

**THE VALUE OF CASE STUDIES
AS A TEACHING STRATEGY**

Lennox McLeod
School of Education
The University of the West
Indies
St. Augustine



3 minutes exercise

You may discuss with the person sitting next to you

Briefly explain the essential differences between education and training



SELF-MARKING

One mark each for reference to any of the following concepts or names. **SHOUT OUT "EUREKA, I GOT IT" FOR ANYONE YOU GET RIGHT**

Maximum 10 marks

1. Behaviourism
2. Operant conditioning
3. Law of Effect
4. Classical Conditioning
5. Social Learning Theory
6. Behavioural Theory
7. Pavlov
8. Thorndike
9. Piaget
10. Maslow

Let's attempt the same question posed differently

Joey was planning to throw a big all-inclusive fete in St. Augustine. So he went by the security firm

Joey: "ah want to hire three of your baddest pit bulls for mih fete"

Security: "No problem. That would be \$4,500----\$500 for a dog and \$1000 for each handler

Joey: "So much? I didn't ask for no handler. And yuh dogs well-trained? Why yuh can't send them by themselves?"

3 minutes

You may discuss with the person sitting next to you

Explain to Joey why his suggestion is absolutely ridiculous



MARK SCHEME

Two marks for any point...maximum 10 marks. DO NOT FORGET TO SHOUT “EUREKA I GOT IT”

- 1. Training is restricted to memory and recall but education refers to higher order skills**
- 2. Animals operate on instinct since their brains cannot handle complexity**
- 3. Education involves developing the capacity to analyse situations, make informed decisions and judgements, predict things based on trends and think creatively if no solution is obvious.**
- 4. Training involves developing the capacity to respond to orders**
- 5. Learning by way of training is negative--aimed at curbing natural animalistic instincts whilst education is positive—aimed at expanding the capabilities of the mind**

Analysing question 1 : Rote learning and teacher-centeredness

I, teacher was the Boss. I knew everything: the questions, the answers and how they were going to be marked

I left you completely in the dark with no notes or handouts so you had no clue as to what answers I was looking for

You had to figure out the answer for yourselves without a clue as to whether you were correct or wrong

I was the stage manager and ring leader, with only wrong and right answers to the questions.

Ideally I would have given out notes, read the texts in class, allow you to learn the notes by heart and when the examination results come in

35 % of students, the 'academically-inclined' pass the exam. Those with very good memories would gain scholarships and you, the master teacher would be praised by the school, parents and the Minister of Education who would all acclaim: YOU IS AH BOSS. Never mind that the students will forget everything the moment they leave the examination room

Analysing question 2

First, I ask myself *“What do you already know about this topic?”*

Pit bulls are vicious animals that must be chained or led by a handler to prevent them from running amuck in a fete

Then I consider “How can I add new concepts to what you already know?”

I moved from the known to the unknown linking what you already know with what I want you to know

By so doing so I allowed you to work things out on your own with no notes or handouts.

The teacher who is indeed wise does not bid you to enter the house of his wisdom but rather leads you to the threshold of your mind

Khalil Gibran

Why we think that Physics is a difficult subject

Teacher: Today we are going to learn about Specific Gravity

Specific gravity is the ratio of the density of a substance to the density of a reference substance; equivalently, it is the ratio of the mass of a substance to the mass of a reference substance for the same given volume

Class: WHAT THE HELL IS THAT?????

The case study approach

Teacher: If you fill a bathtub to the brim and sit down in the water, what will happen?

John: water will spill over to the floor

Teacher: Great, but who can tell me why

Mary: Because John too fat and heavy

Teacher: so if a magga boy like Sean sit in the water, you mean it will not spill over?

Harry: Yes, it will, but it will not spill so much water

Teacher: You may not realize that you have pointed out a major idea in Physics: the relationship between weight, mass and volume. It is called the Archimedes Principle, the Floatation Principle or the Theory of Specific Gravity

The art of teaching is the art of assisting discovery. Mark Van Doren

Teaching is about Constructivism- building knowledge like climbing a scaffold step by step. The case study is its major strategy

Step 1- she creates the link between the known and the unknown and arouses their curiosity

Step 2- she allows them to explore real examples of how the principles are applied in real life

Step 3- she supervises them as they do what real-life scientists do...authentic lab work...different weights , volumes.. do principles of flotation, buoyancy and displacement work all the time?...are there other conditions or alternative explanations?

Building knowledge and understandings through the case study

Step 4- how is the principle applied to the navy, cruise ship industry, the functioning of submarines, aqua culture, eye surgery?

