impeding on effective use of technology to tell stories; and how to systematically solve the problem and enhance efficiency in multimedia news gathering and dissemination.

- Investigate the influence of multimedia convergence in changing journalism practice with emphasis on the implications of information sharing and dissemination.

ii.   Applied research that will concentrate on enhancing our practical knowledge of multimedia journalism practice. Emphases here should be on:
- How mobile connectivity, interactivity and convergence are altering journalism practice vis-à-vis the industry.

- How to effectively tackle infrastructural problems like electricity, limited broadband, technical services and huge costs of procurement and maintenances (peculiar to Nigeria and other developing nations). Related to this, are other physical challenges. Research should address the issue of physical challenges likely to retard the development of multimedia journalism scholarship and practice in Nigeria.

- How to deal with quacks as multimedia and online journalism is currently infested with non-skilled practitioners who lack essential training in journalism skills and practice; and who care less about multimedia and journalism principles like objectivity, fairness, balance and credibility.

> ➤ How best to structure the news in order to carry illiterate audience along especially in developing nations. Increase in telecommunication and computer communication channels and connectivity without adequate training of both the practitioners and the audience (who are largely illiterates) will impede rather than enhance greater participation in multimedia experience. This is true given that the illiterate audience members will be completely cut off from multimedia experience.
>
> Research in these areas should therefore focus on how to make this training participatory, all inclusive and productive. Research in this context should address issues relating to: who should be trained to effectively train other trainees; what should be the key subject of the training; how should the training be made interesting to attract greater participation and by extension, generate interest in multimedia journalism practice; and so on.

4.0: Conclusion

The challenges of multimedia journalism as an emerging aspect of changing media are multifarious and cannot be solved in a study. Continuous and diverse studies are therefore required to understand the challenges as they come, conceptualize and contextualize them; and evolve research-based solutions to the challenges. This is why we cannot effectively undergo tutorial in multimedia journalism practice without recourse to research dimension of the course. This is simply, what we have done in this unit.

Self Assessment Exercise

Why do you think research is necessary in journalism practice?

5.0: Summary

This unit aimed at exploring the relevance of research in multimedia journalism. In line with this aim, tutorial here focused on brief conceptual overview of research, the need for research in multimedia journalism education and practice, and the major areas of research interest in multimedia journalism. You are expected to go through this unit thoroughly and perhaps, identify a gap which you could systematically investigate to serve your final research interest.

6.0: Tutor-Marked Assignment

Define and explain the concept, 'research' stressing areas of research interest in multimedia journalism scholarship and practice.

7.0: References/Further Reading

Deuze, M. (2004) What is Multimedia Journalism? Online Publication (pdf) issn146/-070xprint/issn1469-9699online/04/020139-14, retrived on 17/10/13.

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Unit 2: Ethical Issue in Multimedia Journalism Practice

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: Meaning of Ethics

    3.2: An Overview of Journalism Ethics

    3.3: Ethical Issues in Multimedia Journalism

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Senam (2011:325) describes journalism as a "profession in transition" likening it to chameleon that changes its colour in line with the environment it finds itself. The driving force behind this apparent and constant change in the nature of journalism practice is obviously traced to the continuous change in communication technologies which multimedia technology is part.. It follows that the invention and introduction of technology of communication certainly comes with new challenges to the professional skill, practice, ethics and law. This explains why this unit is relevant to us. The essence is to fathom ethical issues arising with the introduction of multimedia journalism as an evolving brand of journalism practice.

2.0: Objective

Tutorial in this unit is designed to expose you to:

- Refreshing overview of journalism ethics.
- Ethics issues associated with multimedia journalism.

3.0: Main Content

3.1: Meaning of Ethics

The doyen of media ethics, Merril (1975) offers elaborate definition of ethics as "a normative science of conduct, which stipulated guidelines, rules, principles and codes that are designed to lead individual to make moral decisions". The implication according to Nwodu (2006:135) is that morality is at the core of ethical discourse-cum-practice. Nwodu (2006) further informs that:

> In the context of ethics therefore, the acceptance or otherwise of human attitudes and behaviors'; actions and inactions; and overall conducts can be based on relative moral uprightness or otherwise of such conducts.

Simply put therefore, ethics is "a moral rules or principle of behavior for deciding what is right and wrong" (Summers et al; 1995: 466). Ethical precepts of any given profession therefore, spell out moral conducts which should guide the actions of the practitioners.

