



THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA



**CANDIDATES' ITEM RESPONSE ANALYSIS
REPORT ON THE DIPLOMA IN SECONDARY
EDUCATION EXAMINATION (DSEE) 2021**

EDUCATIONAL MEDIA AND TECHNOLOGY



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750 EDUCATIONAL MEDIA AND TECHNOLOGY

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FOREWORD

The National Examinations Council of Tanzania is pleased to issue this Item Response Analysis Report for the year 2021 Diploma in Secondary Education Examination (DSEE) on the Educational Media and Technology subject. The report provides feedback to student-teachers, tutors, parents, policy makers and the public in general on the performance of candidates and the extent to which the instructional goals and objectives were achieved.

The examination done was a summative evaluation meant mark to the end of the diploma studies in education. The examination results can thus be used to measure the effectiveness of the education system in general and particularly the delivery of the Educational Media and Technology subject. Basically, the candidates' responses to the various examination items can be used as one of the indicators of what the education system was either able or unable to offer to students in their Diploma in Secondary Education studies. This could then act as the basis for future improvement.

In this report, factors which enabled the candidates to answer the questions correctly or incorrectly have been analysed. The analysis shows that the candidates with higher scores were able to understand questions; had sufficient knowledge on the subject matter and possessed proficiency and communication skills in the English Language. However, the weaknesses which were observed in the responses of the candidates who performed poorly included inadequate knowledge and skills of the subject matter, poor English and misinterpretation of examination items.

The feedback provided through this report is expected to enable education administrators, tutors and continuing student teachers to identify proper measures to be taken in order to improve performance in future examinations administered by the Council.

Finally, the National Council of Tanzania is grateful to all stakeholders who provided valuable contributions during the preparation of this report.



Dr. Charles E. Msonde
EXECUTIVE SECRETARY

1.0 INTRODUCTION

This report analyses the performance of the candidates who sat for the Diploma in Secondary Education Examination (DSEE) 2021 for the Educational Media and Technology subject. The examination was based on the 2009 Tanzania Institute of Education (TIE) syllabus. The general performance in the examination is categorised into five grade ranges. The performance is regarded as a fail (F) if the scores range from 0 to 39 marks; It is satisfactory (D) if the scores range from 40 to 54 marks and Good (C) if the scores range from 55 to 69 marks. The performance is very good (B) if the scores range from 70 to 79 marks and excellent (A) if the scores range from 80 to 100. A total of 1,728 candidates sat for the DSEE 2021 in the Educational Media and Technology subject. Out of those, 1,700 (99.42%) of the candidates passed while 10 candidates (0.58%) failed as shown in the following table.

The performance of the candidates who sat for the Educational Media and Technology subject in 2021.

| Candidates sat | Candidates Passed | | Candidates Failed | | Grades | | | | |
|----------------|-------------------|-------|-------------------|------|--------|---|-----|-----|----|
| | No | % | No | % | A | B | C | D | F |
| 1728 | 1,700 | 99.42 | 10 | 0.58 | 0 | 3 | 839 | 858 | 10 |

The table shows that none of the candidates were able to pass with grade A. Also 3 (0.17%) candidates passed with grade B, while 839 candidates (48.55%), 858 (49.65%) passed with grades C and D respectively. Generally, the performance on this subject was good as 1,700 (99.42%) of the candidates passed with grades D to B.

The examination consisted of two sections, A and B with a total of sixteen (16) questions. Section A had ten (10) short answer questions. Each question carried four (4) marks; making a total of 40 marks for the whole section. Section B had six (6) essay questions, from which the candidates were required to attempt any four (4) questions. Each question was worth 15 marks making a total of 60 marks for that section. The candidates were required to attempt a total of 14 questions for the entire examination.

In this report, the analysis of candidates' performance in each question was categorised into three; that is good, average and weak. In short answer items, the performance is regarded to be *Weak* if the scores range from 0 to 1.5 marks, *Average* if the scores range from 2 to 2.5 marks, and *Good* if the scores range from 3 to 4 marks. For essay items, the performance is regarded to be *Weak* if the scores range from 0 to 5.5 marks, *Average* if the scores range from 6 to 10 marks and *Good* if the scores range from 10.5 to 15 marks. Three colours have been used in figures, charts and appendixes whereby green, yellow and red represent good, average and weak performance respectively

Samples of candidates' answers are attached to illustrate the candidates' responses and appendix has been used to show the analysis of performance in each topic.

2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE ON EACH QUESTION

This part is divided into two sections, A and B. Section A analyses short answer questions while section B analyses essay questions. The detailed analysis is as follows:

2.1 SECTION A: Short Answer Questions

This section comprised of ten (10) short answer questions whereby the candidates were required to attempt all questions. Each question carried four (4) marks making a total of 40 marks.

2.1.1 Question 1: Categories of Educational Media and Technology

This question required candidates to outline four advantages of audio-visual learning materials over textual materials. The question was attempted by 1,728 (100%) candidates. Generally, the performance on this question was good as 1,509 (87.3%) candidates scored 2 to 4 marks. Figure 1 summarises the candidates' performance on this question.

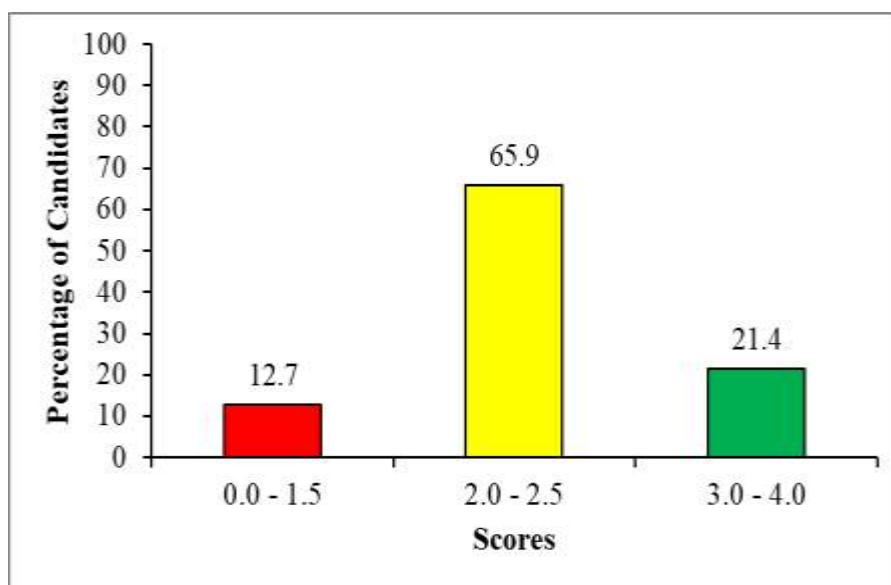


Figure 1: *The candidates' performance on question 1*

Analysis in question 1 shows that, most of the candidates (65.9%) partially outlined advantages of audio-visual learning materials over textual materials hence their scores ranged from 2 to 2.5 marks. Some of the candidates in this category mixed-up correct and incorrect points on advantages of audio-visual learning materials over textual materials.

Others provided general functions of educational media and technology instead of specifically outlining the advantages of audio-visual learning materials over textual materials. For example, one of the candidates with average score in this question gave general responses as follows; *it draws attention of learners, it brings motivation to the learners, it helps learners to remember easily, it expands knowledge of the learners.* These kinds of responses from the candidates caused them to score average marks as it only provides an insight on audio-visual learning materials.

Further analysis shows that 21.4% of the candidates had good performance as they scored 3 to 4 marks which signifies the learners understood the question and had enough knowledge on the concept of audio-visual learning materials and textual materials. Analysis of candidates' responses shows that the candidates who scored full marks managed to outline all four advantages correctly as demanded by the question. Examples of correct responses from these candidates were: *audio-visual media have two-way means of communication in learning while textual have only one-way means of learning, audio-visual produce sound which can be heard while textual cannot produce sound, in audio-visual we can see the speaker while in textual we cannot see the writer, audio-visual is easy in solving language barrier through observing while textual obtained through the document.* Extract 1.1 provides a sample of responses from one of the candidates' in this category.

| | |
|----|---|
| 1. | The following are the advantages of audio-visual learning materials over textual materials |
| | (i) Audiovisual learning materials such as Television (TV) produces both sound and pictures, hence accommodates students with hearing and visual problems while textual materials such as textbooks support learners who can only see. |
| | (ii) Audiovisual learning materials enables a learner to pay attention during the lesson than teaching using textual materials like books. |
| | (iii) Audiovisual materials makes to abstract concept to be concrete than when teaching using textual materials only. |
| | (iv) Audiovisual learning materials help to solve language problems as students can visualize the concept rather than textual materials. |

Extract 1.1: A sample of a candidate's correct response to Question 1

On the other hand, a few candidates (12.7%) with weak performance (0 to 1.5 marks) provided irrelevant responses which did not meet the requirement of the question. Moreover, few candidates (1.2%) who scored a '0' mark lacked knowledge on the concept tested as they provided the incorrect responses which did not relate to any concept. The candidates who scored 1 to 1.5 marks provided a few (one to two) weak points. For example, one candidate with poor performance provided responses like; *it saves time, it does not have costful, Easy to provide and helps to remember what is learned*. Another candidate who scored 0 marks provided incorrect responses with grammatical errors like; *it creates easy to recall because students used sense organ, it does not selective because every student can use*. Extract 1.2 provides a sample of an incorrect response to this question.

| | |
|---|---|
| 1 | i/ television It has learning Tanzania families for about twenty years |
| | ii/ Movie films are oddest form of motion picture technology capable of capturing life videostyle |
| | iii/ Video is the technology that captures moving image evaluation calls |
| | iv/ It used to reflect the image to the screen |

Extract 1.2: A sample of a candidate's incorrect response to Question 1

Extract 1.2 shows that a candidate provided social use of audio-visual material in entertainment. Also, the candidate demonstrates inability to comprehend the English Language commands.

2.1.2 Question 2: Principles of Teaching and Learning in Educational Media and Technology

In this question, the candidates were required to explain four types of technology as used in educational media and technology. The question was attempted by 1,728 (100%) candidates. In general, the candidates' performance on this question was poor as illustrated in Figure 2.

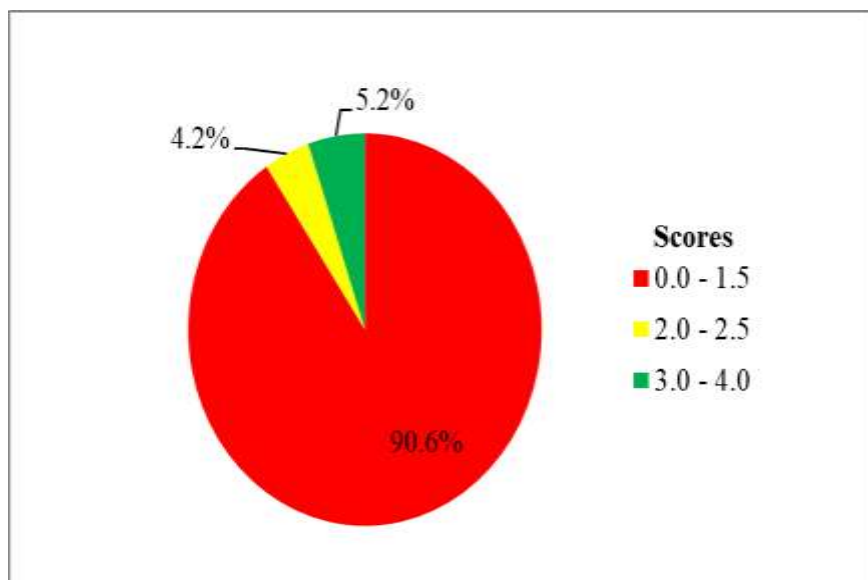


Figure 2: The candidate' performance on question 2

data in figure 2 reveals that majority of the candidates (90.6%) had poor performance due to lack of knowledge on the types of technology used in Educational Media and Technology. Also, most of the candidates in

this category misinterpreted the question. Thus, they provided concepts based on categories of Educational Media and Technology instead of types of technology like; *audio technology, visual technology, audio-visual technology, felt technology, computer technology, mobile phones technology, television technology, projector, overhead projector, telephone technology, printed media technology, non-printed media technology, liquid technology, gaseous technology* etc. For example, one candidate who scored 0 marks responded the question incorrectly as; *modern technology, traditional technology, imitative technology, advanced technology*. Extract 2.1. illustrates by providing a sample responses of the candidates in this category.

| |
|--|
| 2. (i) Use of Computer ; This tend to be as education media in teaching and learning process |
| (ii) Use of projector ; This used to display the information on the wall, that can be easy to seen. |
| (iii) Use of Television and Video ; This used to show motion picture, that can be used to represent or show information to the learner |
| (iv) Use of Smartphone ; This can be used as education media to explain a certain content, that tend to simplify distribute of knowledge and skills. |

Extract 2.1: A sample of a candidate's incorrect response to question 2

Extract 2.1 shows that the candidate outlined examples of modern media instead of types of technology as used in educational media and technology.

Further analysis reveals that few candidates (5.2%) who had good performance (3 to 4 marks) were able to briefly explain types of technology as used in educational media and technology as demanded by the question. These imply that they had adequate knowledge of the tested concept and understood the demand of the question. Some of the candidates' responses in this category were; *educational technology, communicational technology, industrial technology, informational technology, instructional technology*. In addition, the candidates supported their correct points with relevant explanations. Extract 2.2 provided a sample of a response from one of the candidates in this category.

| | |
|-------|---|
| 2. | Four types of technology as used in educational media and technology |
| (i) | Educational technology; These are technology used in application of science in education. |
| (ii) | Information technology; This is the technology used into the sharing of ideas. |
| (iii) | Communication technology; The technology used in provision of instruction. |
| (iv) | Media technology; There is the technology used into media like video, radio, audio. |

Extract 2.2: A sample of a candidate's correct response to Question 2

On the other hand, analysis shows that other few candidates (4.2%) who had average performance (2 to 2.5 marks) were able to respond to the question partially. Some of them provided two correct responses and the other two were incorrect responses. Others provided a few correct points out of the four points required. Other candidates also failed to support their correct points with relevant explanations to due partial understanding of the tested concept. For example, one candidates explained types of technology as; *educational technology e.g. projector and computer, industry technology e.g. recycling, modern technology e.g. tractor, telephone technology eg. smartphone*. In those points, two *educational technology* and *industry technology* were correct while others were incorrect. This depicts that the candidates had partial understanding of the types of technology as used in educational media and technology.

