

Tutors Assignment Correction Guide

Module 5 Educational Theory and Practice

Unit 5.3 Learning Theories

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This Guide is to assist you in the correction of the assignments for this unit.

If more than one Tutor is involved with Student Support in your institution, it will also assist in ensuring that there is a consistency in the weighting of assignments, and questions within assignments.

The Core Curriculum is designed to be offered utilising competency standards, so the elements that need to be included in answers are specified in the guide. It will therefore assist those who wish to use a competency assessment of Completed or Incomplete.

It is particularly important in the Caribbean to ensure that the assignments are assessed as indicated in the Guide, as Regional recognition is an ultimate (and desired) outcome.

Assessment Instrument

Module 5 Educational Theory and Practise

Unit 5.3 Learning Theories

Assignment 1

This assignment has been designed as a short answer type. It tests whether you have an understanding of the basic concepts and terminology of educational theory and the theories that you have studied to this point.

To obtain the required competence, you need to obtain at least 8 correct responses for question 1 and 13 correct responses for the remainder of the questions. Should you not achieve the level of competency required, you may resubmit the assignment without penalty.



Assignment Number 5.3 – 1

To be completed and returned to your tutor for assessment.

This is an Open Book assignment and you may refer to whatever references you have at your disposal.

To have attained the required competency you need to obtain at least 8 correct responses for Question 1 and 13 correct responses for the remainder of the questions.

Name: _____ Due date: _____

Question 1

Answer *true* or *false* to the following statements:

- 1.1. _____ Every change in a person's behaviour indicates that some learning has occurred.
- 1.2. _____ In Pavlov's theory of classical conditioning the unconditioned stimulus acts as a reinforcer.
- 1.3. _____ According to Skinner's theory of operant conditioning, a response which has been reinforced on a variable interval/variable ratio schedule is less resistant to extinction than a response which has been reinforced on a variable interval/fixed ration schedule.
- 1.4. _____ According to Pavlov's theory of classical conditioning, a conditioned stimulus produces exactly the same response as the response elicited by the unconditioned stimulus with which it was paired
- 1.5. _____ According to Skinner's theory of operant conditioning, a negative reinforcer diminishes the probability of a response when it is added to a situation.
- 1.6. _____ In Piaget's developmental theory of learning an operation is always mentally reversible.
- 1.7. _____ According to Skinner's theory of operant conditioning, a response is made in anticipation of a stimulus rather than being elicited by the stimulus.

- 1.8. _____ In Piaget's developmental theory, the process by which new schemata are altered is called *assimilation*.
- 1.9. _____ In Piaget's developmental theory, maturation determines the range of possibilities at a specific stage of development.
- 1.10. _____ The two stages of development in which most *adults* operate are the pre-operational stage and the concrete operational stage.

1 mark each = 10 marks

Question 2

In the following scenario identify the unconditioned stimulus, the conditioned stimulus and the conditioned response:

A baby is taken to the doctor to receive an injection. When the needle is put into the baby's arm the baby starts to cry. Three months later the baby is taken to the doctor for a check-up. As soon as the baby sees the doctor the baby begins to cry.

- 2.1 Unconditioned stimulus: _____
- 2.2 Conditioned stimulus: _____
- 2.3 Conditioned response: _____

1 mark each = 3 marks

Question 3

In the following scenario identify the reinforcer, the operant and the cue and the operant:

A small manufacturing company was experiencing a high incidence of absenteeism. A new incentive program was introduced to combat this. Workers were allowed to participate in a lottery if they had not been absent at all for the past month. At the end of each month the names of all the workers who had not been absent were placed in a basket. One name was picked out and that person won a cash prize. Over the eleven months following introduction of the incentive program, absenteeism was 30% lower than for the eleven months before the program was introduced

3.1 Reinforcer: _____

3.2 Operant: _____

3.3 Cue: _____

2 marks each = 6 marks

Question 4

Alongside each of the following statements write the stage of development during which the behaviour first appears, according to Piaget

4.1 making drawings _____

4.2 reasoning deductively _____

4.3 grasping an object _____

4.4 using language _____

4.5 explaining why a past event occurred as it did _____

2 marks each – 10 marks

Question 5

Alongside each of the following statements write the name of the theorist of the three you have so far studied whose theory of learning best accounts for each of the following learnt behaviours:

- 5.1 driving a car _____
- 5.2 feeling anxious while flying in an aircraft _____
- 5.3 estimating how much profit a new business should be able to make in its first twelve months of operation _____

2 marks each = 6 marks

Question 6

Educational theorists generally agree that the purpose of teaching is to facilitate learning. Where they disagree is on what facilitates learning.

Alongside each of the following statements write the name of the theorist whose theory the statement most closely matches:

- 6.1 learning is facilitated by receipt of a stimulus following a response which increases the probability of the response recurring.

- 6.2 learning is facilitated by the occurrence of a state of disequilibrium that drives the learner to try to assimilate the new information.

