ANSWERS

TO

ACTIVITIES AND ASSIGNMENTS

APPENDIX I

ANSWERS TO ACTIVITIES AND ASSIGNMENTS IN PED 431

PED 431 CONTINUOUS ASSESSMENTS IN PRIMARY SCHOOLS

MODULE 1

Unit 1

Activity

Solution to activity 1:

Continuous assessment (CA) can be defined as a mechanism whereby the final grading of a student in cognitive, affective and psychomotor domains of all his or her performance during a given period of schooling.

Solution to activity 2:

One-short examination

Problems

- 1. Assessment was unidirectional, that is, it was concerned with cognitive.
- 2. Decision was central which led to test abuse.
- 3. Teachers who taught the students were left out in the assessment process.
- 4. It was not guidance oriented.

Solution to activity 3:

School record book, cumulative record card and the transcript

Assignment

Solution to take home assignment 1:

- 1) **Comparability of Standard**: Comparability of standards arises from the differences in the quality of tests and other assessment instruments used in different schools.
- 2) **Record Keeping and Continuity of Records**: Continuous assessment cannot be meaningful except there is a meticulous keeping of accurate records for each students/pupils throughout the child's period of schooling. Since these records are expected to be cumulative from class-to-class and from school-to-school, there is the need for some uniformity in the kinds of records kept and the format for keeping such records.
- 3) **Storage Facilities:** In continuous assessment, associated with the problem of record keeping is the storage facility for safe keeping of records. Most primary and secondary are poorly equipped for such a function.
- 4) **Unqualified Personnel:** There are no qualified personnel to implement and operate continuous assessment. Many teachers do not possess the necessary skills in developing valid assessment instruments for the evaluation of

- behavioural outcomes in the three domains. Continuous assessment requires the overall ability of every child in terms of cognitive, affective and psychomotor.
- 5) **Misinterpretation of Guideline:** Some principals and teachers think that assessments are limited to paper and pencil tests and examination. Teachers can summarize pupils score, class work and assignments to make up a grade for a given period.

Solution to take home assignment 2:

- 1. Regular seminars, conference and workshops for teachers on continuous assessment
- 2. Training f evaluators should be liberalized through special scholarship scheme.
- 3. The continuous assessment programme should be adequately funded
- 4. Monitoring committee should be set up at the National, state and local level

Solution to take home assignment 3:

- 1. Grading of students involves the teacher.
- 2. It is formative in nature. This helps to guide the development of the child.
- 3. The 3H of the child (Head, heart and hands) are assessed.
- 4. Assessment begins as soon as the child enters school.

Unit 2

Activity

Solution to activity 1: There are (6) levels of cognitive domain.

Solution to activity 2: Evaluation, synthesis, analysis, application comprehension and knowledge

Solution to activity 3: Application and synthesis

Solution to take home assignment 1:

Knowledge: This is the lowest level; it involves mere recall or the remembering of previous learned materials, from simple fact to complete theories.

Comprehension: This is the ability to understand or grasp the meaning o the materials learned or committed to the memory

Solution to take home assignment 2:

Analysis: This is the ability to break down material into the component part so that the internal organization structure may be understood.

Synthesis: This refers to the ability to put parts together to form a new whole. Learning outcomes at this level stress creating behaviours, with major emphasis on the formulation of patterns or structures.

Solution to take home assignment 3:

Evaluation

Unit 3

Activity

Solution to activity 1:

Level of affective domain and their order

There are five levels of affective domain.

Hierarchical arrangement: Receiving, responding, valuing organizing and characterization

Level of psychomotor domain and their order

There are seven levels of affective domain.

Hierarchical arrangement: perception, set, guidance response, mechanism, complex overt response, adaptation and origination

Solution to activity 2:

Receiving: This refers to the willingness of the learner to attend to a particular phenomena or stimuli (classroom activities, text book) and it is the lowest level in the domain.

Responding: This refers to the active participation of the learner who reacts to the phenomena or stimuli in some way.

