

African Virtual University

Education: Education EDU06

# **LEARNING** PSYCHOLOGY

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Catherine W. DENYEKO

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# Foreword

The African Virtual University (AVU) is proud to participate in increasing access to education in African countries through the production of quality learning materials. We are also proud to contribute to global knowledge as our Open Educational Resources (OERs) are mostly accessed from outside the African continent. This module was prepared in collaboration with twenty one (21) African partner institutions which participated in the AVU Multinational Project I and II.

From 2005 to 2011, an ICT-integrated Teacher Education Program, funded by the African Development Bank, was developed and offered by 12 universities drawn from 10 countries which worked collaboratively to design, develop, and deliver their own Open Distance and e-Learning (ODeL) programs for teachers in Biology, Chemistry, Physics, Math, ICTs for teachers, and Teacher Education Professional Development. Four Bachelors of Education in mathematics and sciences were developed and peer-reviewed by African Subject Matter Experts (SMEs) from the participating institutions. A total of 73 modules were developed and translated to ensure availability in English, French and Portuguese making it a total of 219 modules. These modules have also been made available as Open Educational Resources (OER) on [oer.avu.org](http://oer.avu.org), and have since then been accessed over 2 million times.

In 2012 a second phase of this project was launched to build on the existing teacher education modules, learning from the lessons of the existing teacher education program, reviewing the existing modules and creating new ones. This exercise was completed in 2017.

On behalf of the African Virtual University and our patron, our partner institutions, the African Development Bank, I invite you to use this module in your institution, for your own education, to share it as widely as possible, and to participate actively in the AVU communities of practice of your interest. We are committed to be on the frontline of developing and sharing open educational resources.

The African Virtual University (AVU) is a Pan African Intergovernmental Organization established by charter with the mandate of significantly increasing access to quality higher education and training through the innovative use of information communication technologies. A Charter, establishing the AVU as an Intergovernmental Organization, has been signed so far by nineteen (19) African Governments - Kenya, Senegal, Mauritania, Mali, Cote d'Ivoire, Tanzania, Mozambique, Democratic Republic of Congo, Benin, Ghana, Republic of Guinea, Burkina Faso, Niger, South Sudan, Sudan, The Gambia, Guinea-Bissau, Ethiopia and Cape Verde.

The following institutions participated in the teacher education program of the Multinational Project I: University of Nairobi – Kenya, Kyambogo University – Uganda, Open University of Tanzania, University of Zambia, University of Zimbabwe – Zimbabwe, Jimma University – Ethiopia, Amoud University - Somalia; Université Cheikh Anta Diop (UCAD)-Senegal, Université d' Antananarivo – Madagascar, Universidade Pedagogica – Mozambique, East African University - Somalia, and University of Hargeisa - Somalia

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The following institutions participated in the teacher education program of the Multinational Project II: University of Juba (UOJ) - South Sudan, University of The Gambia (UTG), University of Port Harcourt (UNIPORT) – Nigeria, Open University of Sudan (OUS) – Sudan, University of Education Winneba (UEW) – Ghana, University of Cape Verde (UniCV) – Cape Verde, Institut des Sciences (IDS) – Burkina Faso, Ecole Normale Supérieure (ENSUP) - Mali, Université Abdou Moumouni (UAM) - Niger, Institut Supérieur Pédagogique de la Gombe (ISPG) – Democratic Republic of Congo and Escola Normal Superior Tchicote – Guinea Bissau

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# Production Credits

This second edition is the result of the revision of the first edition of this module. The informations provided below, at the exception of the name of the author of the first edition, refer to the second edition.

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AVU Multinational Project II funded by the African Development Bank.

# Table of Contents

|  |           |
|--|-----------|
| <b>Foreword</b>  | <b>2</b>  |
| <b>Production Credits</b>  | <b>3</b>  |
| <b>Copyright Notice</b>  | <b>4</b>  |
| <b>Supported By</b>  | <b>4</b>  |
| <b>I. Learning Psychology Introduction</b>                           | <b>9</b>  |
| <b>II. Prerequisite Courses or Knowledge.</b>                        | <b>9</b>  |
| <b>III. Time</b>   | <b>9</b>  |
| <b>IV. Material.</b>   | <b>10</b> |
| <b>V. Module Rationale</b>   | <b>10</b> |
| <b>VI. Content.</b>  | <b>11</b> |
| 6.1 Overview   | 11        |
| 6.2 Outline  | 11        |
| 6.3 Graphic Organizer  | 12        |
| <b>VII. General Objective(s)</b>                                     | <b>12</b> |
| <b>VIII. Specific Learning Objectives (Instructional Objectives)</b> | <b>13</b> |
| <b>IX. Teaching and Learning Activities</b>                          | <b>14</b> |
| 9.1 Pre-assessment: Learning Psychology                              | 14        |
| Answer key   | 18        |
| <b>Pedagogical comment for learner: Notes to the student</b>         | <b>19</b> |
| <b>X. Learning Activities</b>  | <b>19</b> |
| <b>Summary</b>   | <b>20</b> |
| <b>Definitions and applications of the learning principles</b>       | <b>20</b> |
| Unit 1   | 20        |
| Key Words  | 21        |
| List of relevant readings  | 22        |
| List of relevant useful links.                                       | 22        |
| Detailed description of the activity                                 | 23        |
| Introduction   | 23        |

---

|   |           |
|---|-----------|
| Learning objective                                | 23        |
| Unit one  | 23        |
| Task One  | 23        |
| Task two  | 26        |
| Task three  | 26        |
| Formative evaluation: One                         | 26        |
| Formative evaluation: 1                           | 26        |
| <b>Summary . . . . .</b>                          | <b>28</b> |
| <b>Theories of learning</b>                       | <b>28</b> |
| <b>Summary of the learning Activity . . . . .</b> | <b>28</b> |
| <b>Unit 2: Theories . . . . .</b>                 | <b>28</b> |
| <b>Behaviourism. . . . .</b>                      | <b>28</b> |
| Learning objective                                | 28        |
| Shortcomings:                                     | 29        |
| <b>Cognitive Learning. . . . .</b>                | <b>29</b> |
| <b>Humanistic theory . . . . .</b>                | <b>30</b> |
| Role of the teacher                               | 30        |
| Instructional implications of humanistic theory:  | 31        |
| Approaches to humanistic education                | 31        |
| Evaluation  | 32        |
| Types of groups used are:                         | 32        |
| Advantages of co-operative learning               | 32        |
| Reactions to humanistic education                 | 33        |
| <b>Social Learning. . . . .</b>                   | <b>33</b> |
| General principles of social learning theory:     | 33        |
| Contemporary social learning perspective          | 34        |
| Effects of modelling on behaviour:                | 34        |
| Educational implication of social learning theory | 34        |
| <b>List of relevant readings . . . . .</b>        | <b>36</b> |
| Introduction                                      | 36        |

|   |           |
|---|-----------|
| Task one  | 36        |
| Task Two  | 37        |
| Formative assessment -unit two  | 37        |
| Formative Evaluation: answer key  | 38        |
| <b>Title: Class management and practice:</b>                            | <b>40</b> |
| <b>Summary . . . . .</b>  | <b>40</b> |
| <b>Learning objective . . . . .</b>                                     | <b>41</b> |
| <b>List of Relevant Reading . . . . .</b>                               | <b>42</b> |
| Introduction  | 42        |
| Formative evaluation:   | 44        |
| Answers Key   | 44        |
| <b>XI.Compiled List of All Key Concepts (Glossary). . . . .</b>         | <b>45</b> |
| <b>XII. Compiled List of Compulsory Readings . . . . .</b>              | <b>48</b> |
| <b>XIII. Compiled List of (Optional) Multimedia Resources . . . . .</b> | <b>48</b> |
| <b>XIV. Compiled list of Useful Links . . . . .</b>                     | <b>50</b> |
| Useful Link 1   | 50        |
| Useful Link 2   | 51        |
| Useful Link 3   | 52        |
| Useful Link 4   | 53        |
| Useful Link 5   | 54        |
| Useful Link 6   | 55        |
| <b>XV. Synthesis of the Module . . . . .</b>                            | <b>55</b> |
| <b>XVI. Summative Evaluation . . . . .</b>                              | <b>56</b> |
| SUMMATIVE EVALUATION: ANSWER KEY  | 57        |
| <b>XVII. References . . . . .</b>                                       | <b>63</b> |
| <b>XVIII. Main Author of the Module . . . . .</b>                       | <b>64</b> |
| XIV. Reviewer of the Module   | 64        |



# I. Learning Psychology Introduction

Welcome to this module titled Learning Psychology. In this module our focus will be on human learning. Human learning is not an entirely new topic to you since it was discussed at introductory level in the General Psychology unit and also in Developmental Psychology. Learning is undoubtedly one of the most important parts of psychology for the simple reason that most, if not all, human behaviour is either learned or is influenced by learning. A basic understanding of the behaviour of human beings therefore calls for basic knowledge of the basic psychological principles, concepts and approaches in classroom teaching and learning. The other factors that influence learning are inheritance, but this is beyond the scope of this module.

The real test for mastery of competence lies in being able to apply the principles covered in theory in solving your day –to –day teaching problems. To the extent that you are able to apply these principles or at least relate them to what you have experienced in the field, will you have gone a long way in meeting the objectives of this course.

## II. Prerequisite Courses or Knowledge

It is expected that you have successfully completed module 1 on General Psychology and module 11 in Developmental Psychology. This is because it is important and necessary that you have some elementary knowledge on psychology and recent movements in Educational psychology i.e. structuralism, functionalism, Gestalt psychology and behaviourism.

In Developmental Psychology, again, it is expected that you have requisite knowledge and skills on how people come to perceive, understand and act within the world and how this process change as they age. This is especially in relation to Jean Piaget (1896-1980) model of child development and learning and how it impacts learning.