2.1.3 Question 3: Care and Maintenance of Educational Media and Technology.

This question had two parts (a) and (b). In part (a), the question required candidates to briefly describe two ways used to maintain educational media and technology and in Part (b) they were required to identify two conditions to consider when storing electronic educational media. The question was attempted by 1,728 (100%) candidates. The general performance of the candidates on this question was good as 1,340 (77.5%) candidates scored 2 to 4 marks. Figure 3 summarises the performance of candidates on Question 3.

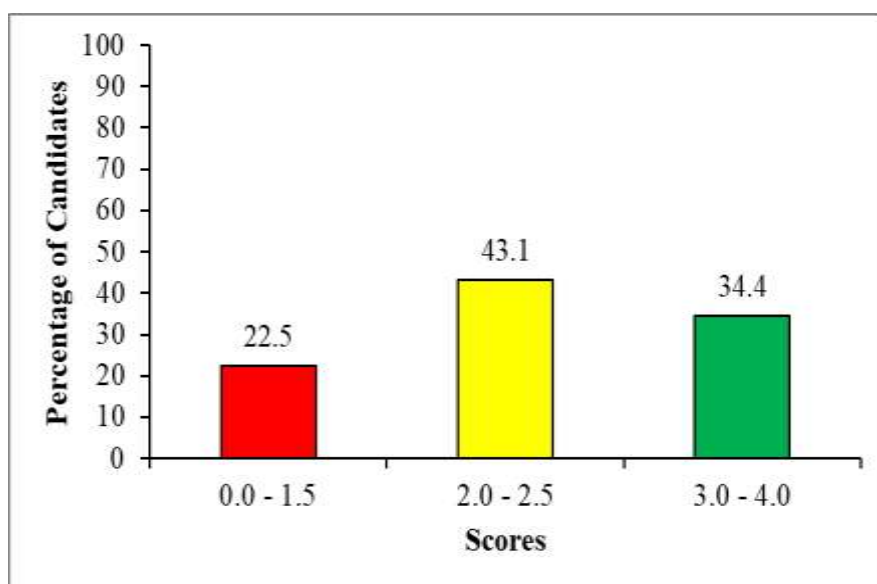


Figure 3: The candidates' performance on question 3

Analysis of the candidates' performance in Figure 3 shows that 43.1% of the candidates had average performance on this question as they scored 2 to 2.5 marks. Most of them failed to describe ways used to maintain educational media and technology in part (a) while the responses in part (b) were correct: For example, some of the candidates provided the following incorrect responses in Part (a) as: *traditional ways of maintaining educational media and technology, modern ways of maintaining educational media and technology, Improvisation, construction, cleanliness and recycling*. The analysis indicated that the candidates who had average scores had partial knowledge and skills on the ways of maintaining educational media and technology.

Further analysis shows that 34.4% of the candidates scored 3 to 4 marks which was good performance. This indicates that the candidates understood the question and had knowledge of care and maintenance of educational media and technology. In part (a), the candidates were able to briefly explain two ways of maintaining educational media and technology to include; *protective maintenance, through corrective maintenance, through replacement maintenance*. In part (b), these candidates were also able to provide two correct conditions to consider when storing electronic educational media such as; *keep in dry place, keep in a clean area with no dust. Avoid plugging in equipment while in storage, avoid storing electronic devices in place with direct sunrise*. Extract 3.1 provide a sample response of candidates from this category.

| | |
|---|--|
| 3 | a) The following are the two ways used to maintain educational Media and technology: |
| | i) Preventive Maintenance: is the way of maintain educational Media and technology where by the educational Media and technology are prevented from the danger or dust. |
| | ii) Corrective Maintenance: is another way of maintain in educational Media where by the Media are corrected |
| 3 | or b) - there any instruction to the educational Media and technology. |
| 3 | (b) The conditions to consider when are storing electronic educational Media. |
| | i) cover it if it is not used; When you want to storing electronic educational Media you have to cover it which the special cover made to avoid dust. |
| | ii) Keep away from water, sunlight and dust; electronic educational Media when needed to storing should be keep away from the things which will destroy it. like water, sunlight and any kind of dust. |

Extract 3.1: A sample of a candidate's correct response to Question 3

Moreover, 22.5% of the candidates failed to provide correct responses thus scored 0 to 1.5 marks out of 4 marks which was poor performance. The candidates who scored 1 to 1.5 marks identified very weak points on the condition to consider when storing electronic materials in part (b) while in part (a) they failed to briefly explain ways of maintaining educational media and technology. The candidates who scored 0 marks

completely failed to respond correctly in both part (a) and (b). For example, in part (a) the candidates responded as follows; *preserving, laminating, painting, putting in shelves, putting a frame, binding, oiling, spraying, put password, through improvisation, through recycling*. In part (b) *high temperature, good climate and weather* were given as response. Another candidate in this category in part (a) responded as; *putting in shelves, putting a frame*. In part (b), responded as; *type of the media, structure of the media*. According to these responses candidates lacked knowledge and skills on tested competence. Extract 3.2. illustrates by providing a sample responses of candidates from this category.

| | |
|----|--|
| 3. | (a) i) Through buying or purchases due to the education media should be obtained through buying of different teaching resource which help the learners to understand well |
| | ii) Through improvising. due to the different education media and technology should be obtained through creating and making different thing from the local environment which can help in teaching and learning process |
| 3 | (b) i) Analogy sound media |
| | ii) Digital sound media |

Extract 3.2: A sample of a candidates' incorrect response to question 3

Extract 3.2 shows that in part (a), the candidate explained the ways of acquiring educational media and technology instead of the way of maintaining educational media and technology. In part (b), the candidate identified incorrect points which were not relevant to any concept.

2.1.4 Question 4: Categories of Educational Media and Technology

In this question, candidates were required to give the meaning of the terms. (a) Video cassette (b) Globes (c) Filmstrips (d) Poster as used in educational media and technology. Analysis shows that the question was attempted by 1,728 (100%) candidates. Generally, the candidates' performance was poor as 316 (18.3%) candidates scored 2 to 4 marks. Figure 4 summarises the performance of candidates on Question 4.

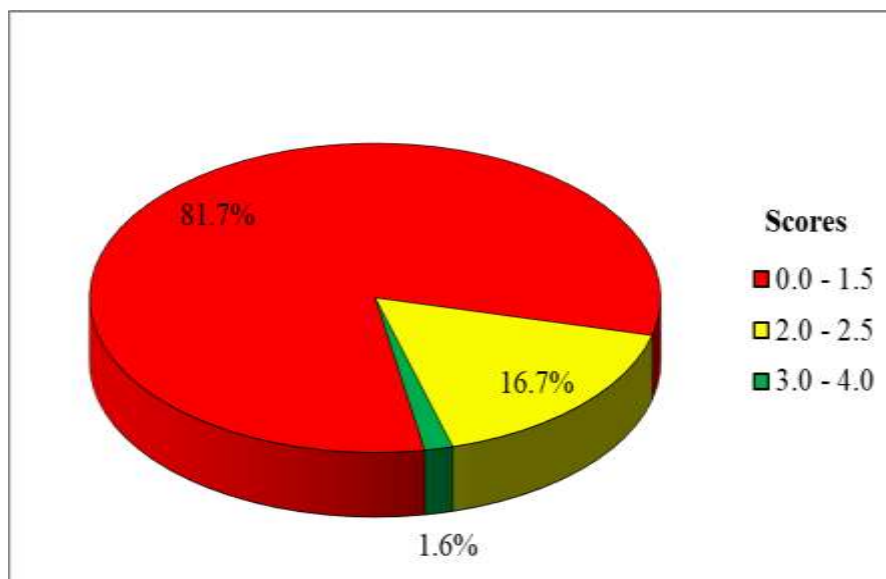


Figure 4: *The candidates' performance on question 4*

Figure 4 shows that, 81.7% of the candidates had scores ranging from 0 to 1.5 marks, which implies poor performance. Among these candidates, there were those who gave the general meaning of the terms based on daily life experiences. For example, one candidate in this group gave general meaning of the terms as; (a) Video cassette: *this is the means of communication where by transmit information through audio-visual. It contains songs.* (b) Globes: *this is among of things that are used to transfer information through news in magazine or inform of text.* (c) Filmstrips: *this is the means of communication or transfer of information through videos, and others that show the reality of the societies.* (d) Poster: *This is the place where by people they use to get information especially through letter at a certain place.* Another candidate who scored 0 marks gave irrelevant answers as; (a) Video cassette: *these are the media which are called as one electronic media* (b) Globes: *are the media used to display information in wide area.* (c) Filmstrips: *these are media where by a learner cannot ask any question or answer and are called one electronic media.* These responses revealed that this candidate had completely lacked knowledge on the tested concepts. Extract 4.1 provides a sample of responses of the candidates in this category.

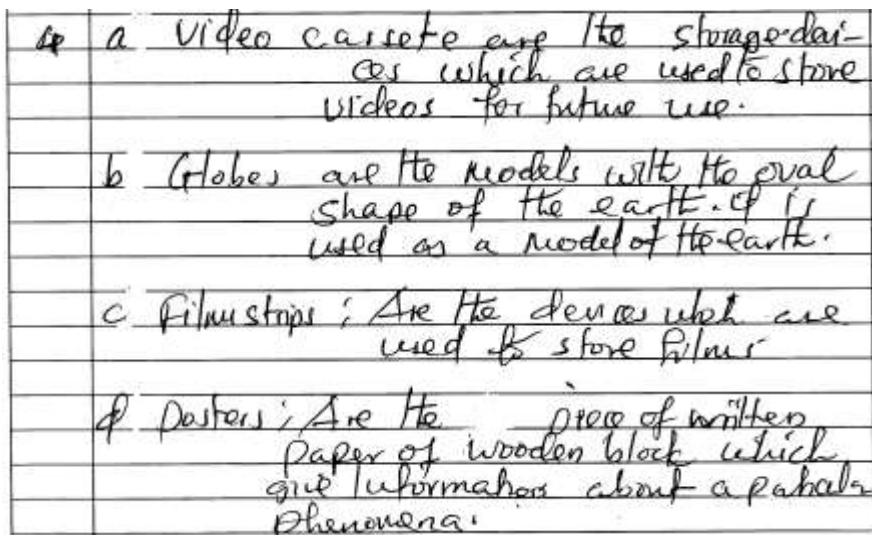
| | |
|--------|---|
| 4. (a) | Video cassettes: Refer to the kind of educational media and technology which contain picture |
| (b) | Filmstrips: Refer to the educational media and technology which show actions of character |
| (c) | Globes: Refer to educational media and technology which used to show pictures. |
| (d) | Posters: Refer to educational media and technology which used to transfer letter from one person to another person. |

Extract 4.1: A sample of a candidate's incorrect response to question 4

Extract 4.1 shows that a candidate explained the terms incorrectly and based on daily life experiences instead of the way they are used in educational media and technology.

Further analysis shows that 16.7% of the candidates who had average performance (2 to 2.5 marks) mixed correct and incorrect responses indicating that they had partial knowledge and skills on the terms tested. Most of these candidates responded to all of the four terms but their answers were partially correct. Among the candidates in this category were able to give the meaning of the two terms correctly while the other two terms were incorrect. Other candidates responded to three terms out of four. For example, one candidate in this group gave partial responses like; (a) Video cassette: *this are the electronic device which are used to control or DVD are entered in order to play a certain video.* (b) Globes: *is the representation of real object into a small surface or thing e.g. representative of an earth into a small globe* (c) Filmstrips: *is the equipment or devices where by information is transmitted by the way of visualization or by using sight* (d) Poster: *are some of the pictures which convey some information or warning and they are usually written in simple language or very few words.* All the points were partially correct thus the candidates scored average marks.

Moreover, a few candidates (1.6%) had good performance (3 to 4 marks). They were able to give the meaning of the terms correctly as demanded by the question implying that they had enough knowledge and skills of the terms. The candidates in this category gave the meaning of the terms as; (a) Video cassette: *are the storage devices which are used to store videos for future use.* (b) Globes: *Is an object used as teaching and learning aid specifically in geography to show the location of area of the countries all over the world.* (c) Filmstrips: *are the device which are used to display the series of still picture in films.* (d) Poster: *are the piece of written paper or wooden block which give information about a particular phenomenon.* For example, one candidate who scored high marks provided the correct responses as shown in Extract 4.2.



Extract 4.2: A sample of a candidate's correct response to question 4

2.1.5 Question 5: Categories of Educational Media and Technology

In this question, candidates were required to identify four strengths of using non-projected aids for the classroom presentation. The question was attempted by 1,728 (100%) candidates. The performance in this question was good since 1,310 (75.8%) candidates scored 2 to 4 marks. Figure 5 summarizes the performance of the candidates on question 5.