Solution to activity 3:

Valuing: This involve the worth or value a learner attaches to a particular object or behavior

Characterization: At this level the learner has value system that controls his/her behavior which is perceived constant and predictable.

Assignment

Solution to take home assignment 1:

There are several problems with the traditional point-based assessment processes. First, changes in affective and cognitive behaviours are not linked [2]. Achieving the desired change in the cognitive domain does not ensure or guarantee desired changes in the affective domain. It is even possible to accomplish cognitive objectives at the expense of affective objectives. To accomplish affective objectives it is important to have specific learning experiences related to the affective objective, just as is done for the cognitive objectives. This de-coupling of these two objectives strongly suggests they be assessed separately.

A second problem with traditional assessment approaches is that combining affective and cognitive assessment impairs the cognitive assessment of the work

Solution to take home assignment 2:

Assessment of Affective Objectives

The first step in assessment is to define objectives. Affective objectives can range from very low level commitment (a willingness to receive information) to higher

levels where students demonstrate that they value the knowledge and skills they are gaining. We believe that it is appropriate to choose overall objectives that fall between these two extremes. We have defined affective behavior objectives related to the willingness of the students to respond (i.e., to do what we ask them to do).

Solution to take home assignment 3:

Attitudescale, interest scale, anecdotal records

MODULE 2

Unit 1

Activity

Solution to activity 1:

Test taker and test administrator

Solution to activity 2:

Test taker: They should indicate the nature of the desired response and how and where to make the desired responses. The direction should indicate in relatively simple language the purpose of the test the duration and time limit and the way the test is to be scored and whether guessing is permitted or not.

Test administrators: They should explain the rationale for the testing procedure including details about the test venue, materials, timing and how to handle expected and unexpected problems and question during the testing session.

Solution to activity 3:

- 1. Were the test items of appropriate difficulty?
- 2. Did each item discriminate between the high and low achievers?
- 3. Was each of the distracters effective n distracting the less knowledgeable examinee?

Assignment

Solution to take home assignment 1:

Validity, reliability and usability

Solution to take home assignment 2:

- 1. Determining the purpose of the test
- 2. Determining of the test specification
- 3. Selecting the appropriate item type
- 4. Preparing relevant test item

Solution to take home assignment 3:

- 1. Evaluating teachers instructional method
- 2. Ascertaining the instructional level of the curriculum
- 3. Motivating students
- 4. Diagnosing students deficiency
- 5. Ranking students into terms of their of their achievement of a particular instruction
- 6. Measuring growth over time

Unit 2

Activity

Solution to activity 1:

Essay test consists of a small number of questions to which the student is expected to demonstrate in his/her response his/her ability to (a) recall factual, conceptual, or procedural knowledge, (b) organize this knowledge, and (c) interpret the information critically in a logical manner.

Solution to activity 2:

Essay items have several advantages. They:

- 1. Is easier and less time consuming to construct than are most other item types.
- 2. Provide a means for testing student's ability to compose an answer and present it in a logical manner.
- 3. Can efficiently measure higher order cognitive objectives (e.g., analysis, synthesis, evaluation).

Solution to activity 3:

Essay items also have several limitations. They are:

- 1. Cannot measure a large amount of content or large number of learning objectives.
- 2. Generally provide low test reliability and low grader reliability.
- 3. Require an extensive amount of instructor's time to read and grade.
- 4. Generally do not provide an objective measure of student achievement or ability (subject to bias on the part of the grader).

Assignment

Solution to take home assignment 1:

The essay test is probably the most popular of teacher-made tests. In general, a classroom essay test consists of a small number of questions to which the student is expected to demonstrate in his/her response to his/her ability to (a) recall factual, conceptual, or procedural knowledge, (b) organize this knowledge, and (c) interpret the information critically in a logical, integrated answer to the question. An essay test item can be classified as either an extended-response or a short-answer. The latter calls for a more restricted or limited answer in terms of form or scope. An example of each type of essay item follows.