The need for professional ethics is premised on the fact that legal provisions are incapable of providing holistic check against recklessness and excesses in most professional practices. As Nwodu (2006:135) points out therefore:

> By prescribing the dos and don'ts in most professional practices, ethics provide enabling environment that encourages individuals to control their instinct and carry out their professional activities in a rational manner.

Ethics tasks the consciences of practitioners in various professions to practice in most credible and acceptable manner. As a moral philosophy, ethics help to determine what is socially right or wrong.

3.2: An Overview of Journalism Ethics

In the above segment, we conceptualize ethics as a moral philosophy that guides social-cum-professional conducts. Relating this to journalism practice would therefore, means that journalism ethics is a code of moral philosophy that guides journalism professionals in their professional practice and or conduct.

This explains why Ekeli and Enokbahare (2011:341) agree that "when journalists write they are not simply writing for the consumption of others, they do so as self expression…" Impliedly, the way a journalist writes a story clearly depicts his/her level of ethical compliant. The moral dos and don'ts

guiding journalism profession therefore constitute what we know today as ethical precepts of journalism practice.

Defined in a more technical and media terms, it simply means "the application of rational thought by media professionals when they are deciding between two or more competing moral choices" (Baran; 1999: 391). In applying ethics in the discharge of their duties, journalists are faced with a number of clashing interests. These interests according to Day (1997) cited in Baran (1999:393) are:

 i. Individual conscience that is the journalist's personal interest.

 ii. The interest of the object of the act which affects journalist's actions.

 iii. Financial interests of the media institution which is the corporate interest.

 iv. The interest of the profession concerned with actions that will sustain the profession.

 v. The interests of the society which is concerned with professional social responsibility.

All these interests constitute the ethical burden of journalism profession. To balance these interests and keep the profession going, Nwodu (2006: 147-152) admonishes that journalists should always be conscious of the following ethical issues:

 i. Truth and honesty which behooves journalists to always report issues truthfully. The emphasis here is on facts not fiction. Always verify your facts before going public and ensure the issue is reported objectively.

 ii. Privacy which insists that there is a limit to which journalists can pry into private lives of others. The journalists should therefore know where individual privacy ends and public interest or right to know begins.

 iii. Confidentiality which demands sacred responsibility to protect the source of information particularly, the source of information obtained on deep background. To this end, Baran (1999:395) counsels:

> Without confidentiality, employees could not report the misdeeds of their employers for fear of being fired; people would not tell what they knew of a crime for fear of retribution from the offenders or unwanted police attention.

Regardless of the source of information however, journalists are expected to verify their facts before going public while maintaining the confidentiality of the source.

The implication of the above is that journalism as a profession requires high level of ethical compliance. It is deeply rooted on public trust which every journalist must earn and maintain. To earn and maintain public trust in journalism practice therefore, the Nigeria code of ethics prescribed ethical codes which practitioners must observe as:

- ➢ Editorial independence
- ➢ Accuracy and fairness
- ➢ Privacy
- ➢ Privilege/Non-disclosure
- ➢ Decency
- ➢ Discrimination
- ➢ Reward and Gratification
- ➢ Violence
- ➢ Children and Minors
- ➢ Access to Information
- ➢ Public Interest
- ➢ Social Responsibility
- ➢ Plagiarism
- ➢ Copy Right
- ➢ Press freedom and Responsibility (see the new Code of Ethics for Nigeria Journalists for details).

3.3: Ethical Issues in Multimedia Journalism

Multimedia journalism is no doubt, an evolving aspect of journalism. As such, it is not doubtful that in addition to the ethical imperative and issues discussed above, there may be other emerging ethical issues evolving along side of it. This segment discusses some of the emerging ethical issue in multimedia journalism practice. Some of these emerging ethical dilemmas and or issues as Senam (2011:333-335) captures them are:

i.   Credibility dilemmas which bothers on the fact that minimal importance is attached on the credibility of the news source. In this

case, the authenticity of news source and the stories is sacrificed on the altar of immediacy. Journalists can hide their identity or use fictitious name to report information which may be grossly distorted against ethical cannon. It becomes ethically problematic on how to fathom the credibility of both the reporter and the news reported. The situation becomes compounded in view of the fact that a good number of online/multimedia journalists are not trained journalists.

