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Instructional Media and Effective Classroom Management Practices

Anthony Aniah¹, PhD Adamu Zubairu Evuti², PhD

¹Department of Educational Technology
School of Science and Technology Education
Federal University of Technology, Minna
²Department of Educational Technology
School of Science and Technology Education
Federal University of Technology, Minna

Abstract

The paper examined the concept of instructional media and its effectiveness on educational classroom management practices in the 21st century. For effective teaching and learning to take place, the paper calls for availability of a variety of instructional tools (power point, internet, video etc), and the instructor should be able to identify, select and organise the instructional materials in line with the concepts to be taught. In the light of the above, the paper also takes into consideration when planning classroom instruction, the learner, teacher and good time management in order to promote and enhance learning outcome. Furthermore, the paper stressed the need to preview media before actual class instruction and provide experts to service the media once in a while and a good source of energy to keep the media in good shape to enhance effective classroom communication.

Introduction

With the advent of new technologies and the explosion in schools enrolment at all levels of education, the need to diversify instruction became inevitable. Technology is defined as the making, modification, use and knowledge of tools, machines, crafts and software to solve a problem, improve on already existing solution to a problem, perform a specific task or achieve a goal. Technology application to instructional process is regarded as instructional technology. According to Nsofor (2010), instructional technology is a component of educational technology which seeks to improve learning by ensuring the installation of efficient and effective instructional system and managing the human and other resources optimally. It comprises of such components as teacher, subject matter and information communication and technology (ICTs), when these components, especially ICTs are efficiently manipulated and managed in any instructional process, learning becomes effective. Consequently, the need for massive use of instructional technology in the classroom. Educational technology is a complex combination of hardware and software. These technologies are combination of audio and visual channels such as computer code, data, graphics, video, and text. Although technology applications are frequently characterized in terms of their most obvious or innovative feature (a high-speed data line or videoconferencing), from the standpoint of education, it is the effectiveness of the instruction delivered that is important rather than the equipment delivering it.

Instructional media is the application of various educational media (audio and visual) in the classroom with a view to facilitate teaching and learning and enhance comprehension of knowledge with ease (Aniah, 2015). Sofolahan (2011) defined instructional media as information carrying technologies that are used for instructional purposes with the hope of delivering educational information very quickly

and widely. The use of various forms of instructional media and technology in teaching whether new or old can have profound impact on students learning. These media can enliven a class, encourage students' participation and help students grasp difficult concepts. The following are types of instructional media: Real objects and models, printed text (books, handouts, worksheets), printed visuals (pictures, photos, drawings, charts, graphs), display boards (chalk, bulletin, multipurpose), Interactive whiteboards, overhead transparencies, slides and filmstrips, audio (tape, disc, voice), Video and film (tape, disc), television (live), computer software, web site, internet and power point.

Classroom management is a term used by teachers to describe the process of ensuring that classroom lessons run smoothly despite disruptive behaviour by students. The term also implies the prevention of disruptive behaviour by students in the classroom. Effective management of classroom by teachers has far reaching effects not only on the students but also on learning, the final objectives and goals of institution. On the basis of these facts, there is need for teachers to understand some of the key aspect of classroom management, which may include expectation, establishment of ground rules and discipline. Effective classroom management also involves clear communication of behavioural and academic expectations as well as a cooperative learning environment (Allen, 1986).

Kauchak and Eggen (2008) explain classroom management in terms of time management. The goal of classroom management is not only to maintain order, but also to optimize student learning. They divided class time into four overlapping categories namely, allocated time, instructional time, engaged time and academic learning time. Allocated time is the time allotted to teaching, learning and routine classroom procedures like attendance and announcements.

Allotted time is also what appears on student's schedule, for example 'Introductory Algebra: 9:50 - 10:30 or 'Calculus1:15 - 2: 00p.m'.Instructional time is what remains after routine classroom procedures are completed. That is to say, instructional time is the time wherein teaching and learning actually takes place. Teachers may spend two or three minutes taking attendance for example, before their instruction begins. Engaged time is also called time on task. During engaged time, students are participating actively in learning activities such as asking and responding to questions, completing worksheets and exercises, preparing skits and representations. Academic learning time is when students participate actively and are successful in learning activities. Effective classroom management maximizes academic learning time.

Tips for use of Variety of Instructional Media for Effective Classroom Instruction

While it is necessary to talk about how media might improve classroom teaching and learning, the following tips will guide the teacher: Visual aids should augment the presentation; they are not meant to be the entire presentation. It is imperative that all instructional media are previewed before they are used in class or online. This will familiarize you with content and structure, as well as ensuring that no unfortunate (and sometimes embarrassing) mixups have occurred. Visuals are best kept simple, with minimal wording. Media should always be readable from a distance (when reproducing from texts and enlarging graphics). You can visual aids in the actual practice using the classroom before the lecture begins and the audience's line of vision should not be obstructed. Visual materials should be displayed only when the instructor is ready to use them, and they should be kept visible until the students have finished taking notes. You should remove the materials when you are ready to talk about something else, signalling that it is time for discussion or noting a subject change also

effective instructors talk to the students, not the visual aids.