Solution to take home assignment 2:

Formative test: The goal of formative test is to *monitor student learning* to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning. More specifically, formative test:

- help students identify their strengths and weaknesses and target areas that need work
- help faculty recognize where students are struggling and address problems immediately

Summative test: The goal of summative tests is to *evaluate student learning* at the end of an instructional unit by comparing it against some standard or benchmark. Summative tests are often *high stakes*, which means that they have a high point value. Examples of summative test include: A midterm exam, a final project and a paper

Solution to take home assignment 3:

- 1. Change your teaching method or lesson plan. If they are not paying attention, there is usually a reason why and that is because something you're doing stinks.
- 2. Ask them questions about what you have just said, get them involved and have them participate in an exercise

Unit 3

Activity

Solution to activity 1:

Project can also be defined as a set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations.

Solution to activity 2:

- 1. It is important to clearly articulate your objectives
- 2. Explicitly define the task
- 3. Clarify your expectations
- 4. Model high-quality work
- 5. Communicate performance criteria

Solution to activity 3:

- 1. Explain their ideas to others.
- 2. Listen to alternative ideas and perspectives.
- 3. Reach consensus.
- 4. Delegate responsibilities.
- 5. Coordinate efforts.
- 6. Resolve conflicts.
- 7. Integrate the contributions of multiple team members.

Assignment

Solution to take home assignment 1:

A task or piece of work assigned to someone as part of a job or course of study

Solution to take home assignment 2:

- 1. If not properly executed may be misleading
- 2. Time consuming

Solution to take home assignment 3:

- 1. Unseriousness may occur among groups since most of the students will rely on the bright ones.
- 2. Limit individual skills

Unit 4

Activity

Solution to activity 1:

- 1. Graphical rating scale
- 2. Descriptive rating scale
- 3. Numerical rating scale

Solution to activity 2:

- 1. It is cheap to administer.
- 2. Respondents feel free to give frank responses.
- 3. Respondents answer the question on their own convenience.
- 4. It maintains high level of privacy.

Solution to activity 3:

- 1. Misunderstood questions cannot be clarified
- 2. Unclear responses cannot be clarified
- 3. Respondents' non verbal cues can be recorded

Assignment

Solution to take home assignment 1:

This is a technique in which questions are presented orally to the testee and he is required to respond to the questions orally.

Solution to take home assignment 2:

- 1. Determine beforehand the characteristic traits you are looking for
- 2. Allow the interviewee to feel at ease
- 3. Take not of the respondent no verbal cues like facial expression smiles etc
- 4. Allow the interviewee to do much of the talking

Solution to take home assignment 3:

- 1. The interviewer
- 2. The interviewee
- 3. The interview schedule

MODULE 3

Unit 1

Activity

Answer to activity 1:

A transcript is an official record of a student's work, showing courses taken and grades achieved.

Answer to activity 2

- Think about how you're most likely to refer back to the records, and set up your files accordingly. For example, if your child has an IEP, you'll want to have quick access to certain documents to prepare for an IEP meeting.
- Be sure all the correspondence you keep is marked with the date you received it. Any time you send a form or letter to the school or the district office, first make a copy for your file
- Err on the side of saving more documents than you think you might need to keep. You can always reevaluate them later.
- Periodically go through your child's files. Add new papers or weed out those you no longer need.

Answer to activity 3:

Cumulative file: This may be little more than a profile card with personal identification data, standardized test scores and report cards.

Confidential file: This is often kept in the school district's central administrative office, where the special education program offices are located. The file typically includes:

- Medical records you've agreed to release to the school
- Results of vision and hearing tests done by the school
- Summary reports of the evaluation team and eligibility committee meetings

Compliance file: This file shows that the school system has met the timelines, notification and consent regulations required by Federal law. The records in this may include:

- Reports of eligibility determination meetings for children being considered for special education services
- Correspondence between school officials, including notifications ad consent

Discipline file: This may include notes about behavior and discipline issues that involve long-term suspension or expulsion.