Step 5- experiential learning: a trip (on YouTube?) to the Panama Canal where cargo ships of multiple weights are directed through different channels by a complex manipulation and adjustment of water levels using the Archimedes principle

The degree of one's emotions varies inversely with one's knowledge of the facts. Bertrand Russell

Students may forget what they learned but will always remember how they felt

The wise physics teacher entices students by appealing to their emotions. She lets them discuss the story of Archimedes who, after years of trying to understand the secrets of mass, volume and floatation, ran out of the bathtub, naked, into the streets shouting “Eureka, Eureka, I found it”

The wise physics teacher teaches Science first, Physics after. She gets them excited by exposing them to the joy of discovery which is the beauty and essence of Science. After all, they are humans and she teaches them **first** the topics **after**

THE CASE STUDY DOES THIS BEST

It is counter-productive to begin a lesson with a definition

This applies to any subject or topic you teach. Why?

Because you kill their curiosity and undermine their creativity

You make your subject boring and uninteresting. Your students die a slow death in the classroom or drop out mentally and emotionally if not physically

as many of us did in Physics class...and you still wonder why we hated the subject?

**CASE STUDIES REMOVE THE ABSTRACTIONS OF CONTENT AND
CREATE LEARNING OPPORTUNITIES THROUGH AUTHENTIC
APPLICATION AND ASSESSMENT**

Ask most mathematics **teachers and students** what
Pythagoras theorem is used for and they do not have a
clue but could recite the formula from memory

IF YOU CANNOT APPLY WHAT YOU HAVE BEEN TAUGHT, YOUR TEACHER HAS NOT REALLY TAUGHT AND YOU HAVE NOT REALLY LEARNED

Ask a typical Economics teacher or student about price elasticity. He would begin talking about shale oil and Saudi Arabia, but will know nothing about how the concept applies to the doubles or fish vendors in his neighbourhood.

He can regurgitate the definition, draw the diagram and probably be hired in later life by Government to solve our economic problems.

And we wonder why the country cannot come up with a plan for economic diversification since the end of slavery in 1838

Ask yourself: What does the subject I teach mean to me? how will it help students in their daily lives now and in the future?

Ask some History teachers why all this knowledge of dead people and what they did is important and you will get the cliché response that “if you don’t know your past, you cannot know your future”

As sad as it sounds, the typical history teacher does not realise **that history is not primarily about the past but about the continuance of the past and its impact on life today**

History is about-the privilege, class divisions, the racism and selfishness of the past that were created in the past but continue unabated today. Slavery, war, oppression are alive NOT DEAD. Why do history teachers treat these issues as if they are no longer with us?

THE USE OF THE CASE STUDY APPROACH IN THE TEACHING OF HISTORY WILL MAKE THE SUBJECT RELEVANT AND GREAT AGAIN

From teacher-centred to student-centred through the Case Study approach

Students who spend their early education learning by rote become misfits in life and at University where learning is complex and where it is assumed that students already have conceptual knowledge.

Our previous experience is the fabric on which we add new knowledge. Our pre-knowledge consists of: Images, sounds and superstitions, intuitions and culture, the movies that we saw and the novels and books that we read, our role models and the music that we enjoy and any other thing that makes us aware of the world. A teacher's job is to build on the things we already know

I write exams in school but I am examined every minute in real life-how do I get along with others? How do I respond to stress? Should I join ISIS?

Your opportunity to help me is now. Teach me first not the topics, show me how to learn by myself, inspire me, make me confident and I will be fine

Do these things qualify as malpractice?

The majority of teachers do not educate, they train. They give students information to learn so that they could regurgitate in exams. They teach topics instead of students. They go to the textbooks page by page to get information so that students could remember in examinations.