## III. Time

This module will cover 120 hours .Please; adhere to the time allotment for each unit to reap maximum benefit from this module. Make every effort to complete all activities and readings to successfully complete this module.

UNIT One - 40 hours

Definition of Learning Psychology: Types of Learning, Approaches and styles in Learning.

Unit Two - 60 hours

Introduction to Theories of Learning: Cognitive, Humanistic, Behavioural and Social Learning theories.

Unit Three - 20 hours

Classroom Management styles/Practices, teacher's role individual differences.

### **IV. Material**

The following materials are important for you to successfully complete this module. Make every effort to ensure that they will be available to you as you commence on this module.

- 1) A computer, internet connectivity and an e-mail address
- 2) A flash disk to download useful and relevant material from the internet
- 3) A teacher resource centre for further reference work
- 4) A study group
- 5) A note book/folder for writing your study notes
- 6) Pens, pencils
- 7) Demonstrative materials e.g. CD/DVDs
- 8) Hand outs/abstracts
- 9) Recommended text books including web based materials

### **V. Module Rationale**

This module is based on the rationale that, you, as a prospective teacher need to understand how learning takes place, what influences it and how it can be maximised. It is thus of utmost importance that you are able to apply the psychological principles of learning to optimise and enhance the learning process in your given area. This knowledge will help equip you as a prospective teacher and an educator with skills and competencies in the art of teaching and handling educational activities effectively. Theories and concepts will give you a frame of reference on which to base your practice. This will help you to accurately translate the theoretical framework into effective skills to enhance learning. These theories and concepts will aid you to positively impact the classroom environment as well as be cognisant of the differential abilities, experiences and social backgrounds of your learners. Your sensitivity, awareness and interventions to cater for individual differences as well your ability to motivate them will determine the effectiveness of the learning process in the classroom. Consequently, these concepts and theories will be useful instruments in enhancing and imparting skills to you, on effective classroom management styles and practices to benefit learners.

All the above is of utmost importance to you, you are encouraged to read widely to gain more insights into the module.

### **VI. Content**

#### **6.1 Overview**

This module has been divided into three units. These units have been arranged sequentially so that the concepts gained in unit one, will be a prerequisite for effective and clear understanding of concepts in unit two and three. It is therefore, advisable that this work be done sequentially. At the end of every unit there are activities and learning tips. Complete all the activities and readings given in each unit before proceeding to the next.

*Unit one:* the general aim is to broaden your understanding of what learning is. It expounds on psychological principles, different types of learning, approaches and learning styles and their impact on behaviour and especially how they apply to the learners in class.

*Unit two:* focuses on the theoretical constructs and their implications on the learning process

*Unit three:* focuses on effective skills of classroom management and practices that enhance the learning process, role of the teacher and individual differences.

#### **6.2 Outline**

UNIT I - 40 hours

Defines concepts of learning psychology (in education), the basic principles in the process of learning and the different types/approaches and styles in learning.

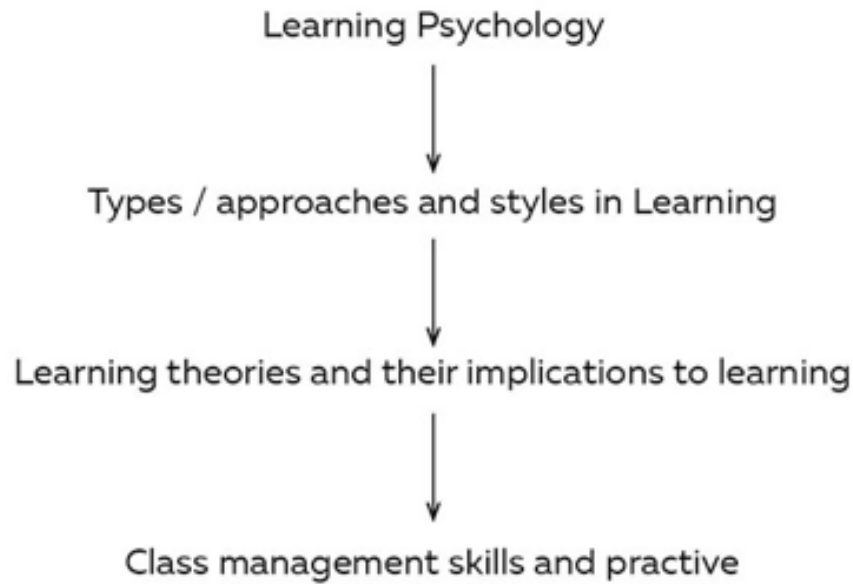
UNIT II - 60 hours

Covers the major learning psychology theories; behavioural, cognitive, humanistic, and social learning.

UNIT III - 20 hours

Covers: Effective application of class management styles and practices to optimise learning, teacher's role and strategies to cater for individual differences.

### 6.3 Graphic Organizer



### **VII. General Objective(s)**

1. To provide the student teacher with sound psychological principles and concepts in learning psychology. Highlight the different types/approaches and styles in learning and teaching so as to enable the student teacher to effectively teach in their specific subjects.
2. Provide student teacher with requisite knowledge and skills to enable him/her be cognisant of the implications of the major learning psychology theories and to use them as a frame of reference on which to base his/her classroom practices.
3. Gain theoretical and practical skills of designing strategies to enable the student teacher impact and apply effective class management styles in the learning environment. Be cognisant of teacher's role and cater for learners with individual differences.

## VIII. Specific Learning Objectives (Instructional Objectives)

| Unit  | Learning objective(s)  |
|---|--|
| 1. Definitions and concepts of learning             | <p>By the end of this Unit you should be able to:</p> <ol style="list-style-type: none"> <li>1. Integrate different learning types i.e. simple non-associative, sensitization, associative, observational and play,</li> <li>2. To use different learning approaches e.g. rote learning, formal, non-formal and combined approaches in classroom instruction.</li> <li>3. Identify different learning styles among the learners and appropriately apply different teaching styles for concrete and abstract perceivers as well as for the active and reflective processors.</li> <li>4. Use the concept of Learning Chaining so as to transfer knowledge to the learners more efficiently</li> </ol> |
| 2. Theories used in learning Psychology             | <ol style="list-style-type: none"> <li>1. Highlight the major concerns and principles as postulated by different learning psychology theories i.e. behavioural, cognitive, humanistic and social learning theories.</li> <li>2. Use the principles and concepts postulated by major learning psychology theorists to positively impact on the learning process.</li> </ol>   |
| 3. Class Management and Practice:<br>teacher's role | <ol style="list-style-type: none"> <li>1. Be able to state, discuss and practice management style that is learner centred</li> <li>2. Be able to identify, discuss and demonstrate ability and skills to perform your role(s) and functions</li> <li>3. as a teacher to effectively enhance the teaching /learning process</li> <li>4. Be able to demonstrate creativity, innovation and flexibility in teaching and learning</li> <li>5. Identify individual differences and design effective Learning strategies.</li> </ol>   |

## IX. Teaching and Learning Activities

### 9.1 Pre-assessment: Learning Psychology

These pre-assessment multiple choice questions are designed to test what you already know about the concepts covered in this module

Rationale: Answering these questions correctly or incorrectly will be a good indication of your grasp of the subject matter covered in this module, what you will need to know and be able to apply to solve classroom problems. It is important that you complete them all as diligently as possible.

#### Questions

In each of the following multiple choice questions choose the best answer out of given options A, B, C, or D.

1. Which of the following factors influence human behaviour?

- a) Social status
- b) Types of schools attended
- c) Learning and inheritance
- d) Academic excellence

2. Learning is defined as:

- a) Enduring change through practice
- b) Memorization, reading, writing, testing
- c) The acquisition and development of memories and behaviours including skills, knowledge, understanding, values and wisdom.
- d) Being taught, practicing, writing and being tested.

3. Behaviour that involve sequence of movements that have to be performed together in order to execute a prior skill is known as:

- a) A verbal chaining
- b) Learned behaviour
- c) Sequenced learning
- d) Motor chaining

4. A teacher uses reinforcement in order to:
- a) Punish
  - b) Persuade and influence
  - c) Increase the probability of occurrence of a response which it accompanies
  - d) Decrease the probability of occurrence of a response which it accompanies
5. Individuals perceive and process information differently as a result of;
- a) The teacher's ability to teach well
  - b) Their chronological age
  - c) Facilities offered and curriculum weighting
  - d) Heredity, upbringing and current environmental demands.
6. Any external manifestation of behaviour is referred to as:
- a) Learning
  - b) Performance
  - c) Activity
  - d) Practice
7. Negative reinforcement is used for
- a) Suppressing an undesired response by introducing the unpleasant stimulus as soon as the undesired behaviour occurs
  - b) Apply a pleasant stimulus to suppress undesired behaviour
  - c) Strengthening a desired response by removing the painful stimulus as soon as the learned behaviour occurs
  - d) Applying caning and corporal punishment
8. Intense emotions, whether pleasant or unpleasant will have:
- a) Negative effect on learning
  - b) Positive effect on learning
  - c) No effect on learning
  - d) Will have both positive and negative effect

9. The ability of the learner to utilise or apply the acquired knowledge or skills in school to solve problems in similar or related situations at some future date is known as:
- a) Knowledge acquisition
  - b) Reinforcement
  - c) Motivation
  - d) Transfer of learning
10. Which of the following is NOT true about short term memory store?
- a) It has unlimited capacity for holding information
  - b) Rehearsal is necessary to retain items in the STM
  - c) Information in the STM has never lost consciousness
  - d) Information lasts 10 – 15 seconds
11. When classifying learners on the basis of their intelligence quotient (IQ) scores, what classification would you give a learner with IQ range of 100–119?
- a) Normal
  - b) High average
  - c) Low average
  - d) Superior
12. Individual differences in classroom performance are mainly determined by:
- a) Heredity and environment
  - b) Physical appearance
  - c) Skin colour
  - d) Intelligence quotient
13. According to Jean Piaget (1896-1980) children learn by;
- a) Attending intensive tuition programmes
  - b) Building cognitive structures or net worked concepts for understanding and responding to physical experiences within his or her environment
  - c) Reading and writing extensively
  - d) By eliminating play time