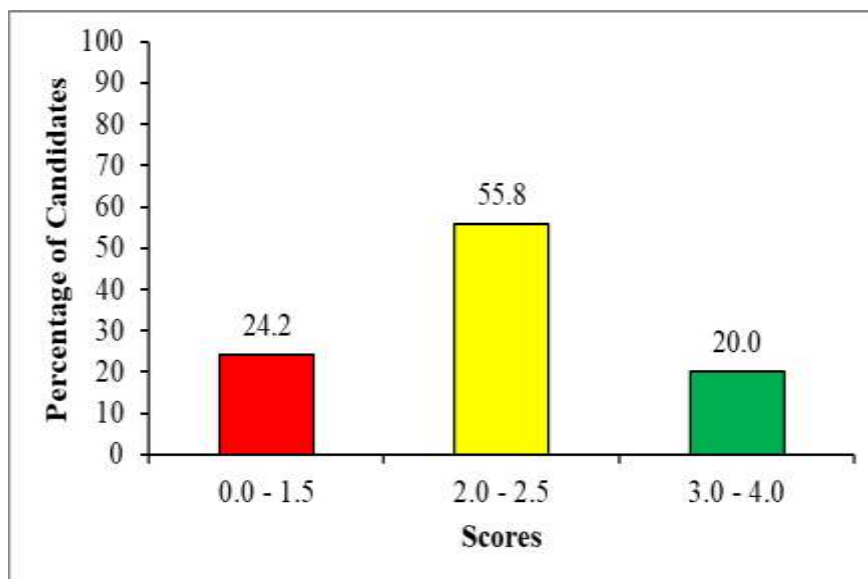


Figure 5: The candidates' performance on question 5

Figure 5 shows that, 55.8% of the candidates with average performance (2 to 2.5 marks) had partial mastery of the subject matter. Most of this candidates were able to provide two correct points while other points were incorrect. Others identified all four points which were partially correct and yet others identified weak points. For example, one of the candidates with average performance responses were; *does not need electricity, it is inexpensive, provide information, used by both learners and teachers*. From that candidate's responses, the first two points were correct while the rest two points were incorrect. The candidate in this category also identified weak points as follows: *It arouse interest of the students, it increases interaction of the students in the class, it makes learners to be creative and innovators, it helps learners to understand the information easily. It simplifies teaching and learning process, it saves time, it motivates learner etc.*

Further analysis shows that 24.2% of the candidates scored 0 to 1.5 marks which was poor performance. Most of them failed to respond correctly to the question as they lacked knowledge on specific competence (non-projected aids). The candidates who scored 0 marks provided incorrect responses which could not relate to any concept as follows: *it is easy to store, it can be used as teaching and learning aids during teaching process because it contains pictures, it is easy to read, scan, searching, materials or information wanted to see*. Another candidate who scored 0 marks gave the responses which were; *can be*

touched by everyone in class, students can use it later after class hours to read. These responses revealed that the candidate lacked knowledge of the tested concept. Others who scored 1 to 1.5 marks identified very weak points like; *it holds attention of the learners, it motivates learners, it rises interest of the learners, encourage active participation between learners, it saves time, crate retention of information to learners.* Extract 5.1 illustrates this by providing a sample of responses of candidates in this category.

| | |
|-----|---|
| 05. | Strengths of using non-projected aids |
| | i, They are safe for use. |
| | ii, They do not incur complications in storing. |
| | iii, They do not produce accidents. |
| | iv, They are in a sence of real objects. |

Extract 5.1: A sample of a candidate's incorrect response to question 5

Moreover, a few candidates (20.0%) had good performance with scores ranging from 3 to 4 marks. These candidates were able to identify strengths of non-projected aids for classroom presentation correctly as demanded by the question. Accuracy of their responses implies that they had adequate knowledge of the tested concept. For example, the responses of candidates with good performance were; *they are readily available, they are not expensive to buy, they are flexible, they are easy to use during presentation, they are easy to prepare, does not need power supply to operate.* Extract 5.2 illustrates this by way of a sample responses of candidates in this category.

| | |
|----|---|
| 05 | Four strengths of using non projected aids for the classroom presentation i) Availability. Non projected material are available compare to projected materials ii) Can be used any where. This is because no need of electricity you can use any where iii) It needs low cost to buy (cost needed is low compare to the cost of projected because text book you can find by one thousand Tanzanian shillings) iv) It needs low skills. No need of high skill to use non projected material like textbook as small amount of skills is needed in the use of text book. |
|----|---|

Extract 5.2: A sample of a candidate's correct response to question 5

2.1.6 Question 6: Characteristics of Educational Media and Technology.

This question required candidates to outline the qualities of educational media that can be used to inspire learning among learners in the teaching and learning process. The question was attempted by 1,728 (100%) candidates. Generally, the performance of candidates on this question was good since 1,664 (96.3%) candidates scored 2 to 4 marks. Figure 6 summarises the candidates' performance in this question.

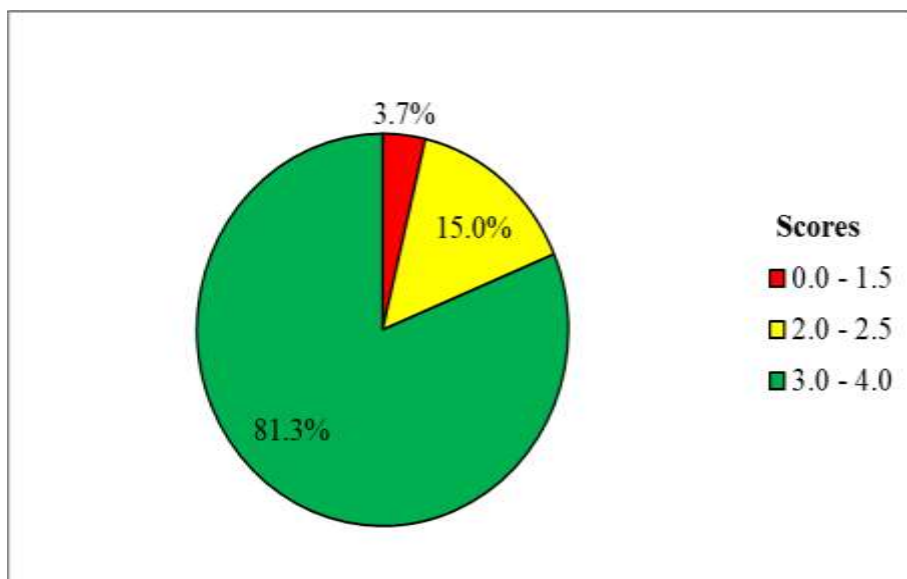


Figure 6: *The candidate's performance on question 6*

Figure 6 shows that 81.3% of the candidates who had good performance (3 to 4 marks) understood the question and had adequate knowledge and skills on qualities of educational media that can be used to inspire learning among learners. These candidates' responses were; *educational media should be relevant to the content, educational media should accommodate all learners in the classroom, educational media should be large in size so as to be visible and audible to all students, should be neat and clear, should be relevant to level and age of the learners*. For example, one candidate who scored full marks (4 marks) allocated to the question responded as follows; *it should be larger in size to be seen by all learners, it should have attractive colours to draw the interest of the learners, it should be relevant to the age and level of the learners, it should be relevant to the subject matter, it should be neat and clean*. Extract 6.1 illustrates this by providing a sample of responses of the candidates in this category.

| | |
|-----|--|
| 06. | (i) It should be relevance to the age, levels and nature of the learners, good educational media should consider the relevance of the learners ability. |
| | |
| | (ii) Should be neat and attractive, - Good teaching or educational media should be neat and attractive to the learners during teaching and learning process. |
| | |
| | (iii) Should be interesting and challenging, The educational media should make the learners to think beyond as it can be challenging them and interesting. |
| | |
| | (iv) It should be big in size, That lead to be seen clearly to all learners in the classroom during teaching and learning process. |
| | |

Extract 6.1: A sample of a candidate's correct response to question 6

However, 15.0% of the candidates who had average performance (2 to 2.5 marks) mixed up correct and incorrect responses. The analysis also indicates that some of the candidates were able to give two correct responses and other two partially correct responses. Yet other candidates outlined all four qualities of educational media but they were partially correct. For example, responses of one candidate who scored average marks were: *educational media should be attractive, should be durable, should be motivate learners, should be portable*. The first and third points were correct while the second and fourth were incorrect and they were related directly to the general quality of educational media and not specifically for the qualities of educational media which inspire learning among learners during the teaching and learning process.

Furthermore, a few candidates (3.7%) who had poor performance (0 to 1.5) provided too short or unclear responses. Some of the candidate in this category who scored 0 marks identified the general qualities of educational media instead of the qualities of educational media which inspire learning among learners during the teaching and learning process. The candidates identified the points like; *portability, accessibility, realistic, availability, durability, applicability* and

learnability. Other candidates who scored 1 to 1.5 marks identified some few partially correct points. For example, one candidate identified the following points; *large in size, they are available, motivate learners, make learners more active*. These show that the candidates lacked knowledge of qualities of educational media that inspire learning among learners during the teaching and learning process and also failed to understand the question. Extract 6.2 provides a sample of responses of candidates in this category.

| | |
|------|--|
| 06 | Outline four qualities of educational Media that can be used to inspire learning among learners in the teaching and learning process |
| i/ | Visual / eg Graphic |
| ii/ | Audio visual example |
| iii/ | Audio Example Tape recorder and Radio |
| iv | Taste / Felt. example Sugar |
| | |

Extract 6.2: A sample of a candidate's incorrect response to Question 6

Extract 6.2 shows that the candidate outlined concepts based on categories of educational media and technology instead of the qualities of educational media that inspire learning among learners during the teaching and learning process.

2.1.7 Question 7: Educational Media and Technology and Environment

In this question, candidates were required to justify the statement that “preparation of education media should go hand in hand with conserving the school environment”. The data show that the question was attempted by 1,728 (100%) candidates. The general performance was poor, since 1077 (62.3%) candidates scored 0 to 1.5 marks. Figure 7 summarises the performance of the candidates on this question.

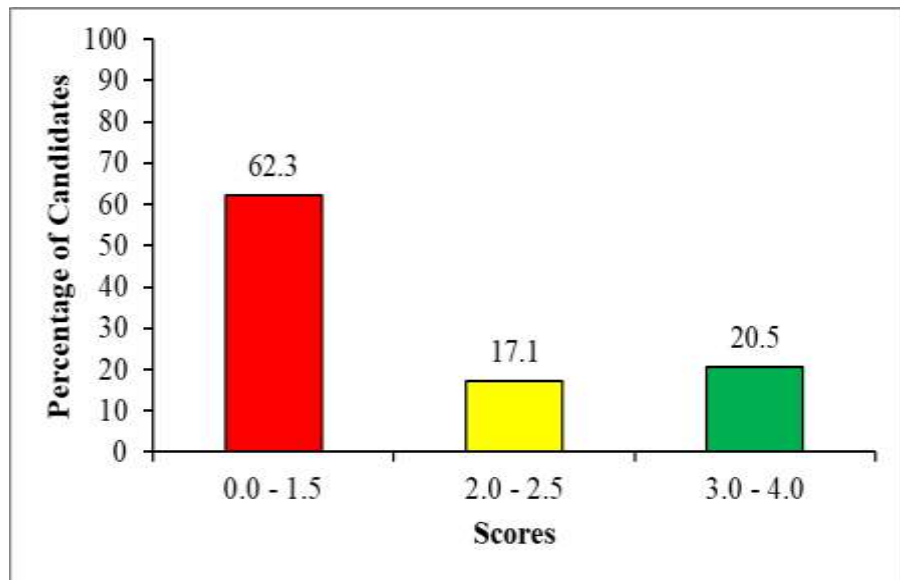


Figure 7: *The candidates' performance on question 7*

Figure 7 shows that 62.3% of the candidates scored 0 to 1.5 marks. Most of the candidates in this category lacked knowledge of the importance of conserving the school environment during the preparation of educational media. They provided answers which relate to the concept of producing of traditional and modern educational media and care and maintenance of educational media and technology. The sample responses from majority of the candidate included; *recycling, collection, reuse, moulding, improvisation, construction, purchasing, borrowing, maintenance, storing, planting trees, afforestation*. In the same direction, one candidate who got 0 marks misinterpreted the question and mentioned things to consider during the construction of media and responded as follows: *must prepare money for the process of preparing, it must prepare materials which are going to use, it must consider the level, nature of the learners, it must prepare environment use due to maintain fresh air*. Another candidate who misinterpreted the question gave the following responses; *by burning used materials, use soft copy in teaching and learning, through use of modern media like computer, through use of photograph in teaching and learning*. Extract 7.1 provides a sample of responses of the candidates in this category.

| | |
|----|--|
| 7. | Preparation of educational media should conserve school environment by the following ways; |
| | i) Ensuring improvisation |
| | ii) Through recycling and re-using of materials from the environment |
| | iii) Through collection of materials from the school environment |
| | iv) It should involve construction by using the materials thrown in the environment |

Extract 7.1: A sample of a candidate's incorrect response to question 7

In extract 7.1 the candidate outlined the concept related to methods of acquiring teaching and learning resources instead of justifying the importance of conserving the school environment during the preparation of educational media.

Moreover, analysis shows that 20.5% of the candidates with good performance (3 to 4 marks) understood the question and had adequate knowledge of conserving the school environment during the preparation of educational media. Among them, 9.0% of the candidates who scored full marks (4 marks) managed to justify the statement by giving all four correct points as required by the question. Examples of such correct responses were; *we conserve environment during the preparation of education media to prevent environmental pollution around the schools, environmental conservation is done during preparation of educational media in order to conserve the natural resources which are available, we conserve environment during preparation of education media so as to avoid the loss of biodiversity in the environment, we conserve environment during the preparation of education media for future generation to use.* One candidate who scored full marks (4 marks) allocated to this question provided the following responses; *It will help to avoid eruption of diseases, it helps to keep the environment clean, it*

prevents environmental pollution, it helps in the recycling process. Extract 7.2 provides a sample responses of candidates from this category.

| | |
|------|--|
| 7.1 | To reduce pollution on the environment. |
| ii. | To reduce spread of diseases and avoid some accidents. |
| iii. | To make environment more attractive. |
| iv. | To preserve and conserve natural resources available in our environment. |

Extract 7.2: A sample of a candidate's correct response to question 7

On the other hand, a few candidates (17.2%) who had average performance (2 to 2.5 marks) revealed several weaknesses in their responses. Some of them mixed-up correct and incorrect answers and others provided two responses out of four. Similarly, others provided all four required points but they were partially correct. For example, one candidate who ultimately got average marks gave three partially correct points which were; *in order to be clean, it help to avoid some risk, it help to avoid accident*. Another candidate with average score mixed correct and incorrect responses like; *helps to reduce pollution and pollutants substance within the school environment, encourage improvisation, help reduce spread of diseases, promote conducive and favourite environment, it helps teacher to prepare teaching and learning aids*. The correct points given were; *promote conducive and favourite environment, helps to reduce pollution and pollutants substance within the school environment, help reduce spread of diseases* while the rest was incorrect.

