THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL OF TANZANIA

DIPLOMA IN SECONDARY EDUCATION EXAMINATION

750   **EDUCATIONAL MEDIA AND TECHNOLOGY**

Time: 3 Hour.   **ANSWERS**   **Year: 2007**

Instructions

1. This paper consists of sections **A** and **B.**

2. Answer all questions in sections **A** and **four (4)** questions from section **B.**

3. Read each question carefully before you start answering it.

4. Cellular phones and other unauthorized materials are **not** allowed in the examination room.

5. Write your **Examination Number** on every page of your answer booklet(s).

1. Identify four signs that show ineffective use of media during a lesson.

Learners appear disengaged or distracted, showing signs of boredom, inattention, or confusion, which indicates that the media is not capturing or holding their interest.

The media content does not align with the lesson objectives, making it hard for students to relate the material to what is being taught.

The teacher spends too much time explaining how to use the media instead of teaching, showing that the tool is either too complex or unfamiliar.

Technical problems disrupt the flow of the lesson, such as malfunctioning equipment or poor visibility, reducing the effectiveness of the media in supporting learning.

2. State four reasons why it is important to evaluate instructional media before using it in class.

Evaluation ensures that the media content is accurate, up-to-date, and relevant to the topic and curriculum standards, preventing the spread of misinformation.

It helps to check whether the media is suitable for the learners' age, language level, and background, increasing understanding and engagement.

Evaluation allows the teacher to plan how to integrate the media effectively into the lesson, avoiding confusion or wasted time during the presentation.

It helps to detect any technical faults, errors in layout, or missing components so that they can be corrected before the lesson.

3. Mention four contributions of digital libraries in supporting secondary school education.

Digital libraries provide access to a wide range of textbooks, articles, and revision materials, supporting independent study and research.

They allow 24/7 access to learning materials, enabling students to study anytime and anywhere, even outside school hours.

Digital libraries reduce the cost of buying and maintaining physical books, which is especially useful in schools with limited budgets.

They support curriculum updates by providing recent content that aligns with the current education standards and national examinations.

4. Explain four benefits of using educational games as media for teaching in secondary schools.

Educational games increase learner motivation. They make learning fun, reducing anxiety and encouraging participation among students.

They support problem-solving and critical thinking, as games often involve challenges, rules, and goals that require logical reasoning.

Games promote teamwork and communication when used in groups, helping learners to build interpersonal and social skills.

They offer immediate feedback, allowing learners to recognize mistakes and adjust their responses in a low-pressure environment.

5. List four safety precautions a teacher should follow when using electrical teaching devices.

Ensure all electrical devices are in good condition, with no exposed wires or damaged plugs, to avoid the risk of electric shock.

Devices should be connected to stable power sources, and surge protectors should be used where possible to prevent damage from power fluctuations.

Electrical equipment must be kept away from water or wet surfaces to prevent short circuits or accidents.

After use, devices should be switched off, unplugged, and stored in safe, dry, and secure places to avoid overheating or tampering.

6. Outline four indicators of well-designed visual instructional materials.

The materials use clear, large fonts and appropriate color contrast, making them easy to read from different parts of the classroom.

They are focused and not overcrowded, displaying only essential information to avoid confusing or overwhelming learners.

All visuals are relevant and directly related to the lesson objectives, helping to reinforce key concepts being taught.

Labels, titles, and diagrams are correctly positioned and easy to understand, supporting clarity and logical flow of information.

7. Give four reasons why teamwork among teachers is important in the preparation and use of media.

It saves time and effort by allowing teachers to share ideas, divide responsibilities, and produce materials more efficiently.

Prepared by Maria Marco for TETEA

Teamwork leads to higher quality media, as teachers can combine different skills such as drawing, digital editing, or content design.

It encourages professional growth through knowledge exchange, where teachers learn new strategies and tools from one another.

Collaborative planning ensures consistency across classes or streams, especially when multiple teachers are handling the same subject or level.

8. Describe four ways in which instructional media can be used to support slow learners.

Media can break down complex topics into visual or audio formats, making it easier for slow learners to process and understand information.

Recorded lessons or videos allow learners to replay and review content at their own pace, helping them to catch up with the rest of the class.

Charts, diagrams, and real objects offer concrete examples that reinforce learning and support memory retention.

Interactive tools like flashcards or games can be used for practice and repetition, allowing slow learners to build confidence gradually.

9. Mention four barriers that prevent the successful integration of media in lesson presentation.

Lack of training leaves teachers unprepared or unconfident in selecting and using media tools effectively.

Insufficient resources such as projectors, computers, or materials make it difficult to implement media-rich lessons.

Large class sizes and limited space may prevent effective display or use of media, especially visual or audio tools.

Inconsistent power supply or poor classroom infrastructure may cause disruptions or discourage the use of digital or electrical media.

10. Explain four responsibilities of a subject teacher in the storage and maintenance of teaching aids.

Teachers must ensure teaching aids are cleaned and stored properly after use to preserve their quality and prevent damage.

They should label and organize the materials clearly, making it easy to retrieve and return items when needed.

Teachers are responsible for reporting damaged or missing materials to the administration so that replacements or repairs can be arranged.

They should monitor how materials are used during class and by other staff, ensuring accountability and proper handling of school resources.