ii. Unauthentic record – online/Multimedia news and information is frequently and severally updated within the day and with conflicting angles and details. This weakens the reliability and dependability of its news and information as a public record. The visual elements may be the same or even altered (manipulated) to suit the reporter's rather than the public interest. Also the textual components of the same story may present different pictures/views of the same story to the extent audience members will be left confused.

iii. Professionalism Issues: One of the ethical imperatives in journalism practice emphasizes the need for professionalism. In the context where multimedia/online reports were posted by non-trained journalists, there will be lack of high standard of professionalism and ethics (Giwa, 2006 quoted in Senam, 2011). To this end, factors like objectivity, fairness, accuracy, balance, public interest and decency which are not only proof of professionalism but also indices of ethical compliance will be lacking essentially in greater percent of multimedia news reporting.

4.0: Conclusion

Any advancement in any professional practice certainly raises a number of ethical dilemmas. Multimedia journalism is certainly not an exception. As an emerging aspect of journalism, it has its own attendant ethical dilemmas some of which were discussed here.

Self Assessment Exercise

Define and explain the meaning of the word, ethics.

5.0: Summary

This unit discussed ethical issues arising from the evolution and practice of multimedia communications. Specific interests like the meaning of ethics,

brief overview of journalism ethics and emerging ethical dilemmas arising from multimedia journalism practice were treated.

6.0: Tutor-Marked Assignment

Mention and discuss the ethical dilemmas arising from multimedia journalism practice. Explain how you think the ethical problems can be fixed.

7.0: References/Further Reading

Baran, S. J. (1999) *Introduction to Mass Communication: Media Literacy and Culture;* California: May Field Publishing.

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Unit 3: Issues in Multimedia Journalism Law.

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: brief Overview Media Law in Nigeria.

    3.2: Legal Issues in Multimedia Journalism in Nigeria

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

Ethics is incapable of protecting individuals in the society from injurious media content. At best, ethics when applied well can only make practitioners to show some moral restraint in their report of issues. This is where law comes in. The essence of media law therefore, is to offer members of the public some degree of protection from malicious or injurious media portrayals. It is important we therefore discuss some legal issues arising from multimedia journalism practice here.

2.0: Objective

At the end of tutorial in this unit, you are expected to learn:

    ➢ An overview of media law.
    ➢ Law related to issue arising from multimedia journalism practice.

3.0: Main Content

3.1: Brief Overview Media Law in Nigeria.

Nigerian media system, like other media systems of the world, does not operate in a state of legal void. Thus, there are professional bodies that one way or the other, act as ombudsman and by extension, check against

unprofessional practice. Example of such professional bodies included but not limited to Nigerian Guild of Editors (NGE), Nigerian Union of Journalists (NUJ), Nigerian Press Council (NPO), and Broadcast Organisation of Nigeria (BON). There are also regulatory bodies like Nigerian Broadcast Commission that regulate the activities-cum-operation of media institutions in Nigeria.

In spite of all these, there are a number of laws guiding media practices in Nigeria. While some of the laws are worthwhile, some are just there in Nigeria's legal documents for purpose of gagging and controlling the media. In view of the fact that before taking this course, you would have taken a course in media laws and ethics (at least at the undergraduate level), we will not bother going into details here. It is germane therefore to mention and briefly explain some of these laws regulating media practice in Nigeria. Some of these laws are:

i.   Official Secrets Act of 1962 reviewed in 1990 which is "being used by government officials to deny the press access to information and documents" (Ndolo and Ezinwa; 2011:236).

ii. Obscene Publication Act of 1961 which aims at promoting and protecting public good and moral, and by so doing control the press and other instruments of communication from exposing members of the public to materials that can corrupt their minds (Nwodu, 2006).

iii. Criminal Code Act CAP 77 of 1990 otherwise called seditious laws which empowers both the Federal and State government to confiscate any publication likely to bring the Federal or State government to ridicule, odium and public contempt in addition to inciting the masses against the government.

iv. Copyright ACT of 1970 amended in 1990 which offers an individual constitutional rather than privileged right of an author or originator or a creator to reap the benefits accruing to his work by exercising maximum authority or control over the reputation, distribution and commercial use of his/her work for a specific period. The nature of copyright therefore, varies according "to the peculiar nature of each work" (Ewelukwa, 2004:236).

v.   Nigerian Defamation Law of 1960 now Decree No. 44 1966 which offers members of the public protection over injurious publication or

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oral statement which tends to lower their reputation in the estimation of mentally balanced members of the society.