2.1.8 Question 8: Function of Educational Media Technology

In this question, the candidates were required to briefly explain four roles of educational media in facilitating the effective teaching and learning process. The question was attempted by 1,728 (100%) candidates. The general performance was good since 1,553 (89.8%) candidates scored from 2 to 4 marks. Figure 8 summarises the candidates' performance on question 8.

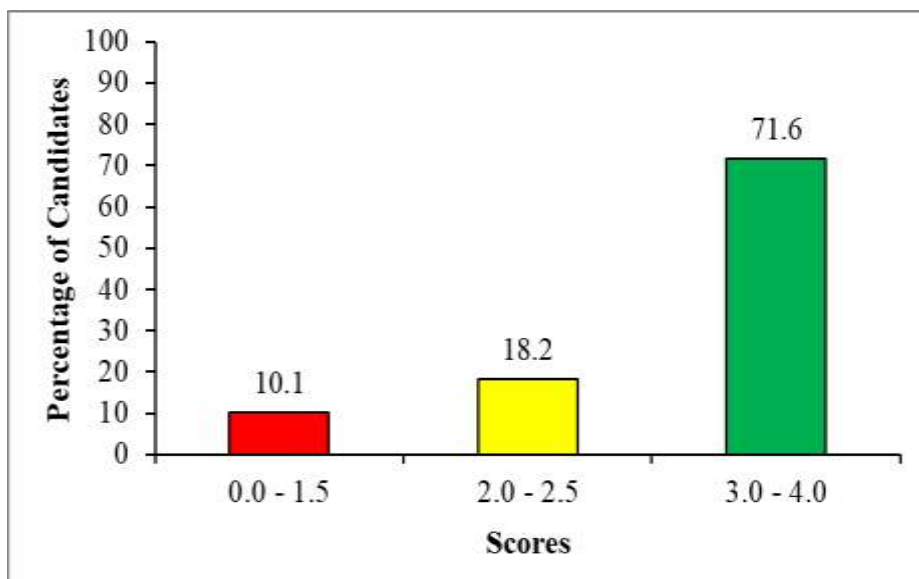


Figure 8: *The candidates' performance on question 8*

Figure 8 indicates that most of the candidates (71.6%) with good performance (2 to 4 marks) were able to provide correct responses which indicates that the candidates had adequate knowledge on the role of educational media in facilitating an effective teaching and learning process. These candidates also understood the question thus they managed to score high marks. For example, one candidate who scored full 4 marks was able to briefly explain all four correct responses as follows: *it helps learners to solve language barrier, it helps learners to learn fast and more accuracy, it creates motivation, it attracts the attention of the learners*. Another candidate who had high scores gave responses that include; *it rises motivation in teaching and learning process, it rises the interest of the learners during teaching and learning process, it reduces communication barrier in teaching and learning process, it rises good participation relationship between teachers and his/her learners*. The candidate's responses were also related directly to the marking guide. Extract 8.1 provides a sample of responses of the candidates in this category.

| | |
|----|--|
| 08 | i) Educational media Motivate learning. Educational media provide desire, interest and further more it gives a reason for learners to learn the lesson in the process of teaching and learning. In short it provide mood to learn the lesson Example computers |
| | ii) Educational media hold retention of the learnt information to the learners. Education media enable learners to remember the learnt information easily Example Audio visual media. |
| | iii) Education media ensure active participation to the learners. This is due to involvement and interaction which exists between learners and educational media, where they comment, answer and ask questions concerning the learnt informations. |
| | iv) Educational media provide instructions to the learners, Education media solve language problem by playing the role of the teacher by instructing and guiding learners in the process of teaching and learning. |

Extract 8.1: A sample of a candidate's correct response to question 8

Further analysis shows that 18.2% of the candidates had average performance (2 to 2.5 marks). Some of them mixed correct and incorrect responses. Others listed all four points but they were partially correct and others listed less number of the required points. All these made the candidates to score averagely. For instance, one candidate gave partially correct explanations which read as; *it brings interest to the learners, it allows recall and remembering of the subject matter, it lead students to become creative, it bring attention to the learners.* Another candidate

gave both correct and incorrect responses as; *it should be based on subject matter, consider level of the learners, it attracts learners, it motivates learners*. The correct points were; *it attracts learners, it motivates learner* and incorrect ones were; *it should be based on subject matter, consider level of the learners*. The observation from analysis shows that the candidates who scored averagely had partial knowledge and skills on the role of educational media in facilitating an effective teaching and learning process.

Moreover, the analysis also shows that 10.2% of the candidates had poor scores (0 to 1.5 marks). Some of these candidates the question and others lacked knowledge of the role of educational media in facilitating an effective teaching and learning process. Some of the candidates who misunderstood the question in this group explained qualities of good teaching and learning media instead of role of educational media in facilitating the teaching and learning process as follows: *it should not confuse the learners, it should consider the level of the learners, should be attractive, should be tested before used in the classroom, should be seen to all learners during teaching and learning process, do not use image when real things are available*. One candidate in this category who got 0 marks gave incorrect responses like; *improvisation of teaching and learning aids, designing of the model and other equipment which may be used for teaching and learning process, provisional of audio-visual which may be used in teaching and process, selection of good media for teaching and learning process*. Extract 8.2 provides a sample of a candidate's response to substantiate the above observation.

| | |
|----|---|
| 8. | i/ should use real object |
| | ii/ should be relevant |
| | iii/ should emphasize effective learning |
| | iv/ should be applied in teaching and learning. |

Extract 8.2: A sample of a candidates' incorrect response to question 8

Extract 8.2 shows that the candidate outlined the points that relate to the qualities of good educational media instead of the roles of teaching and learning media in the teaching and learning process.

2.1.9 Question 9: Production of Traditional and Modern Educational Media and Technology

This question had two parts, (a) and (b). In part (a), the question required candidates to give the meaning of the terms (i) Imitative media production. (ii) Adaptive media production. Part (b) of the question required candidates to briefly describe the importance of manual in the use of educational media and technology.

The question was attempted by 1,728 (100%) candidates. The general performance was average since 1,045 (60.5%) candidates scored 2 to 4 marks. Figure 9 summarises the performance of the candidates on question 9.

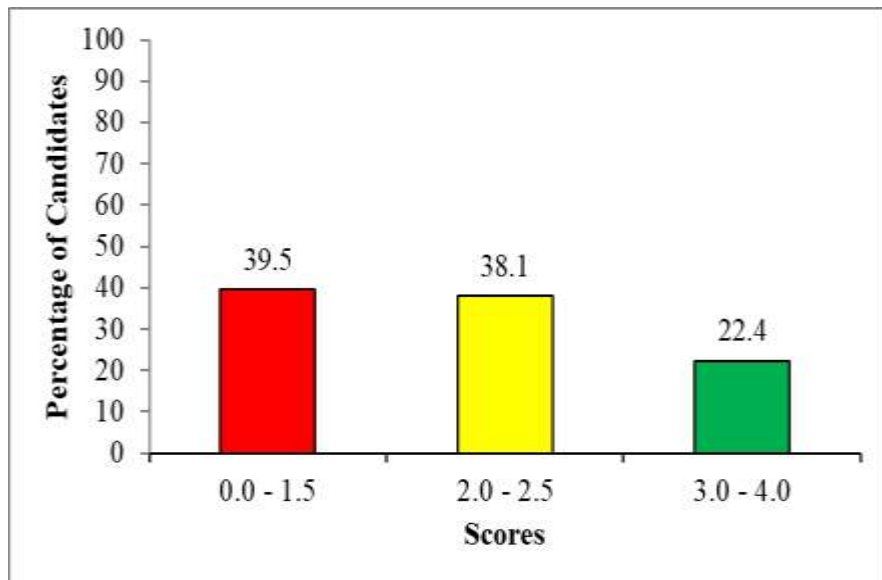
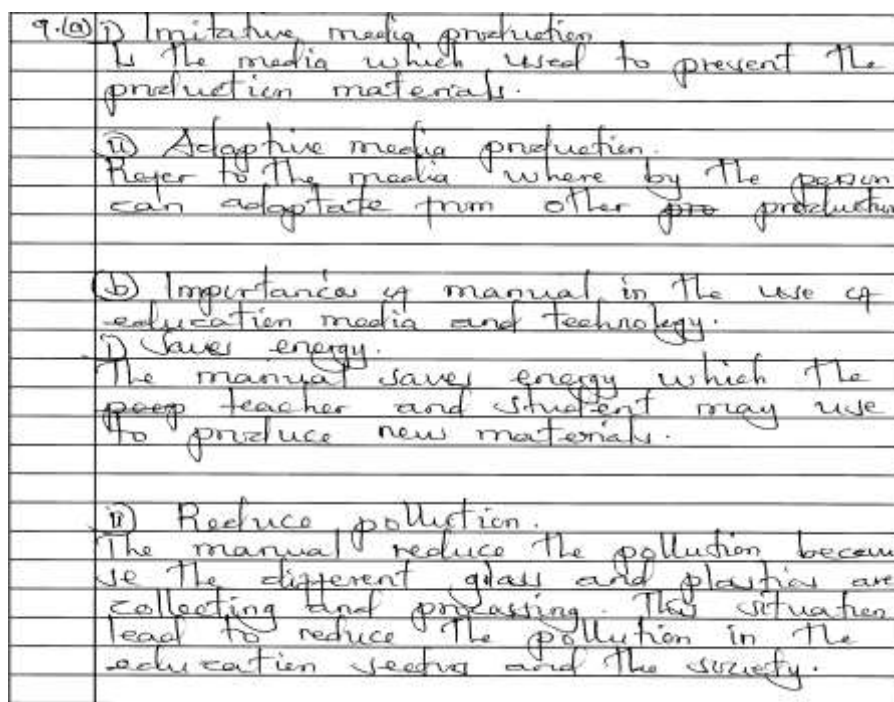


Figure 9: *The candidates' performance on question 9*

According to data in Figure 9, it was revealed that 39.5% of the candidate had poor performance (0 to 1.5 marks). Most of them lacked competence in the concepts assessed. A few of them failed to understand the question. Some of these candidates who scored 1 to 1.5 marks completely failed to give correct responses in part (a) and tried to respond partially correct in part (b) the question. Others who scored 0 marks failed to provide correct responses in both part (a) and (b) of the question. For example, the response of the candidates who scored 0 marks were: in part (a) (i) Imitative media production *is media which is obtained from the use of advanced technology like the use of dressing*

style from Europe such as short clothes. (ii) Adaptive media production refers to the media we learn from our forefathers example the use of drama and storytelling. In part (b) the responses were; manual helps to hold attention of learners as the materials which a learner can use it, it motivates learners for example non-technological people may be attracted by different materials which are provided through the use of manual as a guideline in performing activities. Another candidate who got 0 marks provided ideas that showed that the candidates guessed. The candidate provided such responses like; In part (a) (i) Imitative media production are those productions which are used in teaching and learning process which are used on the time and disappear. (ii) Adaptive media production are those productions which are used in teaching and learning process which are relevant also it has long life to use. In part (b) the responses were; Manual helps to simplify work during teaching, it helps to motivate, increase interest, to keep long term memory, to solve language barriers during teaching and learning process. Extract 9.1 provides a sample of responses of the candidates in this category.



Extract 9.1: A sample of a candidate's incorrect response to question 9

Further analysis shows that 38.1% of the candidates who had average performance (2 to 2.5 marks) on this question had partial knowledge and

skills on the tested concepts. These candidates were able to respond to the question partially. Most of them failed to give the meaning of the terms in part (a) and a few of them failed to give the required number of points in part (b) as they gave one correct point and one incorrect responses. In part (a), the candidates gave incorrect definitions of the terms as (i); Imitative media production *is the media which do not gave room for a person to interact, with example television.* (ii); Adaptive media production *is the form of media which gave a chance for a person to interact with it, example movies, videos.*

On the other hand, 22.4% candidates scored 3 to 4 marks. Those who scored full marks allocated to this question met the requirement of the question and had knowledge on the tested concept as they were able to provide correct responses in both parts. In part (a), the candidates managed to give the meaning of terms correctly as showed that (i) Imitative media production *is the production of media which is the same as already made by other people* (ii) Adaptive media production *is the production of media by taking some ideas and modify them and produce a new media.* In part (b) the responses of the candidates were as follows; *Manual helps to guide and direct on how to use a certain media, Manual helps to know how to maintain and store tool it after use, it helps to increase efficiency of the product as the user know how to handle, it helps to prevent accident which may occur due improper use of the certain tool.* In addition, the points provided were clear and matched with the required responses according the marking guide. Extract 9.2 illustrates this by providing a sample responses of candidates in this category.

| | |
|----|---|
| 9. | (a) (i) Imitative media production: this is the process of producing or creating media through imitations by using idea and techniques of some body. |
| | (ii) Adaptive media production: this is the process of producing or creating media through adapting the environment through characteristics and behaviour of the environment or other person. |
| | (b) The following are two importance of manual in the use of educational media and technology. |
| | (i) Helps to give instructions of the use of materials or tools. |
| | (ii) Helps to show methods and techniques of preparing materials. |

Extract 9.2: A sample of a candidate's correct response to question 9

2.1.10 Question 10: Principles of Teaching and Learning in Educational Media and Technology

In this question, candidates were required to give factors that teachers should consider when selecting educational media and technology. Data analysis shows that 1,728 (100%) candidates attempted this question. In general, the performance on this question was good as 1,639 (94.85%) candidates scored 2 to 4 marks. Figure 10 summarises the candidates' performance on question 10.

