JSS Mahavidyapeeta, Mysuru-570004

JSS Institute of Education

Sakleshpur-573134

Subject / Course: pedagogy school subject of physics

Assignment / Seminar on

Teacher centric and leasing centric approach and methods of Teaching physics.

Submitted by:

Name: YOGESHA

Roll No. / Reg. No: U01HY21E0046

Semester: IIIrd sem

Year: 2022-23

Submitted to:

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20/05/23

JSS Institute Of Education

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Subject:-Pedagogy of school subject of Physics.

Seminar On:-Teacher centric and learner centric approach and methods of teaching physics.

Submittted by

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Meaning Of Teacher Centric Approach.

- In teacher-centric learning :- the more traditional or conventional approach . the teacher functions in the familiar role of classroom lecturer, presenting information to the students, who are expected to passively receive the knowledge being presented.
- If we observe classrooms, we find it is the teacher who speaks most of the time, and the children either are given no opportunity to speak of a very little opportunity to speak and ask questions or interact. This is teacher centred approach of teaching.

Teacher centric methods are following:-

- Lecture method.
- Demonstration method.
- Lecture demonstration method.
- Problem solving method.

Characteristics of Teacher centric approach:-

- The teacher is the center of knowledge and in charge of learning.
  Students are usually passively receiving information.
- Students are viewed as "empty vessels" who passively receive knowledge from their teachers.
  Teachers and professors act as the sole supplier of knowledge, and under the direct instruction model, teachers often utilize systematic, scripted lesson plans.
- Assessments are in many cases only carried out as summative and not formative evaluations and they rarely address qualitative issues of the learner's progress.
- The teacher is an important source of information on how the learners are doing

Merits of teacher centric approach.

- Teacher retain full control of the classroom and its activity.
- Order in the class! Students are quiet as the teacher exercises full control o the classroom and activities.
- When a teacher takes full responsibility for educating a group of students, the class benefits from a focused approach to research, planning and preparation.
- Teachers feel comfortable, confident and in charge of the classroom activities.
- Students always know where to focus their attention — on the teacher.

Demerits of Teacher method approach:-

- Students don't learn to collaborate with other students missing opportunities to share what they have learned.
  Students don't use their communication skills.
  This type of instruction can be boring for students.

Meaning of learner centric approach.

- The learner centric approach involves instruction where the teacher is a facilitator as the learner must construct their own knowledge.
- The teacher is still the classroom authority figure but functions as more of a coach or facilitator as students embrace a more active and collaborative role in their own learning.

Characteristics of learner centric approach:-

- They have learn the knowledge and skills.
- The role of teacher is instructor and good facilitator.
- Learner Centric approach encourages students to reflect on what they are learning and how they are learning it.
- Learner centric approach encourage collaboration.
- Learners learn more through experience and active involvement.
- Learners know what they are learning and why.

learner centric methods are following:-

- Project Method.
- Inductive Method.
- Deductive Method.
- Discovery Method ... Etc

Merits :-

- Education becomes a more shared experience between the instructor and the students, and between the students themselves.
  The students would be performing the task in pairs, in groups and sometimes individually based on the purpose of the task. This improves their communicative and collaborative skills.
  Students tend to be more interested in learning when they can interact with one another and participate actively in their own education.
  Members of the class learn to work independently and to interact with others as part of the learning process.

Demerits:-

- With students free to interact, the classroom space can feel noisy or chaotic.
- With less focus on lectures, there can be a concern that some students may miss important information.
- This is not suitable for all methods of teaching.

Conclusion:-

In conclusion, the main difference between teacher centric and learner centric approach is that, within teacher centric approach, the focus is on the teacher, and such a classroom does not encourage student expression and communication, while learner centric classroom shares its focus equally between the teacher and the learner, further permitting collaboration, communication, and self-expression of learners.

Reference:-

- Modern teaching of physics :-by udai veer.
- www.pediaa.com

Criteria in assessing assignment / seminar

Components	Max. Marks	Marks obtained
First draft	2	2
Quality of Information	2	2
Organization	2	1
Presentation	2	2
Discussion	2	1
Total	10	9

Signature
(Student-teacher)

(Dr. Prabhuswamy M.)

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Subject / Course: PSS - Physics

Assignment / Seminar on

'Concept and Constuction of Unit Test'

Submitted by:

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Semester: III SEM

Year: 2022/23

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JSS INSTITUTE OF EDUCATION, Sakleshpur

2022/23

Seminar on:PSS-Physics

Topic: Concept and Construction of Unit test

Submitted by:

Amrutha N. M.

II B. Ed teacher trainee

Introduction

Teaching and testing are the integral part of educational system.

Usually the test / Examinations are held based on the entire syllabus. A unit test is not a random assessment of questions. It is preplanned, systematic and scientific test.

A unit test is a test which is constructed, administered and assessed by a teacher after teaching a particular unit to the students.

Definition

- A Unit test is one of the important evaluation tool. It is constructed, administrated and evaluated by the teacher after teaching a particular unit to a group of students for whom he thought.
- Unit test is a type of achievement test meant for particular unit of teaching by the classroom teacher.