Attendance file: This contains a record of a student's school attendance. It might also include notes from parents regarding excused absences.

Assignment

Solution to assignment 1

Records are the documented information generated, collected or received in the initiation, conduct or completion of an activity and that comprises sufficient content, context and structure to provide proof or evidence of the activity. Specifically, Hrach (2006) defined school record as a unified, comprehensive collection of documentation concerning all services provided to a student which may include intake information, evaluation(s), assessment(s), release of information forms, individual learning plan, all written notes regarding the student, all collateral information regarding the student, etc. Chifwepa (2001) observed that a record is a documented proof of transaction and that information is what a record contains, stores and transmits.

Solution to assignment 2:

- 1. Primary school principals should continue to encourage and monitor their teachers in the keeping of records in schools. The principals should ensure that all the relevant records are kept in secondary schools.
- 2. Secondary schools principals should continue to delegate the keeping of day to day administrative records such as attendance register, diaries and schemes of work, and punishment book to teachers in their schools. They should ensure that they record events as they occur in the appropriate record booklets and check every item of information in the records before appending their signatories. This is necessary because when principals append their signatories to records, the implication is that such records are correct and are duly kept.
- 3. State Universal Basic Education Board (SUBEB) should provide pimary school principals with sufficient funds to procure all record materials in their schools. This is necessary because without funds, principals cannot procure the records for their schools.
- 4. The State government should take necessary steps to pay teachers salaries and allowances regularly. This will lead to increased morale and interest on the part of teachers in the keeping of records.

Unit 2

Activity

Answer to activity 1

Weighing: This is the point or score value for the correct response to each item especially with a view to a decision or action. While Grading is the process is the process ofscoring or assignment of ranks used for judging the quality of something.

Answer to activity 2

Two methods of interpreting test scores are:

- 1. Criterion-Referenced Interpretation: This is based on Based on mastery of a specific set of skills. It deals with questions like
 - Are the achievement domains clearly defined?
 - Are there enough items for each skill tested?
 - What is the difficulty level of the items?
 - What type(s) of items are used?
 - What is the match of items to objectives?
- 2. Norm-Referenced Interpretation: This is based on comparison of individuals to clearly defined groups (called norming groups). It deals with questions like
 - Are the test norms relevant?
 - Are the test norms representative?
 - Are the test norms up to date?
 - Are the test norms comparable?
 - Are the test norms adequately described?

Answer to activity 3

Advantages of grading and weighing

- 1) Moving away from letter grades is a sign of decreasing academic rigor.
- 2) Letter grades allow us to compare student performance across different institutions or organizations.
- 3) It motivates students to work harder

Assignment

Solution to assignment 1

Types of Test Scores and Defined Purpose

Raw scores -- the number of items correct or the number of points earned; not of much use by themselves

Grade Equivalent scores -- grade group in which student's raw score is average; used to estimate or monitor growth

Standard scores -- terms of standard distance of student's raw score from the mean (average) in terms of standard deviations; used to monitor growth; better at reflecting reality than grade equivalent scores

Normal Curve Equivalent -- a normalized standard score; used to avoid problems with grade equivalent scores and used to describe group performance and to show growth over time

Percentile Ranks -- student's relative position in a group in terms of the percentage of students scoring lower than or equal to that student; used to determine relative areas of strengths and weaknesses; can create profile analyses from these scores.

National Stanines -- normal distribution is divided into nine parts; used to identify relative areas of strengths and weaknesses

Scale Scores -- scores on an arbitrarily set common scale; used to measure students' progress across grades in a subject

Solution to assignment 2

- Weighted grades discourage students from taking certain classes that may be
 educationally valuable but that may present a numerical disadvantage when
 calculating GPA and class rank.
- Weighted grades are not academically meaningful unless the grades are based on a single set of learning standards that are evaluated consistently from course to course.
- Weighted grades may actually act as disincentives, rather than incentives, for students. While weighted grades may make challenging courses seem less "risky" to students, it's also possible that students, once enrolled in the course, may not work as hard because they know that a lower grade is worth as much as a higher grade in another course. In addition, students enrolled in lower-level courses know that their efforts are being assigned less value by the grading system, so even if a student works hard and earns a good grade in a college-prep course, that effort will still be assigned a lower value than grades earned by students in higher-level courses.
- Weighted grades can devalue certain courses and reinforce cultural divisions within a school.
- Weighted grades create opportunities for students to manipulate the grading process.