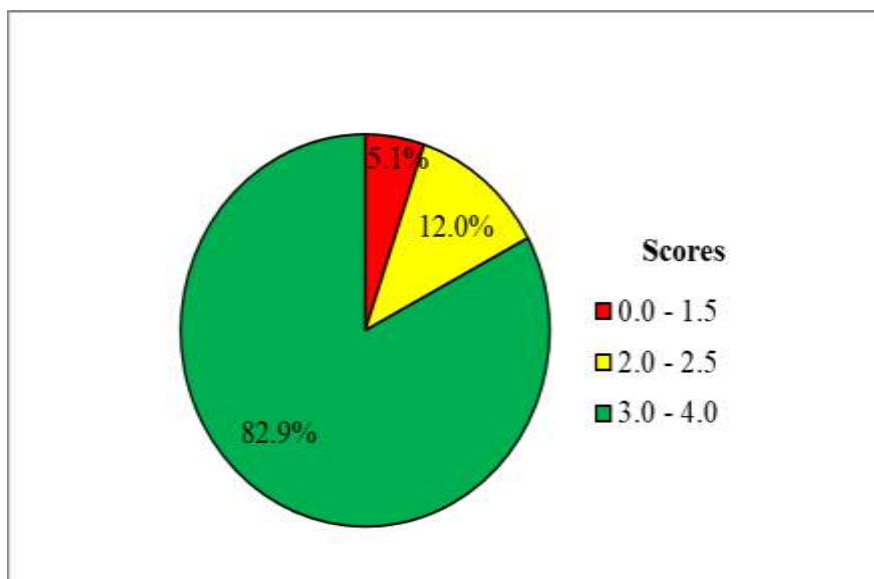


Figure 10: *The candidates' performance on question 10*

Figure 10 shows that, 82.9% of the candidates with good performance (3 to 4 marks) were knowledgeable enough about factors that teachers should consider when selecting educational media and technology. These candidates were also able to meet the requirement of the question. In addition these candidates supported their points with correct explanations. The candidates in this category managed to provide correct answers like: *the teacher can consider the cost when selecting educational media and technology, availability of a certain educational media and technology, durability; the teacher can ensure that the educational media is durable, level of the learners and nature of the society. should consider subject matter, size of the class, the media should be simple to use.* Extract 10.1 provides a sample of the responses of the candidates in this category.

| | |
|----|---|
| 10 | i) Consideration of the subject matter, Teachers should consider the content or topics as well as subtopic to be taught when selecting teaching and learning educational media. |
| | ii) Consideration of the level and age of the learners; Teachers should look on the cognitive level and ability as well as ages of the learners so teacher should match between age and the selected educational media. |
| | iii) Visibility aspect; Teachers when selecting Educational media and technology should consider the aspect of being seen by all students in the classroom |
| | iv) Motivation aspect; Teachers when selecting Educational media and technology must consider if the Educational media creates desire, interest and gives reason or mood of stimulating learners to learn or not. |

Extract 10.1: A sample of the candidate's correct response to question 10

In addition, 12.0% of the candidates who had average performance (2 to 2.5 marks), responses which were partially correct on the factors teachers should consider when selecting educational media and technology. These candidates were able to provide some correct responses and other ambiguous responses. Others gave weak points which caused them to score average marks. For instance, one candidate with average performance wrote; *nature of the subject matter, element of design, nature and level of learners, principle of design*. In these responses two of them were correct i.e. *nature of the subject matter, nature and level of the learners* while the other two responses were incorrect. Some of the points provided by these candidates in this category were difficult for one to understand what the candidate intended to communicate by those incorrect answers according to question. Generally, analysis shows that these candidates had partial knowledge and skills on the concepts tested.

On the other hand, the analysis of the candidates' responses shows that a few candidates (5.1%) scored 0 to 1.5 marks. Those who scored 0 marks

lacked mastery of the subject matter tested. Those who scored 1 to 1.5 marks gave partially correct responses or few of number of correct points. An example of responses from the candidates who scored 1 to 1.5 marks on factors that teachers should consider when selecting educational media and technology were; *colouring, copy, lettering, durability, mechanism and challenging, consideration of level and age of the learners, simple in outlined, layout, selection of information, drawing, materials*. On the other hand, the candidates who scored 0 marks gave all incorrect answers on the factors to consider when selecting educational media and technology as; *selection of information, layout of educational media and technology, legibility, Practicability, Drawings, equipment, lettering*. These points given by the candidates who scored 0 marks were hanging and ambiguous as they were not even in a sentence which could make them clear. Extract 10.2 illustrates this by providing a sample of responses of candidates in this category.

| | |
|-----|---|
| 10. | (i) Audio visual media - This is the combination of seeing and hearing. |
| | |
| | (ii) Audio media - This is the situation of hearing |
| | |
| | (iii) Visual media - This is the situation of seeing |
| | |
| | (iv) felt and test - This is situation of getting emotion |

Extract 10.2: A sample of a candidate's incorrect response to question 10

In extract 10.2, a candidate outlined the points which relate to the concept of categories of educational media and technology instead of the factors that teachers should consider when selecting educational media and technology.

2.2 SECTION B: ESSAY QUESTIONS

This section comprised six (6) essay questions out of which the candidates were required to attempt any four (4) questions. Each question had the weight of 15 marks making a total of 60 marks.

2.2.1 Question 11: Production of Traditional and Modern Educational Media and Technology

In this question, candidates were required to examine five important aspects a teacher should observe when making still pictures to be used in teaching and learning process. This question was attempted by 1,294 (74.9%) candidates. In general, the performance on this question was good as 1,199 (92.7%) candidates scored 6 to 13.5 marks. Figure 11 summarises the candidates' performance on Question 11.

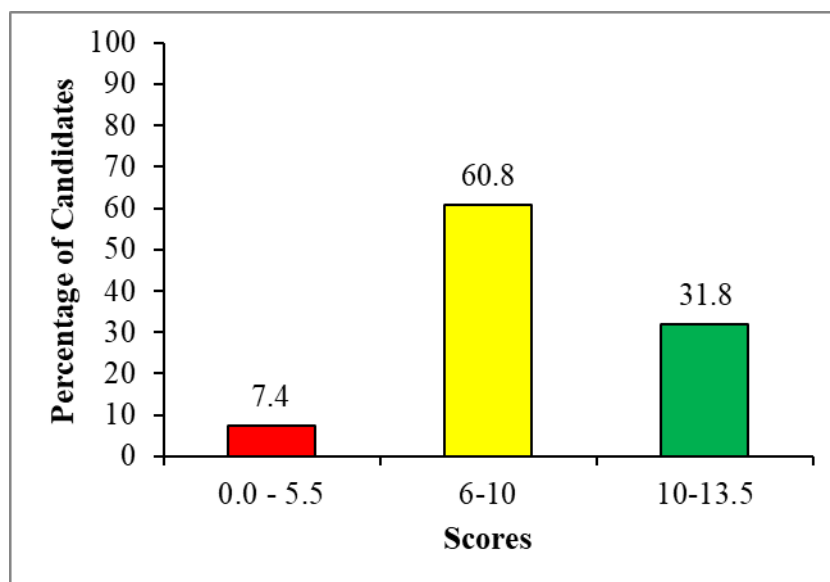


Figure 11: *The candidates' performance on question 11*

From Figure 11, analysis shows that, 60.8 candidates who had average performance scored 6 to 10 marks. Some mixed-up correct and incorrect points. Others were able to account for all five aspects but they were irrelevantly examined. Also, other candidates provided less number of points out of the five required number of points. The difference of marks scored depended on the responses they provided thus those who scored 9 to 10 marks gave better responses than those who scored 6 to 8 marks. For example, the candidates examined the following points; *the topic of*

the lesson; The media should go together with the lesson, appropriate level of the learners: the the teacher should consider the level of the learner, the picture should be large and clear seen; the teacher should consider the picture is largr and clear. From those responses it was observed that, the candidates made repetetion of points without detailed elaboration. Other candidates with average marks mixed incorrect responses when examining as; *it should be accurate, it should be up to date, weight of the picture, layout. Lettering.* Further analysisi shows that these candidates had partial knowledge and skills of essay writing, thus they provided points without detailed examination while others failed to give relevant conclusion.

Likewise, 31.8 % of the candidates had good performance as they scored 10.5 to 13.5 marks on this question. However, no candidates scored all the marks (15) marks in this question; The candidates in this category understood the question and had sufficient knowledge on aspects to observe when making still pictures to be used in the teaching and learning process. They presented organized essays with clear introduction, well supported points with relevant explanations as well as good conclusions. The variation in their performances was determined by clarity of their responses and the ability to provide relevant explanations to support their answers. An example of correct responses from these candidates was as follows: when making still picture for classroom presentation a teacher should consider; *number of the students in the class, relevant to the subject matter, colour of the picture should be relevant to the concept presented, relevant of the picture to the understanding ability (age and level) of the learners, ethics or religion of the students, good arrangement of concept intended to display.* Extract 11:1 provides a sample of responses of candidates in this category.

| | |
|-----|---|
| 11. | still picture; |
| | Refers to the picture which are static or not in motion, where it used to promote the meaningful information or message according to the user. |
| | - Also still picture are cheap, durable and easy to produce where it promote learning effectively. |
| | The following are the aspects to consider when making a still picture in teaching and learning. |
| | Size of the picture and visibility, to ensure the picture which can relate the instructional objective the learner is supposed to be large in size where can create a chance to be seen to all learners who are involved in learning and makes more effectively at the time, also the nature of still picture it promote verification to the learner to gain the concept where are supported to have at the lesson. |
| | Nature of the content, to facilitate the effective teaching and learning is allowed to make a media which can relate to the concept or content illustration where it provide meaningful learning and makes the effectively teaching and learning because the model will be familiar with the media used where it accompanied the learning to be more interactivity at the time used. |
| | The relevance of picture to the learners in teaching and learning, where the learner to have ability to understand what the picture represent can help them to get the information and ensure the correct representation and ability to apply his/her knowledge to the observed information in order to makes the understanding of the concept where are explained on the media. |

| | |
|----|--|
| 11 | <p>Age and level of the learner, there must be consideration the age and their level in order to make a picture which are useful according to them. This implies their performance and ensure the proper usefulness of the media, for example to use the picture which can stimulate the learner and being aware to accept and develop knowledge from the presented picture, hence it makes the teaching and learning more effectively.</p> <p>It should be well painted with colours, in order to make a proper and useful as facilitated to make the common and understood in order to choose a colour which are related to the meaning object where it presented, hence it create the good presentation in order to facilitate the usefulness of the instructional objective where are makes a common understand to the learners.</p> <p>Therefore, still picture are useful to facilitate the teaching because, it easy to use, portable it involves teaching function, it promote curiosity where by an individual develop their inquiry mind to ensure the proper and usefulness of the presented information, But on other hand are cost also are not flexible.</p> |
|----|--|

Extract 11.1: A sample of a candidate's correct response to question 11

On the other hand, 7.4% candidates who scored poorly i.e. 0 to 5.5 marks lacked competence in the subject matter and had poor communication skills in the English language as they provided weak points with unclear explanations. Those who scored 0 marks failed to understand the question. For example, they explained the functions of still pictures in the teaching and learning process instead of aspects that a teacher should observe in making still pictures as; *picture during teaching and learning helps to hold attention of the learners, picture during teaching and learning help to easy remember previous events, pictures during teaching it help to raise interest of the learners, picture during teaching and learning it help to simplify the process of teaching and learning, picture during teaching and learning help to encourage*

active participatory in the classroom period. Some of the candidates with poor performance who scored 4 to 5.5 marks wrote weak points without enough explanations such as: *picture should be quality and quantity, should be relevant to the subject matter, should be large and seen, should have a title and heading, should be not contains more details, storing, maintenance, environment condition.* The candidates also used unclear sentences when examining their points; These show that they lacked communication skills in the English Language. For example, the candidates gave points such as; *the picture when a teacher they learner should be entertain because the lesson should be enjoyed those pictures.* The data analysis shows that apart from providing weak points, these candidates also provided irrelevant introductions and conclusions. Extract 11.2 provides a sample of responses of the candidates in this category.

| | |
|-----|---|
| 11. | <p>still picture, refer to the picture which does not move it remains constant, example in the classroom we put post picture on the displayed board for more time.</p> <p>Due to that the following below are the aspects which a teacher uses to observe the still picture which will be used in teaching and learning process.</p> <p>May accelerate to failure to reach the goals, simply that, when a teacher teach by using still picture in the classroom will failure the plan.</p> <p>May accelerate the wastage of time, simply that a teacher if use still picture in teaching process will be simple to loose the time because the concept will elaborate more time than when using moving movie.</p> <p>May accelerate the student failure to interact, simply that, a teacher when use the still picture in the class room may facilitate the learner failure to interact the lesson.</p> <p>May accelerate to the teacher to elaborate more to the concept, simply that when a teacher use the still picture may make them to explain the concept more.</p> <p>May accelerate to the learner to be discouraged in learning, simply that, due to the still picture make the students failure to enjoy the lesson effectively.</p> <p>Generally, a teacher should be care for the approach which should use in the classroom like of still picture which make the student to become less interactively during the lesson.</p> |
|-----|---|

Extract 11.2: A sample of a candidate's incorrect response to question 11

Extract 11.2 shows that the candidates provided the limitation of using still pictures instead of important aspects that teachers should observe when making still pictures for the teaching and learning process.