14. Concrete perceivers absorb information through:
- a) Analysis, observation, and thinking
  - b) Listening, questioning and writing
  - c) Discussing, identifying and formulating ideas
  - d) Direct experience by doing, acting, sensing and feeling
15. Which of the following is NOT a misuse of punishment in schools?
- a) Failure to take into account the level of drive maintaining a given instrumental behaviour when scaling up intensity of punishment
  - b) Failure to use contingent punishment
  - c) Failure to use corporal punishment
  - d) Failure to provide alternative behaviour
16. In reference to learning styles, teachers should employ assessment techniques based -
- a) On curriculum coverage
  - b) On the ability of the learner
  - c) On the development of the 'whole brain' capacity and each of the different learning styles.
  - d) Focusing on cognitive abilities
17. Learning is seen as a product of
- a) Practice
  - b) Memories
  - c) Understanding
  - d) Experience
18. In the learning of sciences and maths, scientifically there is no difference in performance as a result of gender. Which of the following influence gender based performance?
- a) Culture
  - b) Attitude
  - c) Stereotyping
  - d) Race

19. Constructivism as a description of human cognition is often associated with educational approaches that promote,

- a) Active learning i.e. learning by doing
- b) Observable behaviour change
- c) Internal mental processes
- d) Conditioning

20. Which of the following does not determine individual differences in a classroom?

- a) Intelligence Quotient (IQ)
- b) Differential rate of growth
- c) Sex differences
- d) Date of birth

Answer key

|      |      |       |       |       |
|------|------|-------|-------|-------|
| 1. C | 5. D | 9. D  | 13. B | 17. B |
| 2. C | 6. B | 10. A | 14. D | 18. B |
| 3. D | 7. A | 11. B | 15. C | 19. A |
| 4. C | 8. A | 12. A | 16. C | 20. D |

### **Pedagogical comment for learner: Notes to the student**

If you scored 30% in this pre-assessment you would have to work very hard to pass this course. This might also imply that you need to revisit module 1 General psychology and module 11 Developmental Psychology. If you scored 60% then you can consider that you are doing fine and if you scored 80% and above, you are doing excellently. You should however not sit back; you must do all the activities set out in this module. That way, you can maintain that excellent score.

### **Important tips**

- Learning is the acquisition and the development of memories and behaviours, including skills, knowledge and understanding, values and wisdom.
- Learning chaining is the transfer of knowledge to a wider area. Categories of learning chaining are motor and verbal chaining. Both intrinsic and extrinsic reinforcement are important.
- Individuals perceive and process information differently as a result of heredity, upbringing and current environmental demands.
- Attitudes are predisposition to act in a particular way.
- Reinforcement, punishments can be used as a way of class control and management.
- Individual differences are mainly as a result of heredity and environment. To reduce individual differences in the classroom, promotional policies, ability grouping to instruction, intra-class grouping and admission criteria can be used.
- Constructivism as a description of human cognition is often associated with educational approaches that promote active learning i.e. learning by doing.

## **X. Learning Activities**

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# Learning Activities 1: Definitions and applications of the learning principles

## Unit 1

Definitions and applications of the learning principles

By the end of this unit you should:

- a) Be able define and discuss learning psychology, its principle and concepts
- b) Be able to use different types and approaches to learning
- c) Be able to use different learning styles

## Summary

Learning could be seen as a process through which behaviour changes as a result of experience. Formalized learning arises from the process of facilitating learning. Formalized learning makes learning more conscious in order to enhance it. All human behaviour is either learned or influenced by learning. As a prospective teacher, you need to have a firm grasp of the learning process and how you can apply the principles of learning to optimize learning in classroom setting. It is important that you demonstrate ability to apply these principles in explaining, controlling or predicting the learners' behaviour. You should be cognisant of learning approaches that could harbour interactive learning which include: reciprocal teaching, peer collaboration, cognitive apprenticeship and problem based instruction. Learners need to be attentive in order to activate the memory store. Information should be rehearsed if it is to pass from the short term memory store to the permanent memory store. The teacher should also be able to demonstrate ability to use both extrinsic and intrinsic reinforcement.

### Important tips:

To optimize learning:

- Make learning a positive experience for the students
- Make classroom environment pleasant both physically and socially.
- Make the classroom visually stimulating, well-kept and organized.
- Inquire about students' wellbeing and congratulate them on their success.
- Recommend healthy lifestyle including regular exercise.
- Enhance and teach cooperative learning.
- Avoid unannounced tests and quizzes

- Give adequate time to complete assignments
- Give plenty of time for students to discuss with the teacher and other students
- Teach the whole child
- Teach in different ways to help learners learn

### Key Words

**Learning:** Learning is the acquisition and development of memories and behaviours, including skills, knowledge, and understanding, values and wisdom. It is a product of experience and the goal of education. Learning takes place within the organism and is inferred from change in the organisms behaviour .The definition also stresses that learning takes place as a result of experience or practice. Learning is also seen to cover those behaviours changes that are of a relatively permanent nature. Lastly, reinforced practice is seen as a necessary condition for learning.

**Motor chaining:** These are behaviours that involve sequences of movements that have to be performed together in order to execute a given skill. Conditions that promote this are sequencing of links, contiguity of links, practice, reinforcement, intrinsic feedback and extrinsic feedback.

**Associative learning:** These are classical and operant conditioning. Operant conditioning is the use of consequences to modify the occurrence and form of behaviour. Classical conditioning involves repeated pairing of unconditional stimulus with a previously neutral stimulus. Following conditioning, the response occurs both to the unconditioned and to the other unrelated stimulus.

**Non-formal learning:** This is organized learning outside the formal system e.g. in clubs, youth groups etc.

**Verbal chaining:** This is the formation of verbal associations. Characteristics of verbal chaining are; meaningfulness and familiarity, mediation and coding provision of learning instructions, proper sequencing of verbal links, practice, reinforcement and forgetting factor.

**Informal learning:** These are situations encountered through day-to-day experiences. Learning from life e.g. play and exploring.

## List of relevant readings

1. <https://en.wikipedia.org/wiki/Learning> Retrieved 25/03/2016

### *Content of webpage*

On this site you will learn that learning is the act of acquiring new, or modifying and reinforcing, existing knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information. The web page also contains information of various forms of learning.

## List of relevant useful links

- 1) <https://www.youtube.com/watch?v=lgGiY0BJzLc> Retrieved 25/03/ 2016

### *Content of webpage*

This video is on classroom management tips; the video is on simple classroom tips.

- 2) <http://en.wikipedia.org/wiki/habituation> Retrieved 25/03/ 2016

### *Content of webpage*

This website will contain information detailing habituation as a form of learning in which an organism decreases or ceases to respond to a stimulus after repeated presentations.

- 3) [https://en.wikipedia.org/wiki/Learning\\_theory\\_%28education%29](https://en.wikipedia.org/wiki/Learning_theory_%28education%29) Retrieved 25/03/ 2016

### *Content of webpage*

This website contains information on learning theories including behaviourism and constructivism

## Detailed description of the activity

### Introduction

Remember that, the real test for mastery and competence you need in order to teach effectively lies in your ability to apply the principles covered in theory in solving your-day-to-day teaching problems. It would be advisable that you demonstrate ability to use different types of learning and approaches as well as ability to cater to different learning styles. It is important to remember that learning can only be inferred from observable changes in the organisms' behaviour. Let the learners' copy, repeat verbally and see diagrams/pictures of material to be learned so as to code the information through many sense organs namely auditory, the visual and kinaesthetic sense organs. Change is only observable by registered improvement in the scores obtained in a test or improvement in the speed at which a given task is performed.

### Learning objective

Learning psychology precisely the two fields that are questioned principles underlying learning models the demonstration and explanation of the relationship between the different models. The implementation of the Unit helped develop a glossary of key concepts to understand and use the concepts in various situations relating to the areas of learning. Students will develop a table of the main principles of the psychology of learning and for each of the principles specify the characteristics related to the construction of learning.

### Unit one

As a teacher you will be an acknowledged guide or helper in the process of learning. When deciding what teaching methods to use consider the students background knowledge, environment, and their learning goals as well as the standardized curricula. Be able 'to draw out', your learners in order to facilitate realization of their self- potential and latent potentials. To accomplish the above, skills on how to translate information, good judgment, experience and wisdom into relevant knowledge that a student can understand and retain is necessary. Essentially, this is the learning process.

### Task One

In your form two class, divide the class in groups of six students and ensure that there is gender balance in each group. Let each group select its own secretary. Give each group the following questionnaire to discuss and complete.

- a) Discuss and write, for each category, four ways in which they learnt to accomplish each of the specified tasks.

i) Their first language (mother tongue)

- 1) -----
- 2) -----
- 3) -----
- 4) -----

ii) To play their favourite game

- 1) -----
- 2) -----
- 3) -----
- 4) -----

iii) To write

- 1) -----
- 2) -----
- 3) -----
- 4) -----

iv) Gained skills to pass their primary level to enter secondary school.