Importance of Media in Classroom Instruction

As a rule, educational experiences that involve the learner physically and that give concrete examples are retained longer than abstract experiences such as listening to a lecture. Instructional media help add elements of reality - for instance, including pictures or highly involved computer simulations in a lecture. Media can be used to support one or more of the following instructional activities:

- Gain attention: A picture on the screen, a question on the board, or music playing as students enter the room all serve to get the student's attention.
- Recall prerequisites: Use media to help students recall what they learned in the last class, so that new material can be attached to and built upon it.
- Present objectives to the learners: Hand out or project the day's learning objectives.
- Present new content: Not only can media help make new content more memorable, media can also help deliver new content (a text, movie, or video).
- Support learning through examples and visual elaboration: One of the biggest advantages of media is to bring the world into the classroom when it is not possible to take the student into the world.
- Elicit student response: Present information to students and pose questions to them, getting them involved in answering the questions.
- Provide feedback: Media can be used to provide feed- back relating to a test or class exercise.
 - Enhance retention and transfer: Pictures enhance retention. Instructional media help students visualize a lesson and transfer abstract concepts into concrete, easier to remember objects.
 - Assess performance: Media is an excellent

way to pose assessment questions for the class—to answer, or students car submit mediated—presentations—as classroom projects.

Constraints of Instructional Media Technology Use

The initial enthusiasm for technology (especially computers) included rosy predictions about making teachers' jobs easier. Experience has shown that these early predictions to be naive. Teachers are nearly unanimous in concluding that, in the early stages of technology implementation, at least, their job becomes harder. The technical demands posed by technology use are just the tip of the iceberg. Teachers must be able to select, adapt, or design technology-enhanced materials that meet the needs of their particular students. Technologyenhanced curricula often place new demands on teachers' subject matter knowledge and nearly always require them to take on new roles as curriculum designer, team builder, and coach. Complex collaborative technology-based work can make assessing individual students a complex undertaking. Teachers contemplating the above set of issues might well ask themselves whether their involvement with technology will be worth the trouble. The response from thousands of teachers who have tried it would be a resounding "yes!" (Barbara, 1995).

Shortage of qualified teachers to operate the available audio-visual instructional media in schools: Joseph (2008) observed that despite advancement in technology and the advantages to be derived from audio-visual in instruction, teachers in tertiary institutions are yet to adopt their use in teaching and learning process, stressing that majority of teachers' have no adequate knowledge on how to operate and use the available audio visual equipment and materials as a result of lack of trained professionals and poor governance in the country. Okon (2003) in support of the above

statement stated that graduates from Nigerian universities have fallen below international standard because of lack of application of modern technology devices in teaching and learning such as computer and internet connectivity. The few qualified manpower in the nation's university are not adequately catered for, resulting in their exodus to foreign land (beside the in-ability of government to bring Nigeria experts in specialized disciplines back home to teach and research in our universities). This attitude of staff exodus is largely attributed to poor remuneration simply referred to as brain drain syndrome. It is in the light of the above problems that Bissong (2009) professor in geography and deputy Dean post-graduate school, University of Calabar called on Nigeria government to reverse its non-interest on education and pay adequate attention to the sector as one of the most important area responsible for the rapid advancement of any nation.

Power supply: A major source of concern in education industry in line with technology application in our classrooms is inadequacy of electricity supply to enhance the operation and maintenance of the available instructional media in our institutions of learning in Nigeria. In (2007) when late president Umaru Yar'adua assumed office, in his median broadcast to the nation Umaru Yar'adau said 'our plan is to lunch a national emergency programme on power supply'. Unfortunately, the sector has not witness any meaningful change to this moment in spite of Nigeria's position as the 6th largest producer of crude oil in the organization of petroleum exporting countries (OPEC) and 5th source of imported oil and 8th largest US worldwide crude oil producer. It is indeed pathetic and even more worrisome because the nation cannot boost of stable and affordable power supply to put into use the available technological media that aid or support teaching and learning in our classrooms and also take care of other economic activities that enhances

development. In addition to the challenges of teachers, schools and the education system described above, making technology a force for learning and positive change in our schools poses challenges to our community.

The Way Forward

Need for qualify experienced technology teachers: Most schools have few teachers who are comfortable with technology and able to do much of their own trouble shooting. But most teachers have limited experience in this area, and even if they are comfortable using a technology they have not completely mastered in front of their students. This indicates the importance of having on-site assistance through workshops training and seminars organised periodically to keep teachers in tone with use of technologies in classroom instruction.

Rewards and recognition for exemplary technology-supported activities: Teachers are influenced by the reward structure around them when it comes to deciding where to place their energies. Not surprisingly, school leadership that values technology and education reform activities was associated with more widespread and sustained emphasis in these areas.