2.2.2 Question 12: Types of Educational Media and Technology

In this question, candidates were required to give five reasons why is the use of chalkboard is preferred by many teachers during classroom teaching and learning. The question was attempted by 1,649 (95.4%) candidates. The general performance was good as 1,239 (75.1%) of the

candidates who attempted this question scored 6 to 13.5 marks. Figure 12 summarises the candidate's performance on question 12.

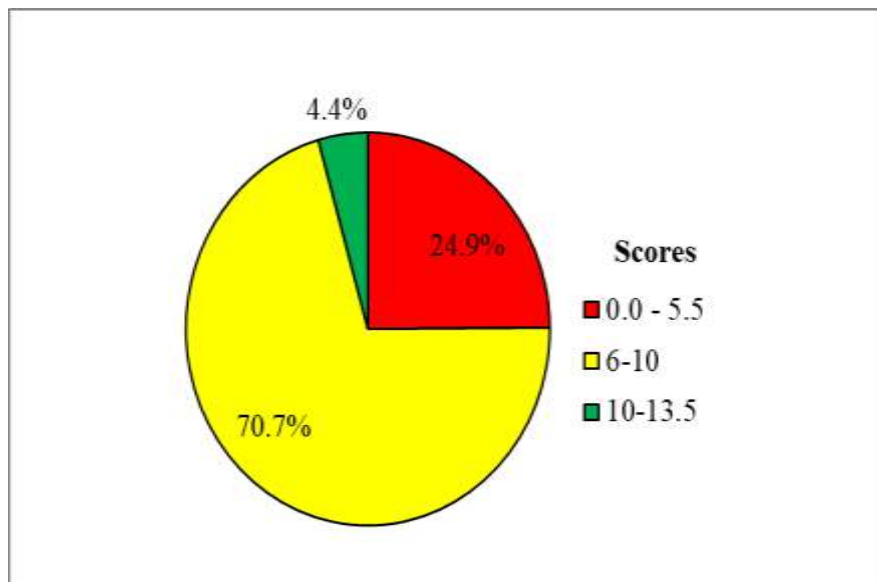


Figure 12: *The candidates' performance on question 12*

The data in figure 12 shows that 70.7% of the candidates with average performance scored 6 to 10 marks. Most of these candidates provided weak points which were irrelevant. For example, the candidates gave the weak points like; *it help a teacher write a lesson notes, it is easy to see by every learners, it is easy to clean after teaching, it help teachers to draw diagram, it help teachers to write summary. It is not costful, it is simple to use.* Some candidates mixed correct and incorrect points in their explanations. It was also noted that some of the candidates in this category provided less number of correct points than the five required points. This shows that the candidates had partial understanding of the concept tested.

Further analysis shows that 24.9% of the candidates scored 0 to 5.5 marks. Those who scored 0 marks failed to understand the question. Most of them provided uses of chalkboard instead of why the chalkboards preferred by many teachers during classroom teaching and learning as demanded by the question. The points from these candidates were; *used to represent notes, used to present diagram, used to present summary, used to hang teaching aids, it helps to present data, used for students illustrations, used for students presentations, used in demonstration of teaching aids, used in writing heading, sub-heading*

and data, used to make clarification, used to note down the important concept, used for correction of spelling, used for writing different document, used for writing questions or tests, used for presentation of subject matter, used for holding map, graph, picture. Other candidates identified the points which related to the function of educational media and technology instead of the concept tested as shown in Extract 12.1.

| | |
|------|---|
| 12.1 | <p>Chalkboard; It the Modern media and Technology which are used by the teachers to facilitate the Teaching and Learning process. The use of chalkboard preferred by many teachers during Classroom Teaching and Learning, because;</p> <p>Used to Motivate learners; Through chalkboard it can helps to Motivate learners when they can make the things which are Tolerance in the class size. So the learner can be Influenced by using Chalkboard when they getting education and the Teacher preferred by teacher when or during Teaching and Learning in the Classroom.</p> <p>It keep long term Memory to the learners! By using Chalkboard when Teacher prefers to use it can create long Memory for a long time during the process of Teaching and Learning, that can Influence the student to be awareness about a Certain topic which are necessary.</p> <p>It create Confidence to the teacher; When teacher teach the learner by using chalkboard they create huge Confidence which are Very essential and can helps the learners to be motivated and awareness about a Certain matter or Topics which can be Covered by the Teacher when they teaching students in the class room.</p> |
|------|---|

| | |
|-----|---|
| 12. | <p>Create Creativity between Teachers and Students: Once the Teacher Teaching the students in the class it creates the skills and knowledge to the learners which facilitate the process of teaching and learning that can increase people ability and confidence when Teacher Teaching in the class so the teacher can be influenced to teacher when the students are still motivated.</p> <p>It promote attention to the learners because of the Chalkboard Teacher can be influenced to teach learners and learners can emphasised to know and talk about their lesson in the process of teaching and learning at the specific areas.</p> <p>Therefore, Chalkboard can helps the teacher to be comfortable and to be knowledgeable when they use to teach the learners it can helps to increase awareness and confidence to the learners in the classroom.</p> |
|-----|---|

Extract 12.1: A sample of candidates' incorrect response to Question 12

On the other hand, a few candidates (4.4%) had good performance (10.5 to 13.5 marks). These candidates managed to give reasons why the use of chalkboard is preferred by many teachers during classroom teaching and learning. The candidates in this category presented essays with clear introduction, correct points supported with relevant explanation as well as relevant conclusions. Examples of the candidates' correct responses were: *chalkboard is less expensive, it is available, it is flexible in nature, it is simple to use, it is multi-purpose*. Such correct responses implied that these candidates had enough knowledge and skills on the subject matter and they understood the question. Extract 12.2 illustrates this by providing a sample responses of candidates in this category.

12 Chalkboard; is the traditional media where by teacher used in teaching and learning process. Example of used for introduce the lesson and writing the key word in the classroom. They have type such as white, display, and green chalkboard. The following are the reason of chalkboard preferred by many teachers during classroom teaching and learning.

Less expensive; First reason should consider the cost chalkboard are use little money to prepare compare other media so it is the teacher influenced more to use chalkboard compare other media.

Flexible; Also another reason because chalkboard are simple to use they not need more preparation during used to teaching and learning process chalkboard are simple to use compare the other media like computer.

Availability or accessibility; chalkboard are available any school so easy to use in teaching and learning process that other media many school are used chalkboard because chalkboard available.

Need low capacity to use; Also another the reason many teacher are used more chalkboard because when are used chalkboard are used low skills and high skills are use so chalkboard are not selective of the user during teaching and learning process.

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| 12 | <p>visibility to the learner. Also another reason teacher are used chalk board because any student they have to be able to see what teacher are writing during teaching and learning process by using direct mediated eye because chalkboard are putting in front of the classroom.</p> <p>Generally chalkboard are very important in teaching and learning process in the classroom because any one are able to use and need low skills to use.</p> |
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Extract 12.2: A sample of a candidate's correct response to question 12

2.2.3 Question 13: Categories of Educational Media and Technology

In this question, candidates were required to show how educational broadcasting facilitates the teaching and learning process by giving five points. The question was attempted by 889 (50.4%) candidates. The general performance was average since 448 (51.4%) candidates who attempted this question scored 6 to 13 marks. Figure 13 summarises the candidates' performance on question 13.

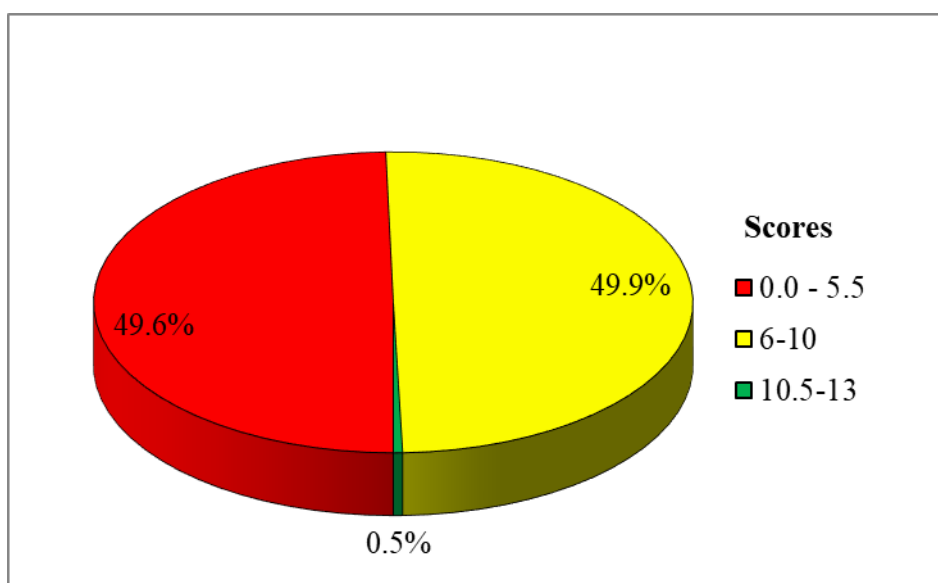


Figure 13: The candidates' performance on question 13

Figure 13 indicates that 49.9% of the candidates with average performance gave both correct and incorrect points but also failed to provide relevant explanations. For example, one candidate with average score responded as; *it enables the educational programmers to transmit different educational*

information worldwide easy, it helps teachers to teach larger number of students at the same time, help to rise learners' motivation, enable teachers to increase knowledge, it promotes meaningful learning to learners, through providing opportunity to disadvantage group to gain knowledge. Some of these candidates provided irrelevant introduction and conclusion due to the partial knowledge and skills they had on the tested concept.

Further analysis shows that 49.6% of the candidates scored poorly 0 to 5.5 marks. The analysis of the candidates' responses depicts that those who scored 0 marks lacked knowledge on education broadcasting. A few of them misunderstood the question as they elaborated media which are used in education broadcasting instead of showing how educational broadcasting facilitates the teaching and learning process like; *radios, televisions, cassettes, DVD, magazines, through use of internet, through use of newspaper.* Others explained the role of educational broadcasting instead of how education broadcasting facilitates teaching and learning process as; *broadcasting help to hold attention during teaching and learning, broadcasting helps in motivation of learners, broadcasting help in simplifying teaching and learning, broadcasting help to understand easy and more accurate.* These candidates also gave incorrect responses with a mixed up ideas. For example, one candidate under this category gave incorrect points which contained mixture of idea as; *through the use of audio-visual media, through using pictures, through use of multimedia and projector, through use of working model.* Other points from these candidates were also repeated. In addition, these candidates were not able to provide relevant introduction and conclusion. Extract 13.1 is a sample of a response from a candidate's script in this category.

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| 13 | <p>Broadcasting media; is the media which use audio, video and audio visual to facilitate teaching and learning process. Examples of broadcasting media is television and radio which help to facilitate the education in schools in teaching and learning process. The following is the ways of broadcasting facilitate the teaching and learning process:-</p> <p>Through television; broadcasting media can facilitate teaching and learning through television when the student learn through television at home from different teachers. Example during lockdown period student learned through television by using audio visual method, which facilitate learner to learn and allowed teacher to get employment to teach learner through television media.</p> <p>Through radio; learning can be facilitated by radio when a teacher teach through a different station of radio can catch attention of learners to be attention to listen that lesson through audio from radio, so due to radio learner can get new knowledge without going to the school but get new knowledge at home without any cost.</p> <p>Through online; broadcasting media facilitate online learning to the learners of different schools. Example the use of telephone to search materials from online where learner has ability to find own material from online and read to get new idea and concept from different materials from online broadcasting media.</p> |
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| 13 | Through projector; due to broadcasting media contain audio and videos facilitate learning and teaching process by using project whereby a teacher makes slides and animation sound to catch attention of learners to the class so through projector teacher can motivate and make interest to learners to learn effectively. Example project or contain videos for teaching a lesson. |
| | Through Computer; Computer can help a teacher to create the slide in order to teach effectively the lesson while a learner can use computer to find materials from internet and use it to see different animation according to a certain topic. Example animation of heart which can google from the internet in order to learn. |
| | Generally; Broadcasting media is important and to the teaching and learning process due to it help to catch attention of learners and also it motivate learners to watch a subject to be loved and participate well when a teacher use audio-visual to teach. |

Extract 13.1: A sample of a candidate's incorrect response to question 13

Extract 13.1 shows that a candidate misunderstood the question and thus explained media or means of broadcasting instead of how educational broadcasting facilitates teaching and learning process.

On other hand a few candidates (0.5%) had good performance as they scored 10 to 13 marks out of 15 marks. These candidates managed to show how the education broadcasting facilitate the teaching and learning process. The responses of these candidates on the role of education broadcasting were; *educational broadcasting act as the source teaching and learning materials, educational broadcasting transmit information in different areas, educational broadcasting promote listening skills, educational broadcasting enable students to access information from the internet, it facilitate individual learning, it facilitate distance learning, it develop curiosity and innovation, it increase new skills and knowledge*

to the teachers and learners, it develop adult education in the societies. These shows that the candidates understood the question and met the requirement of the question. Since no candidate scored full marks in this question, the responses contained some few erros especially in elaboration. Extract 13:2 provides a sample of responses from one of the candidates in this category.

13. Educational broadcasting refers to the process of launching the teaching and learning resources, the programs of learning which will enable the learner to access the learning from the variety places at their own with no interaction with the teacher. For these process to be accomplished there are modern media which may used like television, computer, Tele and video conferencing etc to which these medium will able to transmit the information ~~for~~ quickly to the various places and involve the displaying of the programs like video. The following are the facilitation of educational broadcasting in teaching and learning.

Enhance distance learning, through which there it may favour the learners to be able to acquire the knowledge from the variety places with no interaction with the teacher and thus enable the quickly spread of knowledge and skills.