vi.   Shield Law which is enshrined in Section 36 of 1999 constitution of the Federal Republic of Nigeria and which according to Ewelukwa (2004:135):

> …are statues which afford a privilege to the press and journalists not to disclose in legal proceedings, confidential information obtained by them in their professional capacity as pressmen or journalists

There are so many other legal provisions guiding media operators in Nigeria. While some were inherited from colonial masters, others were either enacted by civilian or military governments. Some of such legal provisions that have and continue to influence media operators include:

- Seditious Meeting Act of 1961.
- Newspaper (Amendment) Act of 1961
- Cinematography Act No. 7 of 1963
- Constitution of the Federation Adaptation of Laws (Miscellaneous Powers) Novenmber, 1964.
- Public Officers (Protection against False Accusation) Decree Nos. 24, 1984
- State Security Detention of Persons Decree No. 2, 1984
- Newspaper Decree No. 43 of 1993
- Treason and Treasonable Offence Decree No. 29 of 1993.
- Offensive publication (Proscription) Decree No. 35 of 1993)

Since all these legal provisions are still in force, trainee and practicing journalists are expected to acquaint themselves with the provisions of these legal documents. This will help them gain informed insight into such provisions and the implications of the provisions in their professional practices.

3.2: Legal Issues in Multimedia Journalism in Nigeria

The nature of multimedia journalism throws up a number of legal issues in Nigeria, and perhaps, elsewhere. As an emerging area of the professional practice, there is certainly dearth of literature that point out the probable legal issues arising from the practice.

However, there are few legal issues the course developer thinks that multimedia communication and journalism scholars should ponder about and provide clues to unravel the problems arising from such issues. Some of emerging legal issues are:

i.   The issue of protection of intellectual property which Webber (2000:21) describes as a collectivity of exclusive rights of creators over their patented works including trademarks, designs, and copyright. In a multimedia journalism environment where computers and internet connections are driving forces, how do we begin to track and deal with copyright violation issues? It is clear that to guard against financial harm, creative works (which are foundations of multimedia experience) are copyrighted. The question above therefore becomes expedient considering that such copyrighted works are easily prone to manipulations via computers. This is why Woocock (2000:2) observes:

> When subtle alterations are made to images, or portions of works are copied then manipulated, so that it is not easy to recognize the original work, it is more difficult to access the "wrong".

The issue is therefore, complex for the original owners of the creative works to claim their copyright in situation like this. Weckert and Adeney (1997:63) quoted in Woodcock (2000) rightly conceptualize the issue here where they queried "if a change is made to an image that was digitized from a photograph or a picture drawn by someone else, whose property is the new image?"

This is a crucial issue multimedia journalism students, scholars and practitioners need to ponder over what could be the most workable solution.

ii. Another issue of interest here is how to check defamation of character. Often times, those who engage in multimedia journalism practice are hardly trained professional journalists. As such, people and institutions are often portrayed in most negative light and with malice without any provable moral and or legal justification. When one's image/reputation is maligned in such online or multimedia presentation therefore, who should be held responsible for character assassination? The issue is compounded by the fact that most time the identity of the creator of damaging stories or images is hardly known;

and where there is a byline, it is often either nickname or non-existent name.

iii.   The fact that computer can be used to create virtual reality raises an issue of credibility and authenticity of information and images in the multimedia communications. In this case, images can be manipulated to appear real while sounds and vocal tunes can be manipulated or simulated to give impression that somebody did or said something he/she never knew anything about to the extent the audience members would take the manipulated images and sounds as real. Again, facts can be distorted to deliberately misinform and 'disinform'. How to fashion out realistic and practicable legal instrument that will deal with situations like these becomes a serious legal issue confronting experts in media ethic and law as well as multimedia journalism practitioners.

The conventional media organizations as corporate entities can sue and be sued. But in the case of online/multimedia journalism sites in which some of the site operators are not known, who should be sued in the case of any legal breach arising from injurious information on the web?

4.0: Conclusion

As Multimedia journalism practice is evolving. So, legal and ethical issues concerning the practice are also, evolving. As such the legal issues associated with multimedia practice may not be limited to the ones discussed above. What is presented here therefore is meant to serve as a take-off for extensive inquiry into legal issues in multimedia journalism. Scholars, practitioners, and students of multimedia journalism should expand on this and even go a step further to develop a body of knowledge in multimedia journalism, law and ethics.

Self Assessment Exercise

Briefly discuss the law guiding journalism practice in Nigeria.