- 6.3 Learning is facilitated through pairing of a stimulus with another stimulus that already elicits a response.

2 marks each = 6 marks



Assignment Number 5.3 – 1

Guidelines for the correction and weighting of questions for Assignment 5.3 – 1.

Question 1

Answer *true* or *false* to the following statements:

- 1.1. **False** Every change in a person's behaviour indicates that some learning has occurred.
- 1.2. **True** In Pavlov's theory of classical conditioning the unconditioned stimulus acts as a reinforcer.
- 1.3. **True** According to Skinner's theory of operant conditioning, a response which has been reinforced on a variable interval/variable ratio schedule is less resistant to extinction than a response which has been reinforced on a variable interval/fixed ration schedule.
- 1.4. **False** According to Pavlov's theory of classical conditioning, a conditioned stimulus produces exactly the same response as the response elicited by the unconditioned stimulus with which it was paired
- 1.5. **False** According to Skinner's theory of operant conditioning, a negative reinforcer diminishes the probability of a response when it is added to a situation.
- 1.6. **True** In Piaget's developmental theory of learning an operation is always mentally reversible.
- 1.7. **True** According to Skinner's theory of operant conditioning, a response is made in anticipation of a stimulus rather than being elicited by the stimulus.
- 1.8. **False** In Piaget's developmental theory, the process by which new schemata are altered is called *assimilation*.
- 1.9. **True** In Piaget's developmental theory, maturation determines the range of possibilities at a specific stage of development.
- 1.10. **False** The two stages of development in which most *adults* operate are the pre-operational stage and the concrete operational stage.

1 mark each = 10 marks

Question 2

In the following scenario identify the unconditioned stimulus, the conditioned stimulus and the conditioned response:

A baby is taken to the doctor to receive an injection. When the needle is put into the baby's arm the baby starts to cry. Three months later the baby is taken to the doctor for a check-up. As soon as the baby sees the doctor the baby begins to cry.

2.1 Unconditioned stimulus: *Needle put in arm.*

2.2 Conditioned stimulus: *Sight of doctor*

2.3 Conditioned response: *Crying*

1 mark each = 3 marks

Question 3

In the following scenario identify the reinforcer, the operant and the cue and the operant:

A small manufacturing company was experiencing a high incidence of absenteeism. A new incentive program was introduced to combat this. Workers were allowed to participate in a lottery if they had not been absent at all for the past month. At the end of each month the names of all the workers who had not been absent were placed in a basket. One name was picked out and that person won a cash prize. Over the eleven months following introduction of the incentive program, absenteeism was 30% lower than for the eleven months before the program was introduced

3.1 Reinforcer: *Cash Prize*

3.2 Operant: *Attending work every day in a month*

3.3 Cue: *Start of the period for which full attendance was required to qualify for entry in the lottery.*

2 marks each = 6 marks

Question 4

Alongside each of the following statements write the stage of development during which the behaviour first appears, according to Piaget

- 4.1 making drawings: pre-operational
- 4.2 reasoning deductively: formal-operational
- 4.3 grasping an object: sensori-motor
- 4.4 using language: pre-operational
- 4.5 explaining why a past event occurred as it did: concrete-operational

2 marks each = 10 marks

Question 5

Alongside each of the following statements write the name of the theorist of the three you have so far studied whose theory of learning best accounts for each of the following learnt behaviours:

- 5.1 driving a car Skinner
- 5.4 feeling anxious while flying in an aircraft Pavlov
- 5.5 estimating how much profit a new business should be able to make in its first twelve months of operation Piaget

2 marks each = 6 marks

Question 6

Educational theorists generally agree that the purpose of teaching is to facilitate learning. Where they disagree is on what facilitates learning.

Alongside each of the following statements write the name of the theorist whose theory the statement most closely matches:

- 6.1 learning is facilitated by receipt of a stimulus following a response which increases the probability of the response recurring.
Skinner

- 6.2 learning is facilitated by the occurrence of a state of disequilibrium that drives the learner to try to assimilate the new information.

Piaget

- 6.3 Learning is facilitated through pairing of a stimulus with another stimulus that already elicits a response.

Pavlov

2 marks each = 6 marks

Submitted by due date = 2 marks

Total = 40 marks

Assignment 1 40%

Assignment 2 60%

Total for Unit 100%

Assessment Instrument

Module 5 Educational Theory and Practise

Unit 5.3 Learning Theories

Assignment 2

This assignment calls upon you to apply the knowledge of educational theory that you have acquired in the study of this unit. It asks you to apply it to your own experience and demonstrate your understanding that the principles and theories involved do have application in the teaching learning process. Your responses must be in the form of well-presented discussion. To achieve competency you will need to:

- ☐ Identify a piece of instruction that conforms to the theories of Ausubel and Gagne, describe features of each and stating the students for whom it is intended.
- ☐ Describe how you would set up a learning programme that would accommodate the theories of Rogers.
- ☐ Describe the design of a training programme that accommodates students who are in the concrete operational stage, outlining the instructional strategies you would employ, the instructional aids you would use, and the delivery methods and student support which would help you achieve your objectives.