Reduce cost in learning, due to when the learner may not required to interact physically with the teacher, no transportation to the institution, no require to have the class etc so all these may ~~also~~ reduce the cost in learning and ~~also~~ enable the people to acquire the knowledge and skills to their home areas.

Reduce the limitive factors in -

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| 13 | <p>acquiring the education, to the factors factors like being already employed, pregnancies, age limit etc due to these it may enable the people to learn even those who do not enough time.</p> <p>Promote the advancement in science and technology in education sector, due to which for these process to be accomplished it may require the use of modern medium for the transmission of knowledge like the use of computer, Teleconferencing, video-conferencing etc.</p> <p>Facilitate the social interaction, since it may be of to involve the learners of different places which are far from the teacher or the source of knowledge so it may enable the people from different places to interact and share their ideas and to promote their cultures and able to study their environment and of others.</p> <p>In generally, the use of educational broadcasting is help helpful and promote the distribution of knowledges and skills to various parts of the world.</p> | |
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Extract 13.2: A sample of a candidate's correct response to Question 13

2.2.4 Question 14: Function of Educational Media Technology

In this question, candidates were required to examine the usefulness of using computer connected to the digital projector during the teaching and learning process. This question was attempted by 1,538 (89.0%) candidates. The general performance was average as 771 (50.1%) of the candidates who attempted this question scored 6 to 14.5 marks. Figure 14 summarises the candidate's performance on question 14.

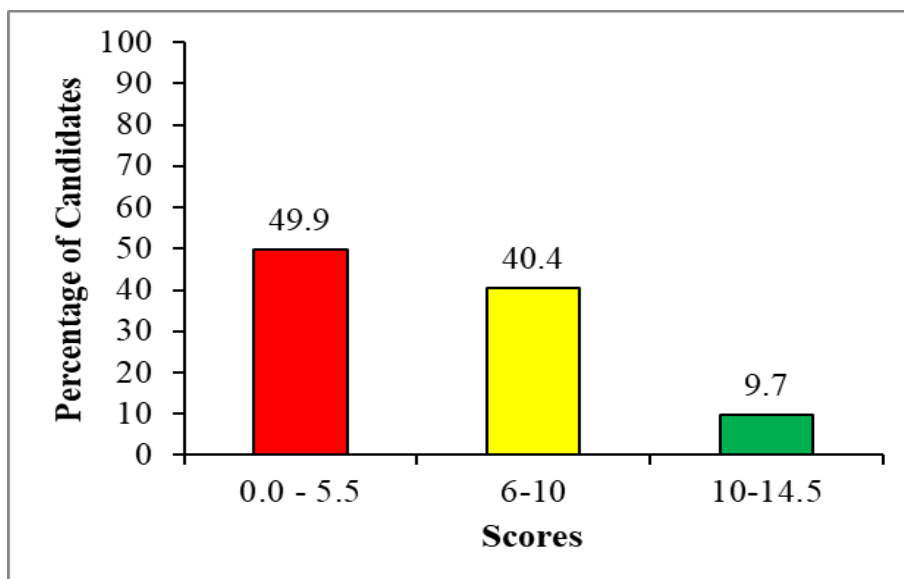


Figure 14: *The candidates' performance on question 14*

Figure 14 illustrates that, 49.9% of the candidates had poor performance as they scored 0 to 5.5 marks. The majority of these candidates misunderstood the question as they provided the concepts which relate to other concepts. Among them, there were those who gave the uses of computer and digital projector in teaching and learning instead of the usefulness of computer connected to the digital projector in teaching and learning as follows: *it used to store information, it used in teaching and learning process, it used in downloading materials, It is help teacher to prepare and present lesson, it is used to store and keep record, used to display or project information on the flat screen, Useful for searching material, used in designing different things, to expand or to enlarge the words, to display words from computer, to maximize words, to minimize words*. Others gave the general concept on the function of educational media and technology instead of the concept examined as follows; *it used to motivate learners, it saves time, it facilitates teaching and learning process, it develops learners thinking capacity, it helps to bring retention to the learners, it motivates learners, it raises the interest of learners in learning, it helps to solve language barrier, to hold attention of the learners*. Extract 14.1 provides a sample of a candidate's response to this question.

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| 14 | Computer electronic device which used to receive data, process it and providing it as output (information). Digital projector are modern projector which used to display the materials showing by the computer. |
| | The following are the usefulness of using computer connected to the projector digital during the teaching and learning process. |
| | Expensive , the use of computer connected to the digital projector need the fund to establish it instead of using chalk-board. |
| | Wastage of time , during the preparation of projector up to projecting process need some time to prepare them. This is because the error during preparation (interconnecting devices the projection will not project). So, it needs time. |
| | It needs skills and knowledge , the use of computer to projector digital needs some skills and knowledge to conduct them starting from connecting devices up to slides presentation. |
| | Emphasize Less of Concentration to learners , some displays from the digital projectors are very attractive in terms of background colour. Due to that some learners will concentrate much on looking how display look like instead of concentrating in learning the lesson. |
| | It needs Source of power which are electricity, the absence of electricity will reflect the losing of teaching and learning process. This is because in order to conduct the the projector to work it needs the electricity. |
| | Generally, instead of having these usefulness also the computer connected to the projector digital have the useful in teaching and learning which are motivation, interest raising, emphasize long memory, attention during learning and others. |

Extract 14.1: A sample of a candidate's incorrect response to question 14

Extract 14.1 shows that a candidate examined the limitation of using computer and projector in teaching and learning instead of usefulness of computer connected to a digital projector during the teaching and learning process.

Furthermore, 40.4% of the candidates scored average (6 to 10 marks). Most of them mixed correct and incorrect points thus they provided two correct points while other points were incorrect. A Few of them provided all points but examined them incorrectly. Some candidates also provided introduction and conclusion which were partially relevant. They also repeated some of the points which denied them to score high marks. For example, one candidate in this category who mixed-up correct

and incorrect points gave the following responses: *deliver of information, distance learning, saves time, it help to displaye already prepared notes or rmaterials on the screen, increase motivation*. From these points; *saves time, it help to displaye already prepared notes or rmaterials on the screen and increase motivation* were correct while the rest were incorrect. Analysis revealed that this candidates had partial knowledge on the usefulness of computer connected to the digital projector during the teaching and learning process.

On other hand, Figure 14 shows that, 9.7% of the candidates had good performance as they scored 10.5 to 14.5 marks. These candidates provided correct responses on the usefulness of computer connected to the digital projector during the teaching and learning process. The explanations of their responses were clear and thus they made the candidates to score high marks. The variation in their marks depended on the clarity of their responses and correctness as compared to the marking scheme. The candidates in this group also provided relevant introduction and conclusion. For example, the candidates gave the meaning of computer and digital projector correctly in the introduction as they were key terms. They provided correct points such as: *computer connected to digital projector displayed information which may be adjusted depending according to the size of the class, it reduces the teachers work, it encourages learning, it improves the learner's ability of note taking, enable teachers to teach systematically and managing time for presentation*. The observation of these candidate's responses shows that they had had enough knowledge of presentation by using projectors and computers. Extract 14.2 provides a sample of responses of the candidates in this category.

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| 14. | Computer is an electronic device which receives receives data and compute it to produce output information. In teaching computer is the source of teaching and learning materials. Digital projector is the device which send the pictures to the wall or screen, It display pictures from the computer. Using computer connected to the digital projector is useful during teaching and learning due to these factors: |
| | It saves time for lesson presentation. The time for presenting the lesson is shortened because the pictures and texts from the computer are displayed on the screen for learners to view hence only little elaboration is needed. Example teaching demonstrations is made simple and easy with computer connected to the digital projector. |
| | The projected image can be enlarged to - accomodate many learners. Even huge class can be be taught easily with computer connected to the |

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| 14. | digital projector because the image and text displayed can be adjusted or enlarged for clear vision. Example diagrams and pictures can be enlarged to be seen clearly by all learners. |
| | Learners are motivated to learn. The texts and pictures displayed by the projector are more attractive to hold attention of learners therefore learners become eager to learn. Example use of animation and simulation stimulates students to learn. |
| | Materials in soft copy can be edited easily in case of errors. The use of computer and digital projector helps a teacher to edit the wrong concepts when displaying hence ensure effective and efficient teaching and learning. Example wrong labels on the diagram can be easily changed or edited. |
| | Accommodate learners with hearing impairments. Since texts and pictures are displayed through the projector learners with hearing impairment are able to grasp meaning through visualization and also they are able to make notes during lesson presentation. Example taking notes and summary from the projected texts on the screen (projector screen). |
| | Generally although the use of computer connected to digital projector is very useful in teaching and learning it has some limitations because it needs power to work, computer and projectors are highly expensive and also it needs some skills or techniques teaching using computer and projector so some teachers can not afford teaching with computer connected to digital projectors. |

Extract 14.2: A sample of a candidate's correct response to question 14

2.2.5 Question 15: Function of Educational Media and Technology

The question required the candidate to justify the statement that “the use of posters as educational media and technology helps in supporting the teaching and learning process.” The question was attempted by 1,099 (63.6%) candidates. The general performance was average as 617 (56.1%) candidates who attempted this question scored 6 to 12 marks. Figure 15 summarises the candidates’ performance on question 15.

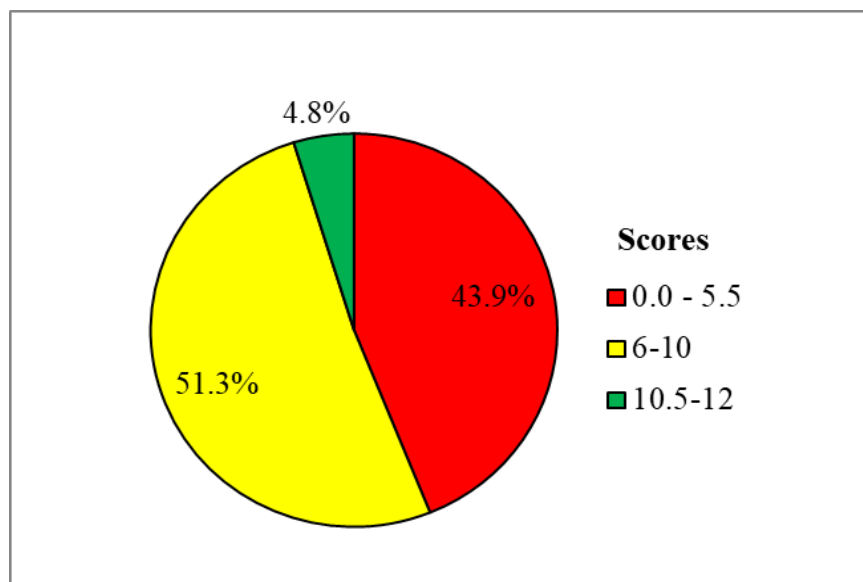


Figure 15: *The candidates’ performance on question 15*

The data in figure 15 shows that 51.3% of the candidates had average performance (6 to 10 marks). Most of these candidates provided correct points but their justification was not clear. Some candidates mixed correct and incorrect responses and others provided less number of points than the five required points while most of them gave weak points. For example, one candidate provided the following points without clear justification; *it arouses interest of learners, it motivates learners, it increases thinking capacity, it helps to remove language barrier, simplify teaching and learning, it holds the attention of the learners, encourages the active involvement of the learners, it helps to increase the degree of understanding*. Some of the candidates in this category made repetitions of points. For example, the candidate wrote; *It helps to motivate the learners: the use of posters during teaching and learning motivates the learners, it arouses interest of the learners; the use of poster during teaching and learning arouse interest of the*

learners. Observation from those points depicts that the candidates had partial understanding thus they just repeated the points now and then. Further analysis shows that these candidates had partial skills in essay writing, and therefore they were able to provide the correct required points but failed to justify them in detail as the question demanded. Others failed to provide a conclusion. All these weaknesses contributed in making the candidates score average marks.

Furthermore, 43.9% of the candidates had poor performance (0 to 5.5 marks) in this question. Those who scored 0 marks lacked knowledge of the examined concept and thus they failed to justify the use of posters as educational media and technology in supporting the teaching and learning process. Others misunderstood the question as they provided features of a good poster instead of justifying the use of posters as educational media and technology in supporting the teaching and learning process. They wrote; *it must be attractive, it must be large and clean, it must carry few words as follows: it is dramatic but simple, well designed with a good layout, they are portable, they are shortly written, they are relevant to the subject matter, they use simple language*. Other justified points as; *helps to improve educational performance, helps to solve problems in schools, are the source of communication and information, encourage to follow the rules and regulation in schools, encourages the employment opportunities in schools*. These candidates were not able to provide relevant introduction and conclusion and even the examples they gave were not supporting the points given. Extract 15.1: presents of the responses of candidates in this category.

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| 15. | <p>Teaching: Refers to the process of facilitating learning. While Learning Refers to the process of acquiring knowledge, skills through teaching, experiences and study. The followings are the reasons on how the use of posters as educational media and technology help in supporting the teaching and learning process, this is true due to the following reasons.</p> <p>It help to promote application-jobs. and this This mean that when people use posters as educational media and technology helps in educating that people on how you can apply job and what things considered to apply job. For example certificate, national identity card, qualification/records of employment and so on.</p> <p>It help to promote application of universities / colleges or high level education. This also is due to the fact that when people wants to get high level education can apply through posters and so on.</p> <p>It help people to apply scholarship which can help people who wants to get high level education. Also due to the fact that people who wants to get high level education like universities can use posters to apply scholarship.</p> |
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| 15. | <p>It help in posting letters to different areas: This also due to the fact that when people using posters for educational media can used to post letters to different areas, for example job letters and friend letters.</p> <p>It help to conduct different business through poster: This is due to the fact that people can see the picture of any business through poster and buy that business for example car from out side the country.</p> <p>Generally: In poster people can use different things in order to conduct different things into posters like use Email to use user name, symbol and domain name and other different things.</p> |
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Extract 15.1: A sample of a candidate's incorrect response to question 15

Extract 15.1 shows that the candidate justified the concept which related to the concept on use of posters in business and economic issues instead of the use of posters in the teaching and learning process.