- 1) -----
- 2) -----
- 3) -----
- 4) -----

b) In all the above learning tasks, learners to write four reasons that made them:

i) Enjoy

- 1) -----
- 2) -----
- 3) -----
- 4) -----



ii) Not enjoy

- 1) -----
- 2) -----
- 3) -----
- 4) -----

iii) Fearful

- 1) -----
- 2) -----
- 3) -----
- 4) -----

iv) Look forward to the activity

- 1) -----
- 2) -----
- 3) -----
- 4) -----

v) Not look forward to the activity/activities

- 1) -----
- 2) -----
- 3) -----
- 4) -----

vii) Made them feel anxious

- 1) -----
- 2) -----
- 3) -----
- 4) -----

### Task two

- a) Collect the duly completed questionnaires from the different groups
- b) Analyse the data showing the different ways/approaches in which the students experienced learning.
- c) Analyse the data showing how they felt/experienced learning in each of method.

### Task three

- a) In your discussion group (student teachers') discuss the results of your data in relation to:
  - i) Non-associative, sensitization, associative, observational and play learning types.
  - ii) In-formal, formal, non-formal and a combination of the above learning.
  - iii) The learning conditions that the learner experienced as enabling and made them want to learn.

### Formative evaluation: One

- a) Write a 400-500 word essay detailing different ways/approaches in which students learn and the conditions that optimized learning.
- b) Present your essay to the head of school to be presented and discussed during an induction course for teachers or during a staff meeting.

### Formative evaluation: 1

#### **Answer key**

- Teachers can use informal learning: these are situations encountered through day-to-day experiences i.e. learning from life.
- Teachers can also use non-formal learning, this is organised formal learning outside the formal system, this includes clubs, youth groups, associations, etc.
- Rote learning: technique that avoids understanding the inner complexities and inferences of the subject that is being learned and instead focuses on memorizing the material so that it can be recalled by learner exactly the same way it was read or heard. Language learning by re- petition is based on the idea that one will be able to recall quickly the meaning of the concept the more it is repeated.

- Observational learning and play learning .These are also known as social learning theory, this occurs when an observer's behaviour changes after viewing the behaviour of a model.
- Sensitization is an example of non-associative learning in which the progressive amplification of a response follows repeated administration of a stimulus.

b) Learning can be optimised by:

- Making learning an enjoyable experience to the students
- Make classroom environment pleasant both physically and socially
- Make classroom visually stimulating, well-kept and organised
- Teach the whole child

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# Learning Activity 2: Theories of learning

## Summary of the learning Activity

### Unit 2: Theories

By the end of this unit you should be able to:

- a) Highlight the major concerns and principles as postulated by different learning psychology theories i.e. behaviourism, cognitive, humanistic and social learning theories.
- b) Use the principles postulated by the major learning psychology theories to positively impact on the learning process.

## Summary

### Behaviourism

This is also called the learning perspective and is based on the proposition that all things which organisms do—including acting, thinking and feeling—can and should be regarded as behaviours. Behaviourism comprises the position that all theories should have observational correlates. It is also known as associative learning.

Its main influences were Ivan Pavlov who investigated classical conditioning and B.F. Skinner who conducted research in operant conditioning. Classical conditioning occurs when a natural reflex responds to a stimulus. Essentially animals and people are biologically wired so that a certain stimulus will produce a specific response.

Operant conditioning occurs when a response to a stimulus is reinforced. This is a simple feedback system, if a reward or reinforcement follows a response it becomes more probable in the future.

### Learning objective

Learning teaching models can specify the contents of the programs expected behaviors of the learner. Thus students can achieve in group work a summary sheet highlighting each model the authors and their work. They present in plenary debates as the list of concepts they deem relevant, specify the reasons for their choice in connection with the academic community.

### Shortcomings:

1. Does not account for all kinds of learning since it disregards the activities of the mind.
2. Does not explain cognition of new language patterns by young children for which there is no reinforcement mechanism.
3. Animals adapt their reinforcement pattern to new information.

### **Learning Tips**

How behaviourism impacts learning

1. Simple to understand because it relies on observable behaviour and describes several universal laws of behaviour.
2. Its positive and negative reinforcement techniques can be very effective in treatment of human disorders e.g. anti-social behaviour
3. Useful in that, teachers can use reward and punishment of students' behaviour in order to suppress or encourage it.

### **Cognitive Learning**

This examines internal mental process such as problems solving, memory and language .Cognitive psychology interests itself in how people understand, diagnose, and solve problems concerning themselves with mental processes which mediate between stimulus response. Wolfgang Kohler showed that a protracted process of trial and error maybe replaced by sudden understanding that grasps the interrelationships of a problem. This process is called insight and is more akin to piecing together a puzzle than responding to a stimulus.

Edward Tolman found that (1930) unrewarded rats learned the lay out of a maze, yet this was not apparent until they were later rewarded with food. Tolman called this latent learning. Its dominant paradigm has been the information processing model.

### **Learning Tips**

- Views learning as an internal process including insight.
- Information processing, memory and perception.
- Its locus of learning is internal mental structures.
- Its purpose in education is to develop capacity and skills.
- The educators' role is to structure content of learning activity.

### Humanistic theory

Humanistic movement in education is seen as the third force in psychology. It emphasizes the uniqueness and importance of the individual. It is also seen as a reaction against overly mechanistic and dehumanizing approaches.

Its Principles are:

- Current and future welfare of students
- Worth and rights of children
- Openness, honesty, selflessness, altruism

The challenge faced is to be a humanistic teacher in a traditional classroom.

Humanistic theorists concentrate upon the development of the child's self-concept. It involves knowledge of one's strengths and weaknesses and a belief in one's abilities to improve. Learning is seen not as an end in itself but as a means to progress towards the pinnacle of self-development which Maslow terms as self-actualization. The child is seen to learn because he/she is inwardly driven, and derives his/her reward from the sense of achievement that having learned something affords. Rewards here are seen as intrinsic i.e. are within oneself, rather like satisfaction of a need. In humanistic approach, education is really about creating a need within the child or instilling within the child self-motivation.

### Role of the teacher

- 1) Put much effort in developing the child's self-esteem
  - Education should be child centred, typified by the child taking responsibility for their education and owning their learning.
  - Both praise and blame are rejected by the humanists.
- 2) The humanist teacher is a facilitator, not a disseminator of knowledge.
  - Participatory and discovery methods would be favoured instead of traditional didacticism.
- 3) The humanistic teacher is concerned with the child's affective needs as well as the academic. Feelings and thinking are seen as interlinked.

### Instructional implications of humanistic theory:

- Seen as student centred teaching
- Emphasize on social-personal development
- De-emphasise rigorous, performance oriented test dominated approaches.  
-provide opportunity for success.
- Use discovery learning
- Respect student's feelings and aspirations and right to self-determination.

### Approaches to humanistic education

#### **Content:**

1. Content–curricula: teaching topics that are directly relevant to the students' lives (e.g. drug awareness)
2. Process–curricula: focus on the whole student and can include teaching assertiveness.
3. Humanistic school and group structures: restructuring the whole time-table and school environment in order to facilitate humanistic teaching or just individual classes.

#### **Practice:**

These include:

- Open classrooms-its goals are individual growth, critical thinking, self-reliance, co-operation, commitment to lifelong learning.
- Co-operative Learning: its goals; It combines cognitive and affective aspects of learning, as well emphasizing participatory and active engagement It also stresses academic achievement and clearly defined goals.

#### **Groups**

- Requires face to face interaction usually 4-6 students
- Relationship between group members are one of positive inter-dependence
- Assigns individuals responsibility for sharing, co-operating and learning
- Goals and rewards are contingent on the performance and contribution of all group members
- Interpersonal skills necessary e.g. taking turns, facilitating, collaborating etc.

### Types of groups used are:

- Circles of knowledge
- Students teams –Achievement Division
- Teams –Games –Tournaments
- Jig-saw
- Group investigation
- Reciprocal Teaching

### Advantages of co-operative learning

- 1) It requires no major restructuring of the school day.
- 2) Fosters co-operation among students of different abilities, ethnic backgrounds, ages, and sexes.

### **How much?**

Co-operative learning can be used in conjunction with traditional lessons for 60-90 minutes a day. Others recommend 70% of class time be used in this way, 20% to individualistic and 10% to competitive learning.

### **Disadvantages;**

Co-operative learning needs careful preparation of materials, worksheets, questions and resource materials etc.

### Evaluation

- 1) Better achievement at all grades and for all subjects, because group discussion and co-operation promote discovery.
- 2) Develop higher -quality cognitive strategies
- 3) Increases motivation, comprehension (by having each student teach), enrich learning by having students' of different abilities and experiences.
- 4) Promotes highly positive relationships among group members.
- 5) Some students waste time talking about irrelevant matters. Some members dominate while others are ignored.



### Reactions to humanistic education

- 1) Humanistic teachers' aim for good things, but these are not clearly defined and not easily measured.
- 2) Highly dependent on the capabilities of the teacher OVERALL
- 3) Open schools do not deliver academic performance, but non-graded schools (no age /grade, placement, /no report card) have positive effects on achievement.
- 4) Present structured curriculum in un-graded, no fail environment.
- 5) Criticism cannot be directed at learning styles –oriented schools and co-operative learning. Many schools use group methods which involve co-operative learning.

### **Social Learning**

This is learning that occurs within a social context. It considers that people learn from one another, including such concepts as observational learning, imitation, and modelling. Among others, Albert Bandura is considered the leading proponents of this theory.

### General principles of social learning theory:

- People can learn by observing the behaviours of others and the outcomes of those behaviours.
- Learning can occur without change in behaviour.
- Cognition helps in awareness and expectations of future reinforcement or punishment can have a major effect on the behaviours that people exhibit.
- Social learning is seen as a transition between behaviourist and cognitive learning theories.
- Environment reinforces and punishes modelling.
- The observer is reinforced by the model.
- Observer may be reinforced by a third person.
- The imitated behaviour itself leads to reinforcing consequences. Most behaviour that we learn from others produces satisfying or reinforcing results.
- Consequences of the models behaviour affect the models behaviour vicariously.