Solution to assignment 3

- 1. A test score should be interpreted in terms of the specific test from which it was derived.
- 2. A test score should be interpreted in light of all of the student's relevant characteristics.
- 3. A test score should be interpreted according to the type of decision to be made.
- 4. A test score should be interpreted as a band of scores rather than as a specific score.

Unit 3

Activity

Answer to activity 1:

Continuous Assessment is the educational policy in which students are examined continuously over most of the duration of their education, the results of which are taken into account after leaving school. It is often proposed or used as an alternative to a final examination system.

Answer to activity 2:

This officer is to be in-charge of the following activities and functions:

- 1. He plan and adjudicate test administration in the local government areas
- 2. Organisation of workshops, seminars conferences and symposium for the development of continuous assessment instruments.
- 3. He takes appropriate records of the developed instruments and or other instruments obtained from some external agencies and sources.
- 4. He places the role of a counselor to the various school committees in the zonal and local government area.

 Answer to activity 3:

Techniques for Continuous Assessment

- 1. Sitting and Listening Closely. Teachers watch the behavior of the students at work and listen closely to their conversations. At times, they may askquestions during conversations to clarify details about what students are doing and what they are finding out, but otherwise do not interfere.
- 2. Purposeful Questioning. Teachers ask open-ended questions that enablestudents to reflect on, clarify, and explain their thinking and actions and give their point of view during investigations.
- 3. Sharing New Material/Information. Teachers give students new materialsor information to help them move deeper in their inquiry.
- 4. Sparking Science Conversations. Teachers structure opportunities forwhole-class, group, and individual conversations to explore the learningoccurring through the inquiry.
- 5. Student Self-Assessment. Students conduct routine reflection.

Assignment

Solution to assignment 1: Local government level, State level and Federal government level

Solution to assignment 2:

Tools for Continuous Assessment

- Teacher's observation notes
- Videotape

- Audiotape
- Photographs

Solution to assignment 3

In the inquiry-based classroom, continuous assessment is crucial to student learning. Because students' understanding and skills unfold naturally as they work with materials and explore their ideas through investigations and discussions, it is important that you be present. Being there to interact with your students both as a facilitator and an assessor, you can gather important information while the students are engaged in inquiry. Keeping track of this information and analyzing the data can help you to understand your students' thinking, and to monitor their growth in the concepts, processes, and dispositions of science. When students become "stuck" and need guidance, your intervention can help them delve deeper and move forward in their understanding. You can be as inquiry-oriented as your students by observing, recording, analyzing, and using the data you collect as they do their work.

Unit 4

Activity

Solution to activity 1

- a. Continuous assessment handbook,
- b. Teachers class/school records
- c. Pupils cumulative record
- d. The transcript

Solution to activity 2

- a. Assessment begins as soon as the child enters school
- b. Reduce the incidence of examination malpractices
- c. It ensures a more valid and reliable measurement
- d. It involves the teacher in the final evaluation
- e. The three domains that is the cognitive, affective and psychomotor domain are measured

Solution to activity 3

- a. It is summative
- b. Cumulative
- c. Comprehensive
- d. Guidance oriented

Assignment

Solution to assignment 1: The one-short examination. It means that everything about the assessment of the cognitive, affective and psychomotor domains of the child is

centrally done. That is the teacher is completely exonerated form the assessment of the child.