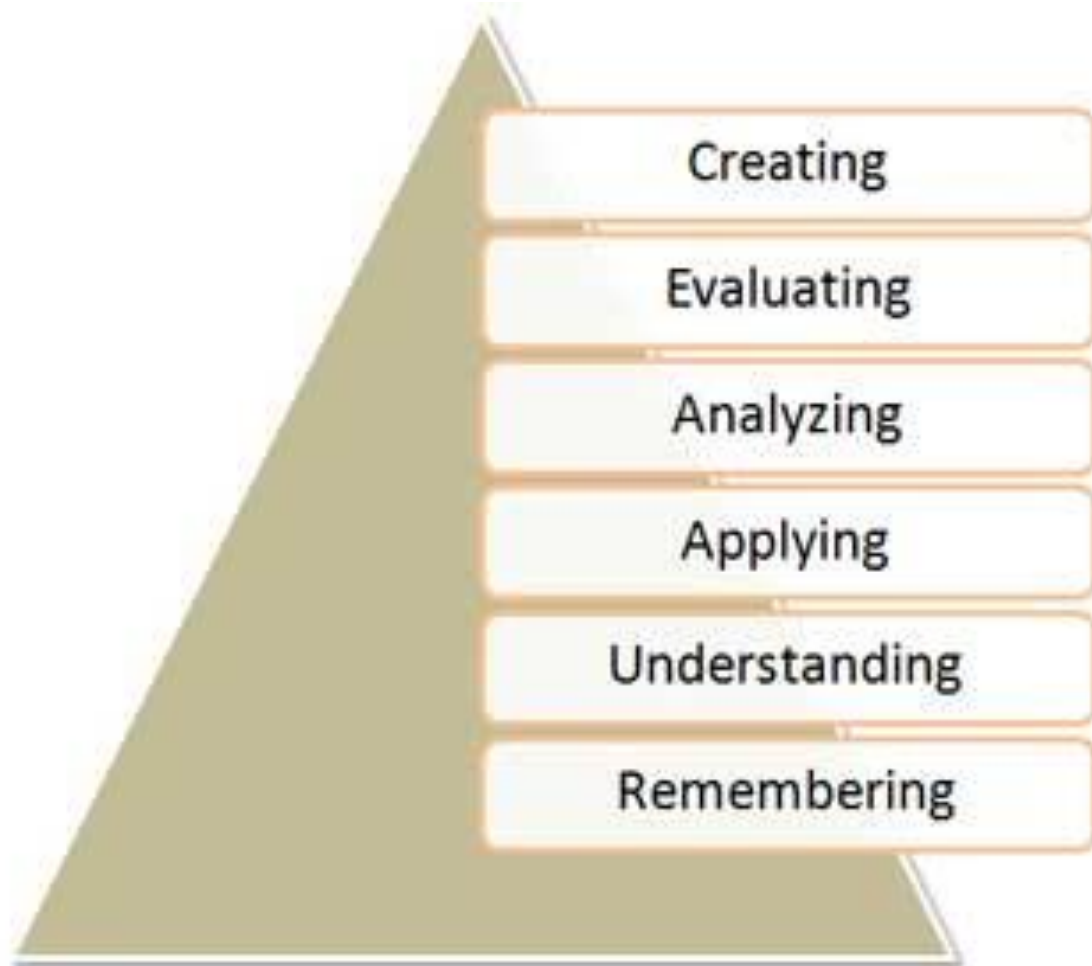
They discard the curriculum in favour of the textbook. They run straight to the content pages of the syllabus, ignoring those sections that contain information on the rationale for including the subject on the school curriculum. They ignore the sections dealing with the aims of education and how the subject fits in with those aims. Even the suggested teaching and learning strategies are ignored.