## Contemporary social learning perspective

- Reinforcement and punishment have indirect effect on social learning
- Cognitive factors in social learning; these are attention, reciprocal causation, modelling.
- Conditions necessary for effective modelling:
  - Attention
  - Retention
  - Motor reproduction
  - Motivation

## Effects of modelling on behaviour:

- Teaches new behaviour
- Influences the frequency of previously learned behaviour
- May encourage previously forbidden behaviour
- Self-efficacy.

## Educational implication of social learning theory

- Learners learn a great deal by observing other people
- Describing the consequences is/can effectively increase the appropriate behaviours and decreases inappropriate ones.
- Modelling provides an alternative to shaping for teaching new behaviour
- Teachers and parents must model appropriate behaviours and take care not to model inappropriate behaviours.
- Students must believe that they are capable of accomplishing school tasks.
- Teachers should expose students to a variety of other models
- Teachers help students set realistic expectations.
- Self-regulation techniques provide an effective method for improving student behaviour.

### **Note:**

- Informal learning: this is learning that takes place through day-to-day experiences and situations. It is also seen as learning from life by playing and exploring.
- Non-formal learning is organized learning outside the formal learning system e.g. clubs, youth organizations and societies.

## Key Words

**Insightful Learning:** This is part of cognitive learning; it shows that a protracted process of trial and error may be replaced by a sudden understanding that grasps the inter-relatedness of a problem.

This process, called insight is more akin to piecing together a puzzle than responding to a stimulus.

**Latent learning:** Akin to insightful Learning, but Edward Tolman (1930) called it latent learning. Tolman found that unrewarded rats learned the lay out of a maze, yet this was not apparent until they were later rewarded with food .It has been suggested that the rats developed cognitive maps of the maze that they were able to apply immediately when a reward was offered.

**Negative reinforcement:** This is a stimulus that tends to be unpleasant but which strengthens those responses that prompts its removal.

**Positive reinforcement:** Here stimulus tends to pleasant and strengthens those responses that tend to strengthen it.

**Self-actualisation;** move towards self-government, self-regulation and autonomy. Moves from external forces control.

Also seen as a need to develop in the direction of healthy, competent and creative functioning.

**Humanism**-Literature, philosophy–historically concerned with human worth, individuality, humanity, freedom for the individual to personal actions. Development of human potential is highly valued, attainment of material gains de-emphasised.

## List of relevant readings

- <http://infed.org/mobi/learning-theory-models-product-and-process/> Retrieved 25/03/2016

This article focuses on learning amongst educational policymakers and practitioners. The author talks about theory of learning in professional education programmes for teachers.

### Introduction

As we have learnt, theories give you a frame of reference on which to base your practice. Education can be defined as organized learning .As such, it is important that the fundamentals of how learning can be imparted most constructively be clarified and understood for you to be effective and for students to gain from your knowledge. This can only be done if you are aware of your practices, their implication and effect on learners'. It is imperative that you complete the following tasks as thoroughly as you can, for it will form the basis of your theoretical framework and consequently influence your classroom practices.

### Task one

A) In your discussion group (as this is a group activity have one member act as a moderator and another member as the secretary to record contributions from colleagues .Members contributing should endeavour to support their points with concrete examples. The group to have equal gender representation)

- i) Discuss the strengths and the weaknesses of each of the learning theories highlighted above.
- ii) Discuss the implication of the theories to the learning process.
- iii) Discuss how reinforcement, extrinsic and intrinsic motivation can be used to enhance learning.
- iv) Discuss different ways in which retention of learned material can be enhanced.

### Task Two

- A. Make a lesson plan in any of your teaching subjects and integrate appropriately the different learning theories to effectively enhance the learning process
- B. Invite a trained teacher colleague with not less than five years teaching experience to sit in during your lesson. Get feedback from him/her in terms of;
  - i) Effective and appropriate application of various theories to optimize the learning process
  - ii) Lesson being learner-centred
  - iii) Creating a stimulating environment.
  - iv) Effective use of reinforcement, intrinsic motivation and techniques that encourage retention of learned material.

### Formative assessment -unit two

From your feedback, write a five hundred to six hundred word essay (500-600) detailing how practices and concepts stipulated in the learning theories can be integrated in the learning process. Briefly discuss how this learning process can be enhanced through use of:

- a) Reinforcement
- b) Intrinsic motivation and
- c) Memory retention techniques.

Submit this report to the head teacher to be circulated to the teaching staff or to be read during an exam analysis meeting.

### Formative Evaluation: answer key

a) Reinforcement is derived from behavioural theory in the operant conditioning theory and it depends on extrinsic motivation. This states that classroom responses are voluntary in nature.

- Teachers to use positive reinforcers, these can either be concrete or abstract. Concrete reinforcers include; pens, pencils, stars etc.
- Abstract reinforcers include, smiles, Verbal will include –praise and gesture will include clapping hands etc. teacher can also use prestige, esteem and affiliate needs and satisfy them as a motivator.
- Use reinforcers that are trans-situational.
- Negative reinforcers will include use of detention. Use non-anxiety arousing remarks
- The aversive stimuli should be those already present in the learner rather than those imposed on him/her by the teacher.
- Termination should be contingent on the learner producing the desired behaviour.

b) Intrinsic motivation. This is based on the humanistic school of thought.

- Humanism is about rewarding oneself
- Child be inwardly driven
- Create a need within the child or instilling with the child self-motivation
- Concentrate on the development of the child's self-concept and self-esteem
- Child to feel good about her/himself that they can set and achieve appropriate goals (high self-efficacy)
- Rewards from within oneself and is derived from a sense of achievement that having learned something affords.
- The child takes responsibility for their education
- Use participatory and discovery methods
- Address the child's emotional needs.
- Put importance on the self and the individuality of every child

c) Memory retention techniques

Information begins with sense receptors and transmitted to the sensory receptors and on to the short term memory (this is seen as the working memory and on to the long term memory) .Memory is connected to remembering and forgetting which is the loss and retaining what is learned.

A teacher can enhance memory by:

- Recitations
- Rehearsing
- Present well organised material
- Us whole or part –learning appropriately
- Use serial presentations
- Pre-view and review the lesson
- Use cues
- Spacing of practice
- Involve learners –use groups and cooperative learning.

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# Learning activity 3: Class management and practice:

## Catering for individual needs, teacher's role

By the end of this unit you should be able to:

- a. State and discuss management style that is learner centred
- b. Identify, discuss and illustrate how you will practice your role(s)/functions as a teacher effectively.
- c. Demonstrate creativity, innovation and flexibility in teaching and learning
- d. Identify individual differences and design effective learning strategies

### Summary

The success of the interaction between you as the teacher and your students will result in effective teaching, effective use of time, and minimum disruption of learning time, effective handling of discipline problem in classroom and facilitates better handling of behaviour problems.

As early as 1916 when John Dewey ([http://en.wikipedia.org/wiki/John\\_Dewey](http://en.wikipedia.org/wiki/John_Dewey)) published his seminal work "Democracy and Education" it was acknowledged that learners should become active participants in educational process. The theory of constructivism in learning is to believe that knowledge is not provided from teacher to student where it remains unaltered, but that learning is an active process of creating and developing knowledge where emphasis is placed on the learning activities. This has been seen as a way of creating democratic classrooms.

In a world where knowledge and information are abundant and so easily accessible, the roles of teachers and learners are transformed and blended. The teacher no longer is the imparter of knowledge and the student a passive recipient. Both become part of a collaborative learning community.

Teachers must learn to use technology to enrich their teaching; they must also learn how to teach students to use it responsibly and mindfully. The forces of globalism, multiculturalism and technological change mandate that teachers extend the boundaries of their learning beyond the strictures of their discipline and the walls of their classroom and institutions to encompass the larger world that they must prepare the student to enter.



### Learning activity 3: Class management and practice:

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In individual differences, we shall confine our discussion to those individual differences that are likely to be important in determining learning ability in the classroom. It is expected that with knowledge of individual differences you will be better prepared to appreciate the need for, individualised instructions in your teaching career. You should be able to identify the major determinants of differences in learning ability in the classroom, recognise characteristics of deviate children and know the classroom teaching problems created by individual differences.

You will also be expected to use behaviour management techniques that teach and encourage academic and social behaviours that are appropriate for classroom learning.

Your role as a teacher then, will be to create a safe learning environment for all, encourage learning by eliminating distractions, teach students to be respectful to each other and to the staff and manage learning time efficiently.

Behaviour management will create a positive environment where students get along with the teachers and other students. This will encourage group activities, cooperative projects, peer tutoring and one-to one tutoring with the teachers. If students discover they will be involved in positive experiences, then cooperation is more likely. Your role as a teacher then, will include demonstrating, explaining, modelling and reinforcing appropriate behaviour and skills.

To accomplish the above, you can use proximity control, show interest in the students' work and use praise appropriately. Non-verbal social approval increases positive behaviours as well as the use of rules and instructions.

### Learning objective

The management style that is learner centred has the advantage to show how students will practice their role(s)/functions in teaching effectively. The can now identify individual differences and design effective learning strategies observing classroom practice

#### Key Words

##### Discipline:

1. Branch of knowledge or learning
2. Training that develops self-control, character or orderliness
3. Self-control or orderly conduct
4. A system of rules
5. Treatment that corrects (websites new world ricers)

**Constructivism:** Theory suggests that learning is accomplished best using hands- on approach, and students learn by experimentations, and not by reproducing the expected outcome. It emphasis that learning is not an “all or nothing” process but that students learn information presented to them by building upon knowledge that they already possess.

**Democratic –classroom;** these are classrooms where students are able to be themselves and have a right to express themselves through their behaviour and opinions. Students need to know these rights are denied or moderated when they excise individual rights that interfere with welfare needs of others.