Solution to assignment 2: Regular seminars, conferences, workshops etc should be organized for teacher on continuous assessment

Solution to assignment 3

- a. Lack of professionalism on the part of teacher
- b. Most teachers complain that it is time consuming
- c. Problem of comparability of standards
- d. Lack of adequate materials like calculators, stationeries, file cabinet etc
- 1. Before the introduction of continuous assessment which test existed and what is it use for
- 2. State any one suggestion on how to improve continuous assessment in primary schools
- 3. What are the problems of continuous assessment in Nigeria

MODULE 4

Unit 1

Activity

Solution to activity 1:

Data generated from the field that does not portray any meaning is called ungrouped data. While those that are classed into frequency distribution are called grouped data

Solution to activity 2:

- 1. Determine the range (R) that is the highest and lowest score.
- 2. Determine the number of class or group as a rule of thumb.
- 3. Divide the rang by the preferred number of class to determine the interval size.
- 4. Group the data using the calculated class width
- 5. Do the tallying.
- 6. Determine the frequency.

Solution to activity 3:

The real limit of a number are those point that falls one half (.5) the upper limit is the upper stated number that is, plus .5.

Assignment

Table 1 Frequency distribution table for data

| S/N | Class Interval | Mid point | Class Boundaries | f | CF |
|-----|----------------|-----------|------------------|----|----|
| 1 | 90-95 | 92.5 | 89.5-95.5 | 1 | 60 |
| 2 | 84-89 | 86.5 | 83.5-89.5 | 2 | 59 |
| 3 | 78-83 | 80.5 | 77.5-83.5 | 4 | 57 |
| 4 | 72-77 | 74.5 | 71.5-77.5 | 7 | 53 |
| 5 | 66-71 | 68.5 | 59.5-71.5 | 5 | 46 |
| 6 | 60-65 | 62.5 | 59.5-65.5 | 11 | 41 |
| 7 | 54-59 | 56.5 | 53.5-59.5 | 5 | 30 |
| 8 | 48-53 | 50.5 | 47.5-53.5 | 9 | 25 |
| 9 | 42-47 | 44.5 | 41.5-47.5 | 8 | 16 |
| 10 | 36-41 | 38.5 | 35.5-41.5 | 4 | 8 |
| 11 | 30-35 | 32.5 | 29.5-35.5 | 4 | 4 |

Unit 2

Activity

Solution to activity 1:

The percentile rank of a score is the percentage of scores in its frequency distribution that are equal to or lower than it. For example, a test score that is greater than or equal to 64% of the scores of people taking the test is said to be at the 64th percentile rank.

Solution to activity 2:

A **percentile** point (or a centile) is a measure used in statistics indicating the value below which a given percentage of observations in a group of observations fall. For example, the 20th **percentile** is the value (or score) below which 20 percent of the observations may be found.

Solution to activity 3:

Percentile rank is a measure of relative standing.

Solution to activity 4:

- 1. The problem is that small differences in raw scores are exaggeratedwhen converted to percentiles if they are close to the mean for the norm group.
- 2. Differences in raw scores at the high and low extremes are collapsed when converted to percentiles.
- 3. In order to understand this we need to consider the shape of the normal distribution curve.

Assignment

1. Find the percentile rank of 40 and 52 in the scores given

| Class Interval | 60-64 | 55-59 | 50-54 | 45-49 | 40-44 | 35-39 | 30-34 | 25-29 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency | 2 | 5 | 6 | 8 | 7 | 4 | 3 | 2 |
| CF | 37 | 35 | 30 | 24 | 16 | 9 | 5 | 2 |

$$PR_{40} = \% CFL + \frac{(\% CFH - \% CFL)(X - XL)}{1}$$

% CFL =
$$\frac{9}{37} X \frac{100}{1} = 24.32$$

% CFH =
$$\frac{16}{37} X \frac{100}{100} = 43.24$$

$$X = 40$$
$$XL = 39$$
$$C = 5$$

$$PR_{40} = 24.32 + \frac{(43.24 - 24.32)(40 - 39)}{5}$$
$$= 24.32 + \frac{(18.92)(1)}{5}$$
$$= 24.32 + \frac{18.92}{5}$$