On the other hand, a few candidates (4.8%) had good performance (10.5 to 12 marks). These candidates were able to justify the statement. In addition, they were able to provide relevant introduction, justification and conclusion. Some of the correct responses of the candidates in this category were: *it facilitates independent learning, it arouses motivation and interest of the students, it increases critical thinking to the students, it develops curiosity and innovation to the students, helps in shaping the behaviours of learns, it encourages active participation to learners.* These responses show that the candidates had sufficient knowledge and skills on the tested concept and also understood the question. Extract 15:2 provides a candidate's response in this category.

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| 15. | <p>Posters, this is the kind of educational media which is in form of large picture with word that used to display the spread the specific information, this can be academic poster, Religion poster, Commercial poster and Social and political posters. The use of posters as educational media and technology helps in supporting the teaching and learning process as follows,</p> <p>It is essential for broadcast the academic information, the poster in teaching and learning helps to provide the information for academic issues by use of academic poster that display the announcement for the academic important. The poster can be used example poster that allocate the picture for environmental pollution to educate on that matter.</p> <p>It is essential in explaining the difficult concepts in teaching and learning, the posters mostly used in demonstrating the difficult concepts so the teacher may used the poster to explain the concept by vivid description so it is used as a teaching and learning material for easy understanding in learning among the learner, so the poster remain at aiming the various concepts in teaching.</p> <p>Posters helps to bring interest in learning, the use of posters in teaching and learning helps the learner to create the self-interest that the learner can have interest due to the appearance of the posters that the poster can even show the easy in understanding of such concepts so student could make interest to be close with such subject due to use of such poster.</p> |
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| 15. | <p>It brings Motivation to the Learners the use of poster as the educational media helps to bring the motivation among the learner that due to use of academic posture such as diagram of plants and animals this makes the learner to be motivated due to use of such kind of posters so the poster helps to create the motivation among the students in learning.</p> <p>It create active involvement of learner during teaching and learning if the teacher use poster the student may actively participated in learning because they are some engaged in preparation of the poster and when the time of use happens the teacher allow the learner to participate so it lead to active and effective teaching and learning.</p> <p>Therefore, the use of poster as the educational media much supporting the teaching and learning process because it some how make the learners and teachers to be creative when they preparing for the poster so this is due to the use and participation of preparing so emphasis the teacher to get familiar in learning.</p> |
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Extract 15.2: A sample of a candidate's correct response to question 15

2.2.6 Question 16: Types of Educational Media and Technology

In this question, the candidates were required to justify the statement which stated that "Teaching by using flat pictures poses a number of limitations" This question was attempted by 433 (25.1%) candidates. Generally, the performance was average as 194 (44.8%) candidates who attempted this question scored 6 to 14.5 marks.

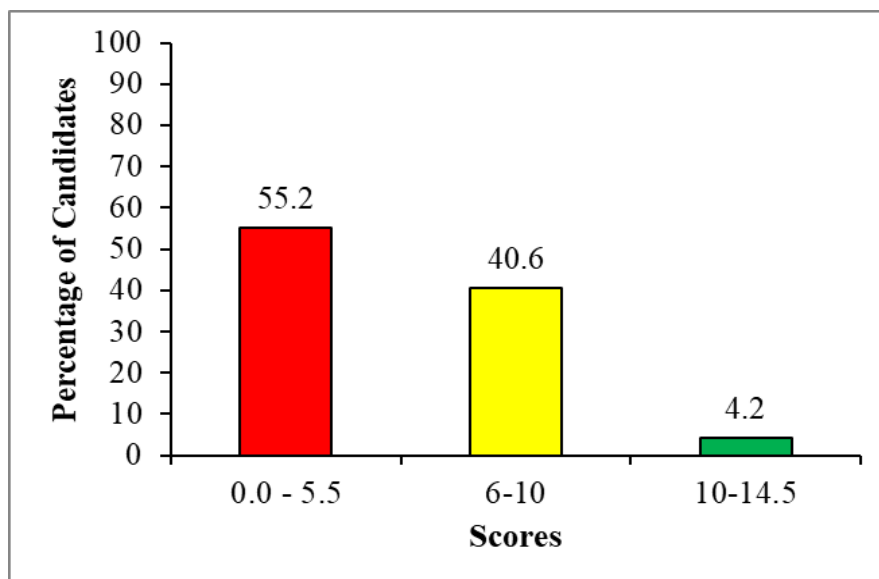


Figure 16: *The candidates' performance on question 16*

Figure 16 shows that 55.2% of the candidates had poor scores ranging from 0 to 5.5 marks. Those who scored 0 marks had poor proficiency in the English language and thus they failed to understand the question as they described features of good flat pictures instead of limitations of flat pictures in teaching and learning. Others lacked knowledge of flat pictures as they justified points which did not relate directly to flat pictures like: *the picture cannot be in balance, the picture is not seen clearly, failure to use the element of design, it sometimes difficult to hold on the blackboard, it can be difficult in storage, it discourages students attention, it increases verbalization, it decreases student's attention, it decreases creativity of the student*. Others provided advantages of using flat pictures in teaching and learning instead of their limitations as follows: *it helps to arose learners interest, it leads cooperation in the class, it develops critical thinking among learners, it helps student to understand faster, and it enhance creativity among leaners*. Most of these students also failed to provide relevant introduction and conclusion. For example, one candidate in the introduction defined flat pictures as; *flat pictures are pictures which are taken as real objects or things* instead of defining them pictures referring to an ordinary pictures that have no motion at all. Extract 16.1 is a sample of responses from one of the candidates in this category.

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| 16 | <p>Serves Language deficiency; Due to the Use of these flat pictures leads to the problem of Language to the individual to transfer the Knowledge or information from a teacher to the learner by using few words and this can serve language deficiency.</p> <p>They are portable; These flat pictures are portable they are easy to carry. they do not consume or the need of high energy a teacher can carry and moving to the class and this can help to avoid the tiredness which may be existed.</p> <p>They help students to keep Memory; Some of the pictures are more interesting to the individual or a learner this can help the learner to keep Memory and it will be easy for him/her to remember because of the use of flat pictures during teaching process.</p> <p>It helps to hold attention of the learners; Due to the use of flat pictures or other picture the attention of the class will be maintained because the learners will be focus to know what is going on in the teaching and learning process of the students.</p> <p>Generally; Due to the individuals to use these flat pictures and the related materials helps the individual to keep Memory and to provide the Motivation of the students to understand the teaching process.</p> |
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Extract 16.1: A sample of a candidate's incorrect response to question 16

Extract 16.1 shows that the candidate gave the points with mixture of concepts on advantages of flat pictures and qualities of good pictures

instead of the limitations of flat picture in the teaching and learning process.

Further analysis shows that 40.6% candidates scored average (6 to 10 marks) in this question. The analysis of their responses indicates that they had partial mastery of the concept of flat pictures and their limitations in teaching and learning. Some were able to provide correct points with insufficient justification. Others mixed up correct and incorrect points in their explanations, and yet others provided less number of points than require. For example, one candidates who got average marks provided weak points as follows; *shortage of funds, lack of experts, low level of technology, time consuming, and shortage of materials.*

On other hand, a few candidates (4.2%) with good performance (10 to 14.5 marks) were able to meet the demand of the question. They were also knowledgeable on flat pictures and their limitations in teaching. They presented organized essays with relevant introduction, provided the required number of points as well as relevant conclusions. The variation in the candidates' performance in this category was determined by the clarity of their responses and the ability to provide sufficient explanation. The candidates provided the following correct points as; *it is cost full, it non interactive, consume time, difficult to use by those with visual impairment, flat pictures need skills when taken, can lead into misinterpretation of information, it can confuse learners, it requires higher knowledge in interpretation.* For example, one candidate with good performances gave the following most correct points; *does not accommodate the need of all learners in the class, it may lead to misconception or confusion, if not well coloured can lead to boredom, flat pictures do not concretise the idea of some concept, it need high knowledge to interpret.* Extract 16.2 provides a sample of a candidate's response in this category.

16.

Flat picture this is the non-projected media which is used by the teacher so that to assist a learner to acquire the knowledge and skills easily. Flat picture can be bought by the teacher or can be designed by the teacher. Flat picture it is found within the traditional teaching media. This it have a lot of advantages but also it have some of the limitations to be used in the teaching and learning process.

The followings are the limitations of using flat picture in teaching and learning process.

It is not suitable for children who have visual impairment. This is because they can not see clearly from what you displayed, but ~~th~~ they can understand well when they hear and touch. Example they can hear the sound of teacher and understand.

It have cost during preparation. The materials that are used can be bought from the shops. Example the pen, marker and sheet for drawing it should be bought from the shop. So it need the money to having it.

It consume time during design. In order to prepare a good and more attractive flat picture a designer her/she should use enough time to

16. design it. Example a teacher can use two or more hours to design the picture.

It is not suitable to the very large number of learners. The number of learner who are many and are sit a more than one kilometer a flat picture can not be used. Example if the number of learners is about two thousand it is imposible to use it. Because some will not see clear.

It can not understandable if it is not well designed. If the designer of the flat picture have low knowledge to construct the flat picture it can not provide a meaningful to the learner. Example if the colour used it does not seen clearly to the student at the student can not understand well.

Generally not only that the flat picture have limitations in teaching and learning process but also have various advantages to students like provide motivation to the learner, it arouse creativity to the learner, it enhance interaction between the learners and the teacher and it enhance retention of material to learners.

Extract 16.2: A sample of a candidate's correct response to question 16

3.0 ANALYSIS OF CANDIDATES PERFORMANCE ON EACH TOPIC

The Educational Media and Technology examination questions were set from 8 topics. The analysis of candidates' performance on each topic shows that the candidates had good performance on four topics namely: *Characteristics of Educational Media and Technology* (96.30), *Care and Maintenance of Educational Media and Technology* (77.55%), *Production of Traditional and Modern Educational Media and Technology* (76.57%) and *Function of Educational Media and Technology* (65.38 %). The topic which candidates performed averagely were; *Types of Educational Media and Technology* (59.97%), *Categories of Educational Media and Technology* (57.95%) and *Principles of Teaching and Learning in Educational Media Technology* (52.12%). The candidates performed poorly on one topic; *Educational Media and Technology and Environment* (37.67%). An appendix has been attached for further illustration at the end of report.

4.0 CONCLUSION

Statistical data analysis for each question shows that the candidates' overall performance on the Educational Media and Technology subject was average as 66.03% of the candidates scored 40 marks and above. The analysis shows that the candidates' good performance was due to their ability to meet various criteria, which included their ability to understand the questions and having sufficient knowledge on the subject matter in relation to curriculum objectives for Diploma in Secondary Education Examination (DSEE). However, candidates with poor performance demonstrated lack of these attributes. The major reasons for poor performance were misinterpretation of the questions which led to candidates' provision of irrelevant answers contrary to the tasks of the questions and lack of knowledge of the assessed concepts. It was also revealed that candidates who performed poorly lacked essay writing skills and had poor English language proficiency.

5.0 RECOMMENDATIONS

From analysis of the candidates' performance, it is recommended that, some measures should be taken in order to improve the performance of the prospective candidates in this subject. The following are recommended:

- (i) Colleges should equip resource rooms for students and tutors to practise and prepare teaching aids. This will help student teachers to know various education media; how to use them in the classroom lessons, their strength and disadvantages as well as their limitations.
- (ii) Tutors should guide student teachers on how to approach examination questions by giving the student teachers frequent exercises, tests, examinations, quizzes and project work accompanied by immediate feedback to enhance assessment for learning.
- (iii) Colleges have to take measures to improve student teacher's proficiency in the English Language particularly on sentences and grammar by insisting Tutors and student teachers to use English Language as a means of communication during teaching and learning process as well as in other activities outside the classroom.
- (iv) Tutors should use teaching and learning strategies such as: case studies, role play, demonstration, think pair and share, gallery tour, sightseeing discussion, field trip and invitation of resource persons to improve the performance on topic of *Educational Media and Technology and Environment* in which the performance of the candidates was poor.

**SUMMARY OF THE CANDIDATES' PERFORMANCE ON THE
EDUCATIONAL MEDIA AND TECHNOLOGY SUBJECT 2021**

| S/N | Topic | Question Number | Performance on Each Question(%) | Average Performance Per Topic (%) | Remarks |
|--------------|---|-----------------|---------------------------------|-----------------------------------|----------------|
| 1 | Characteristics of Educational Media and Technology | 6 | 96.30 | 96.30 | Good |
| 2 | Care and Maintenance of Educational Media and Technology | 3 | 77.55 | 77.55 | Good |
| 3 | Production of Traditional and Modern Educational Media and Technology | 9 | 60.47 | 76.57 | Good |
| | | 11 | 92.66 | | |
| 4 | Function of Educational Media and Technology | 8 | 89.87 | 65.38 | Good |
| | | 14 | 50.13 | | |
| | | 15 | 56.14 | | |
| 5 | Types of Educational media and Technology | 12 | 75.14 | 59.97 | Average |
| | | 16 | 44.80 | | |
| 6 | Categories of Educational Media and Technology | 1 | 87.30 | 57.95 | Average |
| | | 4 | 18.29 | | |
| | | 5 | 75.81 | | |
| | | 13 | 50.39 | | |
| 7 | Principles of Teaching and Learning Educational Media and Technology | 2 | 9.40 | 52.12 | Average |
| | | 10 | 94.85 | | |
| 8 | Educational Media and Technology Environment | 7 | 37.67 | 37.67 | Poor |
| Total | | | | 66.03 | Average |