**Individual Differences:** These are seen in terms of biological details, where no two people are created equal. The two major determinants of individual differences in humans are the environment and inheritance (heredity).

### List of Relevant Reading

1. [https://en.wikipedia.org/wiki/Teacher\\_in\\_role](https://en.wikipedia.org/wiki/Teacher_in_role) Retrieved 25/03/2016

The website details the role of a teacher in teaching. The author indicates that the teacher in role is a method of teaching that utilizes techniques of drama to facilitate education. It is a holistic teaching method designed to integrate critical thought, examination of emotion and moral values and factual data to broaden the learning experience and make it more relevant to everyday life situations.

### Introduction

This is the 3rd and final unit in this module. If you remember in unit 1, we looked at definition of learning psychology, types, approaches and styles of learning. In unit two, theories of learning were introduced to you; mainly cognitive, humanistic, behavioural and social learning theories.

### Learning activity 3: Class management and practice:

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In this 3rd and final unit, we will discuss practice, behaviour management, role of the teacher and individual differences. This unit is meant to help you apply what you learnt in unit 1&2 into classroom practice. As you embark on your teaching career, endeavour to be the teacher you would have liked to have and the one you would like to teach your own children. Always remember, every child is an individual and deserves to be treated with respect, worth and dignity. May you be an instrument to positively change lives and facilitate your students to actualize their full potential. Good luck.

#### STEP 1

In your form 2 and form 3 classes select two groups of 10 students each .If you are in a mixed school, ensure gender parity. Let each group choose a group leader to coordinate the discussion and a secretary to write down their discussion.

- a) Students to discuss and write down five roles of their teachers that they consider very important.

- 1) -----
- 2) -----
- 3) -----
- 4) -----
- 5) -----

- b) Discuss and write down five characteristics that they admire most in the teacher of their favourite subject.

- 1) -----
- 2) -----
- 3) -----
- 4) -----
- 5) -----

#### STEP 2

- a) Interview four trained teachers, two males and two females who have been in the teaching profession for a minimum of five years .Find out:

- Their class management style (s)
- How they handle discipline cases). Their challenges in incorporating ICT in their classrooms.

In reference to the results of your data collected from the students and that received from the teachers interviewed;

Write a 400 word essay agreeing or disagreeing with the teachers' class management style(s) and explain the methods you would use to make your class management/practice learner centred, paying attention to your learners' cultural orientation, feedback from their data and the resources available to you.

### **STEP 3**

Conduct a research in your area by visiting five schools, (either secondary or primary) and find out;

- a) How many use ICT and are linked to internet?
- b) How do they cater for individual differences?

### **Formative evaluation:**

Write a 500 word letter to your member of parliament/representative in government appealing for Information and Communication Technology (ICT) connectivity in your area. Outline how it would be beneficial to the area in terms of accessing new information in;

- a) Core academic area,
- b) Class management styles
- c) Preparing your learners to enter the larger world of globalization responsibly and mindfully

## Formative Assessments

### **Answers Key**

Comment: This formative evaluation is primarily to assess the teacher trainee's synthesis of ideas.

To gauge their creativity and opinion as appertains to embracing technology and innovative ways in management styles in the classroom.

## Expected Answers

Expose teachers and learners to a world where information is easily accessible

- If one is not connected to the ICT, their information may be absolute for in today's world, knowledge is changing very fast
- Assist learners share ideas with other who come from a culturally /geo- graphically different world
- Be able to evaluate different opinions and ideas.

## Management style

- Expose both learners and teachers to 'Democratic classrooms' practice where both the roles of the teachers and the learners have changed
- Expose both learners and teachers to use of democratic management where educators reinforce responsible thinking in students. The learners are trained to use the concept of 'time, place and manner' as organizers and as an intrinsic rationale for determining for themselves what it means to be responsible.
- Expand the classroom beyond the four walls.
- Prepare learners for a globalized world in order to be relevant.
- Learners should be exposed to the globalized world by teachers who would be able to guide them on responsible and beneficial use.

## **XI.Compiled List of All Key Concepts (Glossary)**

### **Learning**

Learning is a relatively permanent change in behaviour potentially which occurs as a result of reinforced practice. Learning takes place within the organism and is inferred from change in the organism's behaviour. The definition also stresses that learning takes place as a result of experience or practice. Learning is also seen to cover those behaviours changes that are of a relatively permanent nature. Lastly, reinforced practice is seen as a necessary condition for learning.

### **Motor chaining**

This are behaviours that involve sequences of movements that have to be performed together in order to execute a given skill. These in early grade include writing letters or figures, throwing ball etc. Conditions that promote this are sequencing of links, contiguity of links, practice, reinforcement, intrinsic feedback and extrinsic feedback.

### **Verbal chaining**

This is the formation of verbal associations. Characteristics of verbal chaining are meaningfulness and familiarity and also mediation and coding provision of learning instructions, proper sequencing of verbal links, practice, reinforcement and forgetting factor.

### **Performance**

Performance refers to any external manifestation behaviour; this therefore should be empirical and observable

### **Reinforcement**

This is the procedure or stimulus which will increase the probability of occurrence of a response which it accompanies, such as a reward for good behaviours.

### **Transfer of learning**

This is the ability of the learner to utilise or apply the acquired knowledge or skill in solving problems in similar or related situations at some future date. Types of transfer are Positive transfer, Negative transfer, Zero transfer, Vertical transfer and Horizontal transfer.

### **Associative learning**

These are classical and operant conditioning. Operant conditioning is the use of consequences to modify the occurrence and form of behaviour. Classical conditioning involves repeated pairing of unconditional stimulus with a previously neutral stimulus. Following conditioning the response occurs both to the unconditioned and to the other unrelated stimulus.

### **Informal learning**

These are situations encountered through day-to-day experiences. Learning from life e.g. play and exploring.

### **Non-formal learning**

This is organized learning outside the formal system e.g. in clubs, youth groups

### **Insightful Learning**

This is part of cognitive learning; it shows that a protracted process of trial and error may be replaced by a sudden understanding that grasps the inter-relatedness of a problem.

This process, called insight is more akin to piecing together a puzzle than responding to a stimulus.

### **Latent learning**

Akin to insightful learning, but Edward Tolman (1930) called it latent learning. Tolman found that unrewarded rats learned the lay out of a maze, yet this was not apparent until they were later rewarded with food .It has been suggested that the rats developed cognitive maps of the maze that they were able to apply immediately when a reward was offered.

### **Negative reinforcement**

This is a stimulus that tends to be unpleasant but which strengthens those responses that prompts its removal.

### **Positive reinforcement**

Here stimulus tends to pleasant and strengthens those responses that tend to strengthen it.

### **Self-actualisation**

Move towards self- government, self-regulation and autonomy. Moves from external forces control.

Also seen as a need to develop in the direction of healthy, competent and creative functioning.

### **Humanism**

Literature, philosophy –historically concerned with human worth, individuality, humanity, freedom for the individual to personal actions. Development of human potential is highly valued, attainment of material gains de-emphasised.

### **Exceptional child**

This is the child who deviates from average of normal child e.g. in terms of mental characteristics, sensory characteristic or social behaviour.

### **Discipline**

Discipline is seen as training that develops self-control, character and orderliness. Discipline should be self-directed and resulting in self-control and orderly conduct. Discipline is also seen as any aversive stimuli used to suppress undesired behaviour.

### **Constructivism**

Theory suggests that learning is accomplished best using hands- on approach, and students learn by experimentations, and not by reproducing the expected outcome. It emphasis that learning is not an “all or nothing” process but that students learn information presented to them by building upon knowledge that they already possess.

### **Democratic-classroom**

Mean that students are able to be themselves and have a right to express them- selves through their behaviour and opinions. Students need to know these rights are denied or moderated when they excise individual rights that interfere with welfare needs of others.

### **Individual differences**

These are seen in terms of biological details, where no two people are created equal. The two major determinants of individual differences in humans are the environment and inheritance (heredity).

## XII. Compiled List of Compulsory Readings

### Reading 1

**Complete reference:**

[https://en.wikipedia.org/wiki/Educational\\_psychology](https://en.wikipedia.org/wiki/Educational_psychology) Retrieved 25/03/2016

**Abstract:** (Summary): This reading gives an overview of the major areas in learning/ educational psychology. It highlights the concepts of social, moral and cognitive development. Motivation and its relevance to learning is also briefly covered. The reading briefly touches on application of the concepts in instructional design. Finally, it gives an overview of the classroom application of these concepts in the learning process.

**Rationale:** This reading is meant to introduce the learner to the background knowledge of learning psychology. The different concepts which are briefly discussed prepare the students to not only be able to define the different concepts but to also be aware of the different areas to be covered.

### Reading 2

**Complete reference:**

<https://en.wikipedia.org/wiki/Learning> Retrieved 25/03/2016

**Abstract Summary:** This reading describes learning as the act of acquiring new, or modifying and reinforcing, existing knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information. The ability to learn is possessed by humans, animals, plants and some machines. Progress over time tends to follow a learning curve. It does not happen all at once, but builds upon and is shaped by previous knowledge. To that end, learning may be viewed as a process, rather than a collection of factual and procedural knowledge. Learning produces changes in the organism and the changes produced are relatively permanent

## XIII. Compiled List of (Optional) Multimedia Resources

### Resource 1

**Complete reference:**

[http://www.youtube.com/watch?v=AU5aM2X\\_Fi4](http://www.youtube.com/watch?v=AU5aM2X_Fi4) Retrieved 3/04/2016

**Abstract:** The video file visually demonstrates effective class management practice, cooperation, democratic and learner's initiative and imagination is encouraged and fostered. Use of group work and the teacher taking time out to be with the learner in a cooperative engagement is illustrated. Finally, the need of the teacher to be a role model is significantly and ably illustrated.