11. Analyse five advantages of incorporating learner-generated content into the media used in classroom teaching.

It enhances student engagement. When learners contribute to the creation of media—such as posters, presentations, or videos—they become active participants, increasing their interest in the lesson.

It improves understanding. The process of creating teaching materials requires learners to research, summarize, and organize knowledge, deepening their comprehension.

It encourages creativity and critical thinking. Learners must design, plan, and reflect on how best to communicate content, building essential problem-solving skills.

It promotes ownership of learning. Students are more likely to value and remember content they have created themselves, rather than what is only delivered by the teacher.

It provides peer learning opportunities. Learners can teach others through their created content, helping classmates to grasp difficult concepts in relatable ways.

12. Discuss five factors a teacher should consider when deciding whether to use audio, visual, or audio-visual media for a particular lesson.

The nature of the topic is key. Visual topics like geometry or biology diagrams are better taught using visual aids, while pronunciation or music lessons may need audio.

Learner characteristics matter. For instance, auditory learners may benefit more from recorded discussions, while others might prefer visual demonstrations.

Availability of resources determines feasibility. If the classroom lacks speakers or projectors, simpler media like printed charts may be more practical.

Time constraints should be considered. Complex media may take longer to set up or explain, so for shorter lessons, a quicker option like a poster may be ideal.

Lesson objectives must guide the choice. If the goal is to promote discussion or exploration, interactive media may be preferable to static visual tools.

13. Describe five challenges that schools face in keeping teaching aids safe, clean, and ready for use and propose appropriate solutions.

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Lack of proper storage leads to damage or loss. Schools should install labeled shelves or cupboards with locks to organize and protect materials.

Dust and humidity can spoil printed or electrical media. Materials should be stored in dry, ventilated spaces with covers or protective packaging.

Improper handling by students or staff may break or disorganize teaching aids. Schools can create usage policies and assign responsible monitors for each item.

Frequent borrowing without tracking causes losses. A borrowing register should be maintained to record who uses which material and when.

Neglect or forgetfulness reduces maintenance. Schools can set regular check-up schedules where teachers inspect and report on the condition of teaching aids.

14. Examine five ways in which improvisation of instructional materials empowers both teachers and learners.

It builds teacher confidence. By creating their own aids, teachers gain deeper understanding of the subject and control over their lesson delivery.

It develops problem-solving skills. Teachers learn to think critically and creatively when designing teaching aids with limited resources.

It makes learning more accessible. Improvised materials are often based on local contexts, helping learners connect theory to their daily environment.

It encourages learner participation. Students can assist in the creation of aids, building teamwork, curiosity, and engagement.

It promotes low-cost sustainability. Improvisation reduces dependence on expensive or imported materials, making education more inclusive and manageable.

15. With examples, explain five classroom situations where non-digital media would be more effective than digital media.

In classrooms without electricity, hand-drawn charts or flashcards are more practical than projectors or videos.

During outdoor lessons like agriculture or geography fieldwork, real objects (plants, soil, maps) are more useful than screens or recorded content.

When teaching tactile learners, using physical models or realia allows hands-on experience that digital media cannot replicate.

For exam preparation in large classes, printed past papers and textbooks allow each learner to work individually, unlike a single screen shared by many.

In environments with noise or poor acoustics, posters and diagrams are clearer than audio-based media, which may be hard to hear.

16. Discuss five benefits of involving students in the design and evaluation of media used in the teaching and learning process.

It increases motivation. Students are more eager to learn when their ideas are valued and incorporated into class materials.

It strengthens understanding. Evaluating or designing teaching aids forces learners to engage with the subject deeply, improving mastery.

It enhances feedback. Students can suggest improvements to media based on how well they understood the lesson, helping teachers refine their materials.

It promotes collaboration. Group-based design tasks build communication and planning skills among students.

It builds responsibility. When students know their input matters, they take greater ownership of their learning and behavior in class.

17. Evaluate five long-term effects of poor media planning on teaching effectiveness and student achievement.

Students may develop misconceptions. If media is irrelevant or inaccurate, it can reinforce wrong ideas that are hard to correct later.

Lesson flow is disrupted. Without proper planning, media may not align with objectives or timing, causing confusion or unfinished lessons.

Learner interest may decline. Repetitive, boring, or low-quality media reduces attention and motivation, affecting engagement over time.

Assessment becomes harder. If media does not reinforce the learning goals, it becomes difficult to evaluate whether students have understood the content.

Teacher stress increases. Constant improvisation without planning puts pressure on teachers, reducing morale and long-term instructional quality.

18. Explain five ways in which educational media and technology can support the teaching of cross-cutting issues like life skills, human rights, and drug abuse prevention.

Role-play videos can demonstrate real-life situations like peer pressure or gender-based violence, encouraging reflection and empathy.

Posters and brochures can be used to spread awareness on topics such as HIV/AIDS, human rights, and environmental conservation in visible, memorable formats.

Songs and audio messages deliver important life skills messages in engaging and culturally relevant ways, especially for younger learners.

Digital simulations allow students to explore consequences of risky behavior, such as drug abuse, in a safe and interactive way.

Debate and discussion prompts based on media clips or images help students develop communication, critical thinking, and decision-making skills.

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