Assignment Number 5.3 – 2

To be completed and returned to your tutor for assessment.

This is an Open Book assignment and you may refer to whatever references you have at your disposal.

Name: _____ **Due date:** _____

Question 1

Provide, from your own experience, an example of a formal piece of instruction that conforms to each of the following theories:

- Ausubel's theory of meaningful verbal learning
- Gagné's theory of classes of learning

This piece of instruction may be part of a distance education package, a textbook that has been designed as a learning package, an example of a program taught face-to-face.

For each of the examples:

1. Name the program.
2. Give a short (100 words or less) description of the program.
3. Identify the types of students for whom it is intended.
4. Describe the features of the program that indicate that it conforms to the particular theory.

20 marks

Question 2

Describe in less than 500 words how you would set up a learning program in the subject area for which you are responsible that would conform to Rogers' Humanistic theory of learning.

20 marks

Question 3

You are required to develop a training program for TVET students in a subject area for which you are responsible. You know that the majority of students who will be taking the program are still functioning at what Piaget called the concrete operational stage of cognitive development. Describe in 500 words or less what approach you would take to the design of the program in order that the needs of these learners will be met. In describing your approach, refer to the instructional strategies you would employ, the types of instructional aids you would provide, the delivery methods you would use and the types of student support mechanisms you would put in place.

20 marks



Assignment Number 5.3 – 2

Guidelines for the correction and weighting of questions for Assignment 5.3 – 2.

Question 1

Provide, from your own experience, an example of a formal piece of instruction which conforms to each of the following theories:

- Ausubel's theory of meaningful verbal learning
- Gagné's theory of classes of learning

This piece of instruction may be part of a distance education package, a textbook that has been designed as a learning package, an example of a program taught face-to-face.

For each of the examples:

1. Name the program.
2. Give a short (100 words or less) description of the program.
3. Identify the types of students for whom it is intended.
4. Describe the features of the program that indicate that it conforms to the particular theory.

The answers to parts 1, 2, and 3 of this question are intended to provide background information needed to score the question. The basis on which the question should be scored is the response given to part 4. Ausubel's theory of meaningful verbal learning relates specifically to expository teaching. The response given to part 4 needs to indicate clearly the piece of instruction is mainly expository (rather than requiring activity on the part of the learner. The other key characteristic of a piece of instruction which follows Ausubel's theory is that it is structured so as to be meaningful to the student. That is, it links new learning to previously learned material. The response may refer to the use of advance organisers.

10 Marks

Gagné's theory of classes of learning proposed that learning could be subdivided into a number of different types each of which calls for a different instructional approach. The response to this question needs to indicate that the piece of instruction distinguishes between different learning outcomes in terms of the way they are dealt with and that the instructional strategy matches the type of objective in question.

10 Marks

Question 2

Describe in less than 500 words how you would set up a learning program in the subject area for which you are responsible that would conform to Rogers' Humanistic theory of learning.

The distinguishing characteristics of Rogers' theory is that students are given responsibility for their own learning. The role of the teacher is to support the learner in achieving their own goals. Some of the characteristics of an instructional program are:

- students determine specifically what they will learn
- students negotiate with the teacher to arrive at what these goals will be
- the students are accountable for their own learning
- students are encouraged to locate their own learning resources, although the teacher may make provision for a collection of resource materials in the field of study that the class is covering
- assessment is based on the individual student's achievement of the goals that have been pre-agreed between the teacher and the student
- the teacher challenges the student to go beyond what they may see as their limit of ability

20 Marks

Question 3

You are required to develop a training program for TVET students in a subject area for which you are responsible. You know that the majority of students who will be taking the program are still functioning at what Piaget called the concrete operational stage of cognitive development. Describe in 500 words or less what approach you would take to the design of the program in order that the needs of these learners will be met. In describing your approach, refer to the instructional strategies you would employ, the types of instructional aids you would provide, the delivery methods you would use and the types of student support mechanisms you would put in place.

The distinguishing characteristic of concrete operational stage of Piaget's theory is that the individual's cognitive operations are still limited to dealing with what is present. Such students will not yet be able to think hypothetically and thus deal with abstractions. A training program that will meet the needs of such learners therefore needs to employ instructional strategies that deal with concrete reality. It might be based on practical skills and make use of workshop equipment or it could use pictorial illustrations to explain how procedures are followed. The use of concrete examples should be evident in both the design of instructional strategies and in the type(s) of student assessment that would be employed. Students at this stage of development should be able to imagine themselves performing procedures but will have difficulty understanding a procedure which they have not yet learnt to perform from listening to a verbal description alone, particularly if the description is abstract rather than a step-by-step account. They will also have difficulty in understanding theoretical explanations of why a procedure should be followed.

20 Marks

Total = 60 marks

Assignment 1 40%

Assignment 2 60%

Total for Unit 100%