### Learning activity 3: Class management and practice:

**Rationale:** Use of multiple sense organs in teaching is important at all levels. The video file not only creates interest and variety, but more importantly gives a real life situation that you as a teacher trainee are able to identify with. It brings to bear the similarities of learners from diverse backgrounds and the universal need for effective and learner centred classroom management practices.

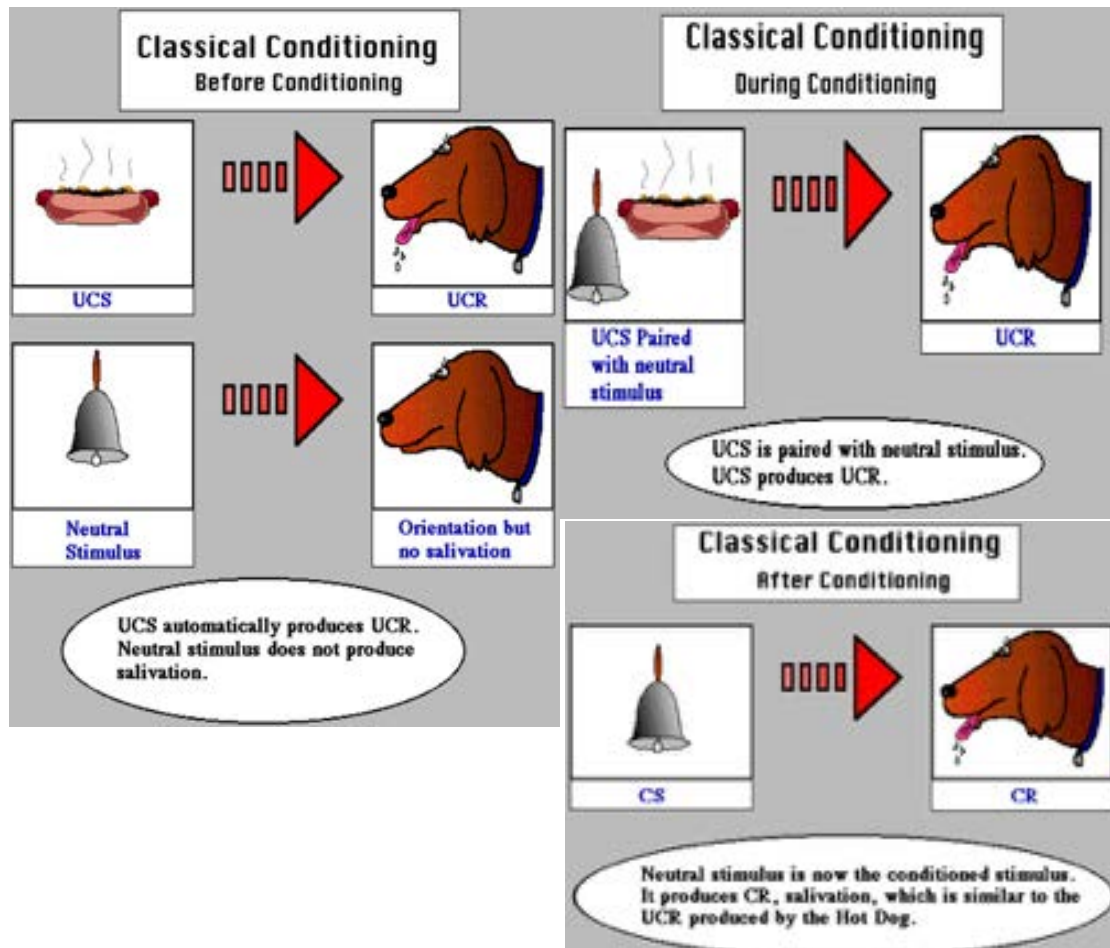
#### Resource 2

##### Complete reference:

<https://www.youtube.com/watch?v=lgGiY0BJzLc> Retrieved 3/04/2016

**Abstract:** There are two links in this resource; the video link gives background information on Ivan Pavlov. The link explains how classical conditioning was first carried out and the subsequent educational implications of conditioning. The second link visually shows this experiment. The pairing of neutral stimuli with conditioned stimuli. It shows how after repeated pairing, the neutral stimuli elicits a conditioned response i.e. the dog salivates when the neutral stimuli; the bell, is presented without the conditioned stimuli; the meat.

**Rationale:** The two resources serve to complement each other. Visual and audio senses, when used together create a more permanent impression and are not easily forgotten. These two links are aimed at simplifying the conditioning concept to make it easier for you, as the teacher, to transfer this concept into effective classroom practices of reinforcement and motivation.



## XIV. Compiled list of Useful Links

### Useful Link 1

**Title: Behaviourism**

URL: <http://en.wikipedia.org/wiki/Behaviorism> retrieved 04/04/2016

Screen capture:



**Description:** This introduces behaviourism as a learning theory .It looks at the technology of teaching and verbal behaviour and gives a critique of the behaviourist school of thought especially in its use of reinforcement and punishment. It also gives case studies though based on work place experiences.

**Rationale:** The rationale here, is again to allow the student teacher to have a historical perspective of how the learning theories have evolved. Nevertheless, this theory has some aspects that are useful to the learning process. It is these aspects that it is hoped the student teacher will be able to judiciously incorporate in his/her teaching practice.

## Useful Link 2

### Title: Cognitive Psychology

URL: [http://en.wikipedia.org/wiki/Cognitive\\_psychology](http://en.wikipedia.org/wiki/Cognitive_psychology) retrieved 04/04/2016

Screen capture:



**Description:** This article gives a good introduction into the cognitive school of thought .It defines what cognitive psychology is and gives a background on the major proponents of this theory. It outlines its major differences from behaviourism as; - It accepts the use of scientific methods, and generally rejects introspection. It also explicitly acknowledges the existence of internal mental states (such as belief, desire and motivation).

**Rationale:** It is important for you as a teacher to have a solid theoretical framework on which to base your practice. The above article introduces you to the cognitive school of thought .This concentration on mental ability serves to sensitise you to the very crucial question, whether learners are comprised of just their mental abilities or whether there other aspects one should not ignore in order to be an effective teacher .

### Useful Link 3

**Title: Postmodernism**

URL: <http://en.wikipedia.org/wiki/Postmodernism> retrieved 04/04/2016

Screen capture:



**Description:** This article looks at post-modernism in the context of adult learners'. It approaches learning in two fundamental ways: one, that rationality and logic are not important to attain knowledge.

Two: that knowledge can be contradictory. Its new thinking is understood within the context of interrelatedness. This is an understanding that things are much more diverse, fluid, illusionary, contested, including the reality of the world itself.

**Rationale:** This again is a very interesting article. The post-modern theory is founded upon the assertion that there is no one kind of a learner. This article is important then, in sensitising you the student teacher with the diverse ways in which people learn. It is interesting to note that there is not one goal for learning, and not one way in which learning takes place or even one particular environment where learning occurs .This then, metaphorically opens the doors of the classroom extending the boundaries of the learning process.



## Useful Link 5

### Title: Humanistic approaches to teaching

URL: <http://homepage.ntlworld.com/gary.sturt/human.htm> retrieved 04/04/2016

Screen capture:



**Description:** This looks at the humanistic approach from an educational perspective. It emphasises the development of the child's self-concept. Learning is seen not as an end to itself but as a means to progress towards the pinnacle of self-development. With the humanistic approach, education is really about creating a need within the child. The humanistic teacher is seen as a facilitator not as a disseminator of knowledge.

**Rationale:** The aim of this article is to sensitise you the student teacher on the importance of each individual student. Emphasis should not be on the similarities between the learners but on their individuality. It is also important that effort be put in developing the child's social-personal development as well as respect students feelings and aspirations-their right to self-determination is emphasised.

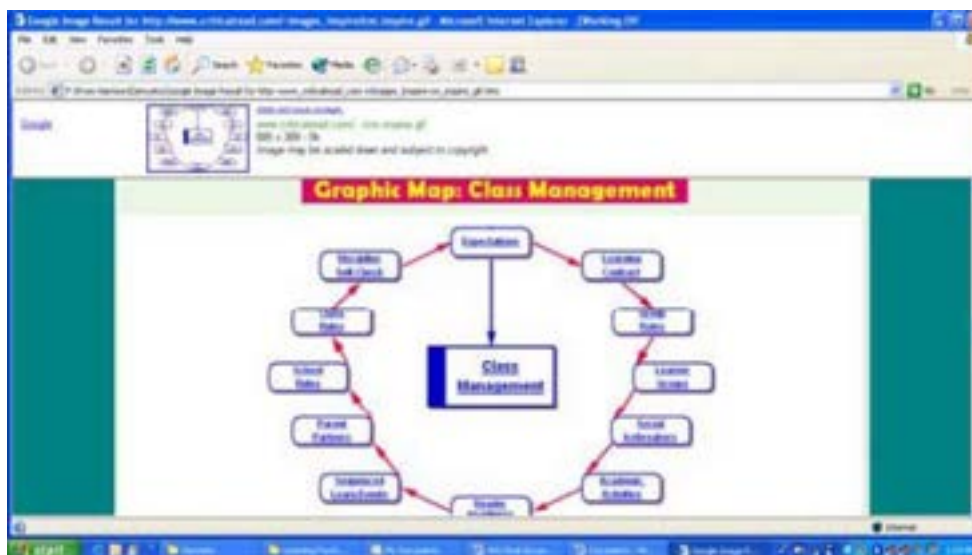


## Useful Link 6

### Title: Classroom Management

URL: <http://www.criticalread.com/index.html>

Screen capture:



**Description:** The above diagram illustrates a learner centred class management style and the various actors and activities that when linked together positively, enhance the learning process. There are group roles, parent partner, school rules, discipline, self-check and expectations among the many roles and activities that are carried on in classroom management.