Use of technology across subject matters and classrooms: There is a certain amount of "overhead" that goes with learning to use any new technology. Students need to acquire keyboarding skills and learn how to get into programmes and files and to store their work in Passwords and Internet appropriate ways. search skills require a certain amount of knowledge that has nothing to do with most curricula and is unlikely to carry directly over into adult settings for any but perhaps senior high school students because of rapid changes in technology. Given this reality, the more classes and grades over which this "technology overhead" can be spread, the better. Teachers in schools that use technology throughout the school find it easier to use technology because

they do not have to teach all of the technology skills themselves. Moreover, when technology is used across a broad range of classes, many more students find enjoyable uses and feel confident about their ability to learn new technology applications.

Providing Technical Support for Technology Use and Maintenance: Even after teachers' initial fear of getting involved with technology has been overcome, serious challenges remain in terms of providing enough technical support that teachers will not be discouraged by equipment failures or software behaviour they do not understand.

'It's like putting gas in the car; you put it in and you want it to run and you don't ever look under the hood. I think it is the same with computers...we need someone...who, when computers break down, can be a trouble shooter'. There appears to be general agreement among observers that, at least in the foreseeable future, schools that are attempting to implement technology on a wide scale need to have on-site technical assistance. Although some sites have attempted to make use of a knowledgeable teacher volunteer or with part-time services from a district technology coordinator, such arrangements are often unsatisfactory. Like all of us, teachers trying to use technology in their classrooms want technical help on demand. Controlling a classroom full of students in the midst of some activities that requires technology when the system goes down requires flexibility and skill. If technical problems arise frequently and teachers have to wait hours, days, or weeks to get them resolved, they will abandon their efforts to incorporate technology.

Quite a bit of technical support is needed in schools where all or most teachers are using technology, particularly if new or experimental systems are involved or extensive use is made of computer networks. At least five kinds of technical assistance are necessary to:

- Help in planning for technology uses and acquisitions
- Help in training on how to use new hardware and software
- Demonstrate and advice on how to incorporate technology into instruction
- help when software problems or hardware failures arise
- Low-level system maintenance.

Conclusion

The paper discussed the significance of instructional media in classroom teaching and learning. It stressed that media when integrated and well managed can ensure that students develop the right attitude towards instructional contents. Furthermore, the use of media would also promote teacher's efficiency in the design, production and handling of media. The paper revealed that when media are used by teacher in the instructional process they can promote students' positive attitude, encourage their self-motivation, encourage relevance and credibility and enhance understanding thereby making classroom management very effective.

Recommendations

The following recommendations were proffered based on the write up in this paper:

Curriculum developers should provide teachers with instructional approaches for classroom management through course work and guided practice with feed back.

Government should re-arrange her priorities and fund education as one of the most important sector by ensuring that schools have computers and internet connectivity to enable teachers' and students' take advantage of their use for effective classroom instruction and national development.

Employ technical support staff to ensure regular maintenance of educational instructional media available in schools.

Give incentives to teachers' at all levels by increasing their take home and pay them as at when due thereby encouraging further researches on use of technology in the classroom and reducing to the barest minimum brain drain syndrome in Nigeria.

Government should provide alternative solution in terms of power supply in order to enhance stable operation of the available instructional technological media by making available standby generators in our schools.

References

Aniah, A. (2015). Instructional technology application in Nigeria classroom: Challenges and the way forward. A paper presented at Annual National Conference held at the Institute of Education University of Nigeria, Nsukka, from 25th-28th August.

Allen, J. D. (1986). Classroom management: students' perspectives, goals and strategies. American Educational Research Journal, 23 (3), 437-459.

Barbara, M. K. O. (1995). Technology's rople in education reform. Educational Research and Improvement. 184-186.

Bissong, F. (2009). In A. Aniah, & C. S. Educational technology: The imperativeness of ICT in Improving Tertiary Education in Nigeria. Proceedings of the 32nd International Conference, Nigerian Association of Educational Media and Technology (NAEMT) held in Imo State University, Owerri, 19th-23rd. 57-59.

Joseph, O. H. (2008). Assessing the availability and utilization of instructional materials in Kaduna Polytechnic. Unpublished M.Tech Thesis, Federal University of Technology, Minna, 58.

Kauchak, D., & Eggen, P. (2008). *Introduction to teaching:* Becoming a professional (3rd ed). Upper Saddle River, NJ: Pearson Education Inc.

- Nsofor, C. C. (2010). Effects of improvised media on secondary school student achievement in biology concepts in Niger State. *Ph.D Thesis, Federal University of Technology, Minna.*
- Okon, E. A. (2003). Information technology and learning organization: Nigerian Universities in perspective. *Journal of Faculty of Education, University of*

Calabar.

Sofolahan, A. (2011). The implication for the nation of students' undergraduate achievement in science. *Journal of Educational Media and Technology, 15* (2), 141-146.