5.0: Summary

This unit dealt with legal issues in multimedia journalism practice. Precisely, the unit offered brief discussion on media laws in Nigeria and concluded with the emerging legal issues in multimedia journalism practice.

6.0: Tutor-Marked Assignment.

Using Nigeria media landscape as a case in point, discuss the legal issues confronting multimedia journalism practice.

7.0: References/Further Reading

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Unit 4: Epilogue: Problems and Prospects of **Online Journalism in Nigeria**

Content

1.0: Introduction

2.0: Objective

3.0: Main Content

    3.1: Online Journalism in Nigeria: the Journey so Far.

    3.2: Problems of Online Journalism in Nigeria

    3.3: Prospects of Online journalism in Nigeria

4.0: Conclusion

5.0: Summary

6.0: Tutor-Marked Assignment

7.0: References/Further Reading

1.0: Introduction

According to Adelabu (2011), journalism practice has not been the same since the emergence of computers in the newsroom. The introduction of computers and the attendant Internet connectivity have therefore, paved way for online journalism which has in turn, prompted the ongoing multimedia journalism. It is no longer fashionable to use type writers in the newsroom. Nigeria journalism landscape is not left out in this crave for online and multimedia journalism practice. This unit shall examine this and more.

2.0: Objective

After tutorial in this unit, you will be able to learn:

- The state of online journalism in Nigeria
- The problems and prospects of online journalism in Nigeria.

3.0: Main Content

3.1: Online journalism in Nigeria: the journey so far.

Online journalism began in Nigeria in 1997 with the production of wired version of the *Post Express* (Nwodu, 2009, and Oloja, et al, 2010 quoted in Adelabu, 2011). The primary motive for going online then was to attract the interest of the young media audience whom research evidence showed that they were developing apathy for mainline news copies like newspaper and magazine.

Since then, online journalism has witnessed sporadic growth in Nigeria to the extent Nwodu (2009:166) agrees that many Nigerian newspapers and magazines are read online. By implication, most mass media institutions in Nigeria (both print and electronic) are now online. In view of this healthy development local news are now effortlessly becoming foreign news and vice versa.

Online journalism is therefore thriving in Nigeria to the extent the traditional mass media consumers are now active participants in agenda setting. Through online platform therefore, the audience members now tell their own stories – a practice media commentator, scholars and researchers now brand "citizen journalism".

As it is now, before the conventional mass media organs report an accident for instance, citizens (the eye witnesses) would have taken some shots from the accident scene and upload the shots in the net with or without professionally written textual stories. The citizen journalism approach often reveals some visual details ordinarily mass media again would have loved to hide due to ethical or legal reasons or both.

The gruesome killing of four students of University of Port Harcourt serves as typical example of the thriving practice of online journalism. In this, before the conventional mass media could report it, the incidence was already in the net revealing the brutal processing in which the students were murdered by alleged community members. The unsolicited story was delivered in personal and public multimedia/internet sites like facebook, Youtube, twitters, flickers etc.

By implication, online journalism has come to be in Nigeria. It is fast whittling down the monopoly of news and information by traditional journalists and making the practice more participatory. What has made this phenomenon thrive more in Nigeria is what Adelabu (2011:21) describes as "fluidity" of the approach which according to him "puts more emphasis on the publishing of information rather than the filtering through editorial gate-keeping".

3.2: Problems of Online Journalism in Nigeria

Although, it was stated in the above segment that online journalism is flourishing in Nigeria, the practice cannot be said to have reached advanced stage. The practice therefore has a number of challenges. Our concern in this segment is to discuss some of those challenges and or problems. Some of the problems militating against full crystallization of online/multimedia journalism in Nigeria include but not limited to:

i. Low Literacy Level. The literacy level in Nigeria is still low. Incidentally, to plug in online/ multimedia journalism experience requires some level of literacy. Literacy in this context is not limited to ability to read and write. It extends to the ability to use technology to seek for, down load and upload information (which could be audio, visual and sound). At moment not many journalists are literate enough to the extent of telling their stories with multimedia technology. A good number of practicing journalists (especially those in outstations) still use business centers to file in stories to their main stations.