And they describe this as teaching

BLOOM'S TAXONOMY

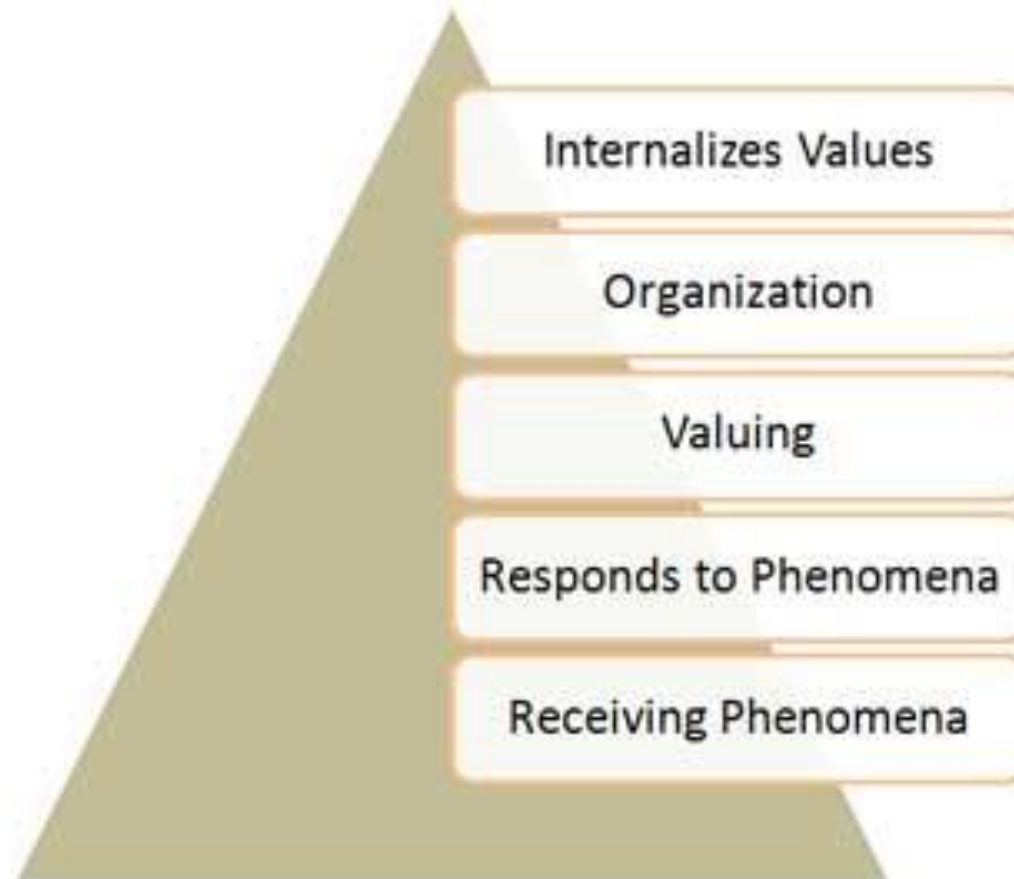
HERE WE HAVE 6 LEVELS OF LEARNING.. THESE ARE THE AREAS OF THE BRAIN THAT TEACHING SEEKS TO DEVELOP. THE MAJORITY OF TEACHERS CONCENTRATE ON THE LOWEST LEVEL: REMEMBERING

The Cognitive Domain



THE CASE STUDY IS EVEN MORE USEFUL FOR TEACHING IN THE AFFECTIVE DOMAIN, THE MOST IMPORTANT BUT MOST NEGLECTED AREA IN TEACHING. ALL SUBJECTS HAVE AN AFFECTIVE COMPONENT

The affective domain: How we develop and express our system of values



USE THE CASE STUDY BY TEACHING THROUGH YOUR SUBJECT TO BUILD CHARACTER

Promotion of the affective domain assists in building character and developing generic skills in
problem-solving
informed decision-making
empathy
values clarification
emotional intelligence

The case study of Archimedes or Calypso Rose or Sunil Narine will inspire students and allow them to put meaning to their education in a way that rote learning will not do. These are the generic skills promoted universally in the technological age of the 21st century, where information is readily available but the ability to use it is not

These Case Studies reflect the absence of ethics and morality in the education system. Our children should be aware of them

Science-A scholarship winner became a Medical Doctor, extracted pounds of cocaine from the stomach of a drug mule and promptly returned it to him without even reporting to the police

Social Science- An educator collected millions of dollars from Government for doing nothing and refuses to give it back. He says that the money is small change

Law- A Senator allegedly ripped off his clients' compensation money while they resided in jail or on the streets. He continues as a Senator

Accounts-A successful Accountant confesses to falsifying a company's accounts to save it from collapse and is still practicing as an accountant

Our education system is all about certification. It is devoid of ethics, morals and values. It is better to steal a million dollars than a duck or chicken. And we wonder why the crime rate is so high. It is as if crooks do not wear jacket and tie

Do's and don'ts in developing case studies

The shorter the case, the better its value

Use what students already know and link the issue to expected outcomes

Make the case as authentic as possible, resorting to dialect to portray realistic images that students could identify with

Do not force opinions or views on students no matter how they conflict with your values but allow students to resolve differences from their own perspectives. Your job is to facilitate, not indoctrinate

Incorporate both cognitive and affective outcomes if possible



Skills in creating case studies

A useful technique is to allow group discussion after individual work allowing students to argue their points, thus clarifying their values

Give feedback after each exercise. At this point you may point out flaws in arguments and why different people share different view

Remember that case studies may open students to deep personal psychological wounds so be on the lookout for children who may become suddenly quiet or angry and find an opportunity to speak to them quietly before referring them to the counsellor if necessary

The End: Questions ???????:?

- lennoxmcleod87@gmail.com
- Lennox.mcleod@sta.uwi.edu
- **Motto**
- You may call me Mr. McLeod
- You may call me Sir
- You may call me Lennox
- **You may NOT call me after 9pm.**