$$PR_{40} = 24.32 + 3.78 = 28.10$$

PPERCENILE RANK FOR SCORE 52

$$PR_{52} = \% CFL + \frac{(\%CFH - \%CFL)(X - XL)}{1}$$

% CFL =
$$\frac{24}{37} X \frac{100}{1} = 64.86$$

% CFH =
$$\frac{30}{37} X \frac{100}{100} = 81.08$$

$$X = 52$$

$$XL = 49$$

$$C = 5$$

$$PR_{40} = 64.86 + \frac{(81.08 - 64.86)(52 - 49)}{5}$$

$$= 64.86 + \frac{(16.22)(3)}{5}$$

$$= 64.86 + \frac{48.66}{5}$$

$$PR_{52} = 64.86 + 9.73 = 74.59$$

2. Percentiles and percentile ranks are frequently used as indicators of performance in both the academic and corporate worlds. Percentiles and percentile ranks provide information about how a person or thing relates to a larger group. Relative measures of this type are often extremely valuable to researchers employing statistical techniques

Unit 3

Activity

- 1. These are measures that have the tendency of occupying the central position in agiven set of distribution
- 2. Advantages
 - a. It is the most common measure of central tendency
 - b. It indicate the true position of the distribution of the scores
 - c. It could be used to compute further statistical analysis

Disadvantage

- a. It is more resistance to sampling fluctuation
- b. It is generally affected by skewness
- c. The sum of the deviation score about the mean is zero

3. Median

- a. It is not based on all the scores in the distribution.
- b. It can be used for further statistical computation.

It is not affected by extreme scores.

c. It fluctuates at regular with different sample.

Mode

- a. It is the easiest to compute.
- b. The mode is generally one value, hence it is not a unique measure.
- c. Extreme score is not affected.
- d. It is not used for further statistical analysis.
- e. This is the most crude measure of central tendency.

Assignment

Assignment 1

20+30+40+50+45+60

6

= 245

6

X = 40.83

Assignment 2

2

$$Mdn = 7.5$$

Assignment 3:

$$Mode = L + \left(\frac{d1}{d1 + d2}\right) \times C$$

$$=44.5 + \left(\frac{1}{1+2}\right) \times 5$$

$$=44.5 + \left(\frac{1}{3}\right) \times 5$$

$$=44.5 +1.67$$

$$Mo = 46.17$$

Unit 3

Activity

Activity 1: A transcript is an official record of a student's work, showing courses taken and grades achieved.

Activity 2: General tips to keep in mind in appropriate record keeping by parents:

- Think about how you're most likely to refer back to the records, and set up your files accordingly. For example, if your child has an IEP, you'll want to have quick access to certain documents to prepare for an IEP meeting.
- Be sure all the correspondence you keep is marked with the date you received it. Any time you send a form or letter to the school or the district office, first make a copy for your file
- Err on the side of saving more documents than you think you might need to keep. You can always reevaluate them later.

- Periodically go through your child's files. Add new papers or weed out those you no longer need.
- By taking the time to organize your child's school records now, you'll streamline your search for records in the future. You'll have access to valuable records whenever you need them to advocate for your child.

Activity 3: Official School Records to Keep

Cumulative file: This may be little more than a profile card with personal identification data, standardized test scores and report cards.

Confidential file: This is often kept in the school district's central administrative office, where the student summative report, medical records etc are kept

Compliance file: This file shows that the school system has met the timelines, notification and consent regulations required by federal law.

Discipline file: This may include notes about behavior and discipline issues that involve long-term suspension or expulsion.

Attendance file: This contains a record of a student's school attendance. It might also include notes from parents regarding excused absences.

Assignment

Assignment 1

Record keeping is the activity of organizing and storing all official document in the organization or institutions.