**Rationale:** The aim of the diagram is to graphically bring out the linkages in all the roles and activities that enhance classroom learning. These roles and activities are not disjointed or applied on their own. The sum total of the linkages is as important as each individual link; each contributes to making the whole. That is how the classroom experience should be. The role of the teacher then, becomes that of a facilitator in education.

## XV. Synthesis of the Module

This module's general aim is to broaden the teachers understanding of the definitions, principles and key concepts of learning. The student teacher should be able to integrate different learning types, both associative and non-associative in the teaching /learning process. You are expected to be cognisant of different approaches that can be combined to enhance classroom learning e.g. rote –learning, formal and non-formal methods.

This module also aims at enabling you cognisant of different learning styles so as to cater for both the concrete and abstract perceivers and the active and reflective processors.

In theories, you should be able to highlight the major concerns and principles as postulated by different learning psychology theories, e.g. behaviourist, cognitive

humanistic and social learning theories .These theories form a frame of reference on which to base you practice and class management style(s).As a result of the above ,you are expected to demonstrate learner centred class management style and appropriately integrate different types of group learning to cater for both the affective and academic needs of your students. To fulfil the above, you are expected to be aware of your changing role and that of your learners.

Finally, you should be able to demonstrate ability to cater for the individual needs of your learners' .To accomplish the above; you are expected to model the practices that you teach.

## **XVI. Summative Evaluation**

This summative evaluation will account for 60% of your examination marks. It will be submitted via E-mail.

### **Instructions**

This summative evaluation has five (5) questions. Question one (1) is compulsory. Answer any other three (3) questions. Each question will constitute fifteen (15) marks.

#### **Unit one**

- 1) Define and explain the following principles.
  - a. Learning
  - b. Observational learning
- 2) Differentiate between informal learning and non-formal leaning.
- 3) Briefly, in about 150 words discuss how you can use non-associative, observational and play learning styles to enhance learning in your classroom.
- 4) In about 75 words, differentiate between concrete and abstract perceivers and active and reflective processors.

#### **Unit Two**

- 1) What are the advantages and disadvantages of behaviourism?
  - d) Discuss the major principles of cognitive learning.
  - e) Discuss the major principles of humanistic education.



### Learning activity 3: Class management and practice:

2) Discuss how the following types of learning can be used:

- i) Co-operative learning
- ii) Student teams- Achievement division.
- iii) Group Investigation
- iv) Reciprocal teaching

3) Outline the general principles of social learning

#### **Unit three**

- 1) Discuss ways in which ICT technology can be used to enhance classroom learning.
- 2) Discuss the roles of a teacher.
- 3) Tools that a teacher can use to enhance class control.
- 4) Illustrate ways that a teacher can use to minimise individual differences
- 5) Discuss management styles that would create democratic classrooms.

## SUMMATIVE EVALUATION: ANSWER KEY

### **Unit one**

Learning: although the term learning has many possible meanings, as used by teachers, it emphasises its relationship to curriculum, to teaching, and to the issues of sequencing, readiness and transfer. It is also seen as the acquisition and development of memories and behaviours, including skills, knowledge, and understanding, values and wisdom. It is a product of experience and the goal to education. It takes place within the organism and is inferred in the change of the organism behaviour.

b) Learning can be optimised by;

- Making it a positive experience to the students
- Make classroom environment pleasant both physically and socially
- Make classroom visually stimulating, well-kept and organised –inquire and show concern about the students well being
- Avoid unannounced quizzes
- Give adequate for discussion with the teacher and other students.
- Teach the whole child.
- Use different teaching styles to help learners learn.

c) In-formal learning situations are situations encountered through day to day experiences.

- Non-formal learning is organised learning that takes place outside the formal system e.g. clubs etc.
- Non-associative learning comprises sensitization: this is learning in which progressive amplification of a response follows repeated administration of a stimulus .It is thought to underlie both adaptive as well as maladaptive learning process in the organism .Habituation is an example of simple non-associative learning.

b) Observational learning and play learning.

This is also known as social learning theory, this occurs when an observer 's behaviour changes after viewing the behaviour of a model .An observers behaviour can be affected by the positive or negative consequences–called vicarious reinforcement or punishment .

c) Associative learning: these are classical and operant conditioning .Operant conditioning is the use of consequences to modify the occurrence and form of behaviour. Classical conditioning involves repeated pairing of unconditioned stimulus with a previously neutral stimulus .Following conditioning the responses occurs to both the other unrelated stimulus.

Concrete perceivers absorb information through direct experience, by doing, acting, sensing and feeling.

- Abstract perceivers; however take in information through analysis, observation and thinking.
- Active and reflective processors make sense of an experience by immediately using the new information. Reflective processors make sense of an experience by reflecting on and thinking about it.
- Emphasise intuition, feeling ad sensing and imagination in addition to the traditional skills of analysis, reason and sequential problems.
- Focus on 'whole brain'
- Use various styles, reflection, conceptualization and experimentation.

### Unit two

a) Advantages of behaviourism

- Does not account for all kinds of learning since it disregard s the activities of the mind.
- Does not explain acquisition of new language patterns by young children for which there is no reinforcement mechanism
- Animals adopt their new reinforcement patterns to new information.

#### b) Disadvantages of behaviourism

- Simple to understand because it relies on observable behaviour and describes several universal laws of behaviour.
- It positive and negative reinforcement techniques can be very effective in treatment of human disorders e.g. anti-social behaviour.
- Useful in that the teacher can use rewards and punishment of students in order to suppress or encourage it.

#### c) Major principles of cognitive learning:

- Views learning as an internal process including insight, information processing, memory and perception.
- Its locus of learning is internal mental structures
- Its propose I education is to develop capacity and skills to learn.
- Educator is to structure content of the learning activity. Cognitive learning theory has however been criticized for;
- Reducing individual meaning to what they perceive as measurement stripped of all significant
- It is also seen as having ignored contextualise
- Methods cannot be used on which is irreducible to component parts
- Understanding requires semantics therefore (hence cognise) cannot explain under standing

#### d) Principles of humanistic education:

- Focus on current and future welfare of students
- Focus on worth and rights of children
- Based on openness, honesty, selflessness and altruism

#### Common emphasise

- Affect-emphasise on feelings and thinking
- Self-concept –positive self-concept important
- Communication be positive and honest
- Personal values –importance of personal values and facilitate their development
- Students must know themselves, have a sense of self identity and actualise themselves.

d) Role of teacher:

- Develop Childs self-esteem
- Facilitate students taking responsibility for their education and owning their learning.
- Be a facilitator not disseminator f knowledge
- Encourage participatory and discovery methods
- Be concerned about the student's affective (emotional) needs.
- Emphasise on individuality and not on the similarities of humans.

Instructional implications:

- Practice student-centred teaching
- Emphasise social personal development
- De-emphasise rigorous performance –oriented test dominated approaches
- Provide opportunity success to the students
- Emphasise discovery learning
- Respect students' feelings and aspirations

2) (i) Co-operative learning

- Combines both cognitive and affective aspects of learning as well as emphasising participatory and active engagement.
- It also stresses academic achievement and clearly defined curricula goals.
- Decreases dependence on the teacher
- Decreases divisiveness
- Improves academic performance
- Eradicates feelings of alienation, isolation, purposelessness and social unease amongst students
- Promotes positive feeling towards school

ii) Students teams-achievement division

- Each group has high and low ability students, different ethnic backgrounds and gender.
- New material presented in class in traditional manner.
- Groups given material to study and worksheets to complete
- Encouraged to help each other. At the end of that week's material, students answer quizzes individually.

### Learning activity 3: Class management and practice:

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- Team's scores are calculated.
- Teams that improve the most are given the most recognition.
- Students select topics-then divided into sub-topics, based on students.
- Each group formulates a plan and assigns responsibilities. Members can work individually or with others. At the end groups members meet and share information to the rest of class.
- each other helps with academic.

#### 3) Principles of social learning

- People can learn by observing the behaviour of others and the outcome of those behaviours
- Learning can occur without change of behaviour.
- Environment reinforces and punishes modelling
- The observer is reinforced by the model
- Consequences of the models behaviour affect the models behaviour vicariously

#### i) Educational implications

- Learners can learn a lot deal by observing other describing the consequences can/is effectively increase the appropriate behaviours and decrease inappropriate ones
- Modelling provides an alternative to shaping for teaching new behaviour
- Teachers and parents must model appropriate behaviours and take care not to model inappropriate ones.
- Students must believe that they are capable of accomplish given school tasks – teachers should expose student to a variety of other models.
- Teachers help student t set realistic goals.

### Unit three

#### 1) Expose both learners and teachers to democratic classroom

- Appreciate the role change between both teachers and learners
- Reinforces responsible thinking by students
- Use the concept of 'time, place and manner' as organisers and as intrinsic rational for determining for themselves what it means to be responsible
- Expand the classroom beyond the halls of the classroom
- Prepare the learner to enter a globalised world responsibly.

### 2) Teacher's role

- Create safe environment
- Encourage learning by eliminating disturbances
- Teach students to be respectful to each other and to the staff
- Manage time efficiently
- Demonstrating, explaining, modelling, and reinforcing appropriate behaviour and skills.
- Tools to use
- Proximity control
- How interest in the students' work
- Use praise appropriately
- Use non-verbal social approval

### 3) Minimising individual differences:

- Use promotional policies
- Use ability grouping
- Use intra-class grouping
- Admission criteria
- Create special schools
- Offer remedial units
- Learner to experience some success every day

### 4) Management styles

- Allow for individual expression
- Use grouping
- Assess readiness factor of the students
- Create democratic classrooms
- Allow learners to use their initiative and imagination

### Be willing to learn with and from the learners

- Encourage co-operative learning
- Let learners use their

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