So, Nigeria needs a lot of computers, visual, audio, online, design and other forms of digital literacy to cope with the demands of online/multimedia journalism. Ironically, research evidence shows that most practicing journalists rely on old technologies to gather, process and file their stories to their main stations (Nwodu; 2004).

ii. Another problem associated with online journalism practice in Nigeria is poor network. Most network providers have continued to disappoint their subscribers with frequent network breakdown. Most times the network is rarely available and whenever, it is available, it runs at snails speed to the extent of leaving users frustrated. Edward Deng cited in *Communication Africa* (2002) underscores this network problem where he observes, "Africa (**in this context Nigeria**, emphasis added) needs a revolutionary access solution to face the Next Generation Network (NGN)".

iii. Epileptic Power Supply is also a problem here. Powers generation and utilization in Nigeria have become a luxury only few highly privileged Nigerians enjoy. National Electric Power Authority (NEPA) now Power Holdings Company of Nigeria (PHCN) has failed to make electric sufficiently available. Even few occasion the company supplies power, what gets to the consumers is low current that may not help them do anything meaningful. Incidentally, online/multimedia journalism requires adequate and constant power supply to thrive.

Most of the tools used for online/multimedia journalism (ranging from computer, digital cameras, mobile phones, ipod, WiFi, ipad, etc) requires constant power supply. Again information gathering, processing and dissemination in the context of online/multimedia journalism requires constant power supply even as power is needed to access online information.

iv.   Low Internet Penetration: Although it is often said that ICTs have encouraged to a large extent, interaction and participatory communication among people irrespective of where they live in the world, certain segment of Nigerian population are still cut off from the online world. The cut off is not really as a result of lack of Internet literacy (which we have already discussed) but due to limited internet penetration. Most villages and communities are not connected with internet - the reason Law (2000:38) questions whether each village has at least a single internet connection accessible to all. Worst is the fact that over 95 percent of the internet users in Nigeria reside in urban areas. Online/multimedia journalism cannot therefore, said to be fully participatory in Nigeria when most rural residents were cut off from Internet experience. This is considered serious problem in that it negates the very essence of online/multimedia journalism which is even participation and or convergence.

v.   Ethical and Legal Challenges which raise questions as to:
   * Who uploads what?
   * How authentic, credible and reliable is the online/multimedia news.
   * How would one fathom the difference between facts and fiction (i.e. actuality or reality in the physical world and simulated virtual reality)?

Much of these legal and ethical imperatives or issues were discussed in the previous two units.

3.3: Prospects of Online journalism in Nigeria.

In spite of the numerous factors militating against online/multimedia journalism in Nigeria, there is hope that the problems will be overcomed over time. According to Njoku (2009:7):

> …the number of internet users in developing countries
> (**including Nigeria**, emphasis added) is expected to cross
> the 500 million mark, surpassing industrial nations for the

first time. By some estimates, more than 75% of the world population now lives within the range of a mobile network.

Although the above information does not situate strictly on Nigeria, since Nigeria is part of the nations being touched by the wave of increasing internet and mobile phone penetration as earlier indicated, then there is high prospect for increased access to and utilization of the benefits of online journalism.

Plausibly, there has been a rising improvement in power supply due to alternative power supply taking place in some areas like Lagos, Awka, and Enugu. If the improvement in power supply is sustained, the problem of sustained powering of multimedia tools like computer, mobile phones and digital cameras will be abated. When this is the case, then access to internet when needed will be enhanced.

In case of illiteracy, the free education programme embarked upon by some states of the Federation like Imo and Rivers state hold some hope for media technology literacy in the country. This is true given that the more educated citizens of a country are the more they tend to plug in knowledge-driven economy which is technologically based. With sufficient education, the citizens will now participate actively in citizen journalism as well as assessing online/multimedia information and news.

4.0: Conclusion

The beginning of any endeavor is usually difficult. But with perseverance, the difficulty is usually surmounted over time. So it is with multimedia practice in Nigeria. At present the industry is facing some challenges. But it is hoped that with the way things are going the challenges will naturally frizzle out soon. It behooves journalism students at various levels to take their training in multimedia journalism serious. This will at least, boost skill acquisition and capacity building in this evolving area of specialization in mass communication/journalism education and practice.

Self Assessment Exercise

What in your own view is the prospect of multimedia journalism practice in Nigeria?

5.0: Summary

This unit serves as an epilogue to this module and the course. As such, issues relating to multimedia problems and prospects in Nigeria were discussed.

6.0: Tutor-Marked Assignment

Discuss the contemporary online journalism situation in Nigeria and explain the current problems facing the industry.

7.0: References/Further Reading

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