Assignment2

- 1. The problems facing educators in the area of data storage are such that people are careless with data.
- 2. People don't preserve documents even personal documents such as pay slips, declaration of age, marriage certificates, receipts of payment made on school fees and even certificates are being poorly kept and lost.
- 3. Another problem with data storage is that people are not aware of some modern storage facilities such as computer diskette, flash disc, microfilm and microfiche.

Assignment 3

Suggestion to improve appropriate school records in Nigeria:

- 1. The teachers need to be taught the improved systems of recording school level data accurately.
- 2. The teachers should be actively involved in serious planning activities and most of the data they are made to collect are not used by them hence they don't realize their value to decision making.
- 3. There is a need to involve the school teachers and head teachers in some major management decision like budgeting, project planning and execution and curriculum planning.
- 4. Schools should be given some incentives to encourage honesty in data collection.

Unit 4

Activity

Activity 1

Tables 1: Scores obtained by students

| S/N | X | $X-\overline{X}$ | $(X-\overline{X})^2$ |
|-----|----|------------------|----------------------|
| 1 | 4 | -1 | 1 |
| 2 | 5 | 0 | 0 |
| 3 | 7 | 2 | 4 |
| 4 | 3 | -2 | 4 |
| 5 | 6 | 1 | 1 |
| 6 | 5 | 0 | 0 |
| Σ | 30 | | 10 |

$$\overline{X} = \sum_{N} X$$

$$\overline{X} = 5$$

Population SD =
$$\sqrt{\frac{10}{6}} = \sqrt{1.67} = \underline{1.29}$$

Sample SD =
$$\sqrt{\frac{10}{6-1}}$$

$$\sqrt{\frac{10}{5}}$$

$$=\sqrt{0.2}=.47$$

Activity
$$2 = 3.5 \text{ X } 3.5$$

= 12.25

Assignment

Solution to Assignment 1: Measures of variability refers to how spread apart the scores of the distribution are or how much the scores vary from each other.

Solution to Assignment 2: They can be referred to as measure of spread, scatter, and dispersion.

Solution to Assignment 3: Range = 9-3=6

Solution to Assignment 3

Table for population variance

| s/n | X | $X-\overline{X}$ | $(X-\overline{X})^2$ |
|--------|----|------------------|----------------------|
| 1 | 6 | -3 | 9 |
| 2 | 8 | -1 | 1 |
| 3 | 5 | -4 | 16 |
| 4 | 7 | -2 | 4 |
| 5 | 7 | -2 | 4 |
| 6 | 7 | -2 | 4 |
| 7 | 9 | 0 | 0 |
| 8 | 5 | -4 | 16 |
| 9 | 3 | -6 | 36 |
| \sum | 57 | | 90 |

$$\overline{X} = \sum_{N} X$$

$$\overline{X} = 6.33$$

Population variance = $(X - \overline{X})^2 = 90$

Assignment solution to 4

Inter quartile range: It is defined as the difference between the largest and smallest values in the middle 50% of a set of data. To compute an inter quartile range using this definition; first remove observations from the lower quartile. Then, remove observations from the upper quartile.

The semi-interquartile range is a measure of the dispersion or spread of a variable; it is the distance between the 1st quartile and the 3rd quartile, halved.

It is common to describe a variable using a measure of central tendency, or average, most commonly the mean or median.

Unit 5

Activity

Activity 1

- a. In test 3
- b. Reason he has a higher mean and a lesser standard deviation hence, a large mean with a small standard deviation depicts a good test.
- c. His worst performance is in test 2 lesser mean and higher standard deviation

Assignment

Solution to assignment 1

$$\overline{X} = 16.33$$

$$SD = 3$$

$$Z = \frac{X - \overline{X}}{SD}$$

$$Z = \frac{10 - 16.33}{3}$$

$$= -2.11$$

Solution to assignment 2

$$T-Score = 10Z + 50$$

$$= -21.1 + 50$$

28.9

Solution to assignment 3 The two ways that classroom teacher can use the results of standardized tests: (1) to individual students.