Steps of unit test

The perfect and valid test must have the following steps:

1. Plan the design of the test
2. Editing the unit test
3. Review test item
4. Administering the test
5. Interpret the test results

1. Plan the design of the test

Planning of an activity is important to achievement of the best results. So it is also very important to plan the design of the test.

A. Unit analysis: based as the scope and significance the unit must organise into conveniet Number of sub units.

B. Content analysis: It can be done for each sub unit by identifying and analyzing important facts, principle and concepts.

C. Weghtage to objective: On the basis of NCERT norms the suitable weightage should be given all important objectives.

Objectives	Marks	Weightage in %
Knowledge	8	32
Understanding	9	36
Application	5	20
Skill	3	12

D. Weightage to the content : Depending on the scope of the lesson proper weightage should be given to all subunits and no Sub units left in the weightage.

Objectives	Marks	Weightage in %
Sub unit - 1	w	P
Sub unit - 2	x	P
Sub unit - 3	y	P
Sub unit - 4	z	P

E. Weightage to the question: Proper weightage should be given to all type of question like objective type, short answer type and essay type.

Question type	Marks	Weightage in %
Objective type	9x1=9	36
Very short answer type	3x2=6	24
Short answer type	2x3=6	24
Essay type	1x4=4	16

F. Blue Print: The blue print is three dimensional chart showing the weightage given to the content, type of question and objectives in terms of marks. It is also called table of specification as it relates outcome to the content and indicates relative weightage of subunit.

objectives / content	Knowledge				Understanding				Application				Skill				Total
	O	VSA	SA	E	O	VSA	SA	E	O	VSA	SA	E	O	VSA	SA	E	
ub unit-1																	
Sub unit -2																	
Sub unit-3																	
Sub unit-4																	
Total																	

2. Editing the unit tests:

A. **Construction of item:** The teacher should construct all possible number of questions on the unit under different objective. The item must be of Objective type, Very short answer type, Short answer type and Essay type.

B. **Selection of test item:** Based on the blue print, the teacher has to select required number of test items.

C. **Instruction of test item:** For each type of question, instruction must be written clearly ie what to do how much answer to be written.

D. **Preparing marking and scoring key:** The teacher should predetermined the scheme of evaluation and scoring key, expected answer and marks allotted.

E. **Question paper:** Question paper should print legibly in different section like part A, B, C, D etc.

3. Review of the test item:

Critical evaluation of question paper must be made to ensure the Correctness and grammatically constructed to overcome latter confusion.

Question	Sub unit	Objective	Specifi-cation	Type	Marks	Time	Difficulty level
1 2 3 . . . 15							

4. Administering the test:

The test should be administered to the student to which class it has to be prepared by giving proper guidance about venue, time etc.

5. Interpret the test results :

The test result has to be interpreted by statistical analysis, based on central tendency, quartiles, NPC and difficulty on,

D = (Correct response/ Total number of students) × 100

Criteria/ Conditions of unit test

1. Select only taught unit
2. Compulsory based on unit and content analysis
3. Selection of different types of Questions
4. Proper weightage to the objectives
5. Writing up of test analysis
6. Allotting marks and time for each item
7. Time and when you of administering the test should prior announcement
8. Proper instruction to each type of item
9. Maintained difficult level of the test item
10. Based on blue print
11. Print the question paper without grammatical mistakes
12. Test should be only for teaching group

Importance of unit test

1. It helps in knowing the pupil's achievement
2. It helps to know whether the objective are achieved or not
3. It is useful to know the weakness and strength the teacher
4. It is part of continuous evaluation
5. It shows that gaps or leaving out areas of learning or teaching
6. It is the best self evaluation for both pupil and teacher
7. It acts as feedback device for teacher to improve his method of instruction
8. It helps to develop self confidence in facing the examination
9. It helps in classify the standard and provide remedial teaching for slow learners and enrichment for gifted children

Conclusion :

The unit tests provide continual feedback information to pupils and teachers as their effectiveness as they proceed through the instructional sequence. It helps us to know the weightage in terms of marks to objectives, areas of content, and forms of questions.

Reference

- Pedagogy of school subject: physics by Ramachandraiah
- https://testbook.com
- http://pedagogybyvasu.blogspot.com

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Subject / Course: Pedagogy of School Subject - Physics

Assignment / Seminar on

"BRUNER'S CONCEPT ATTAINMENT MODEL OF TEACHING PHYSICS",

Submitted by:

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Roll No. / Reg. No: U01HY21E0033

Semester: 3rd Semester

Year: 2nd year

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JSS MAHAVIDYAPEETA MYSORE-04
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SAKLESHPUR 2022-23

SUB: PEDAGOGY SCHOOL SUBJECT physics
TOPIC: CONCEPT ATTAINMENT MODEL

PRESENTED BY,
POORVIKA K R
2ND B.ED
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INTRODUCTION

- The concept attainment model is designed to help students to learn concepts and help them to become more effective in learning concepts. It has been based upon the studies made by Jerome S Bruner and his associates Jacqueline Goodnow and George Austin.

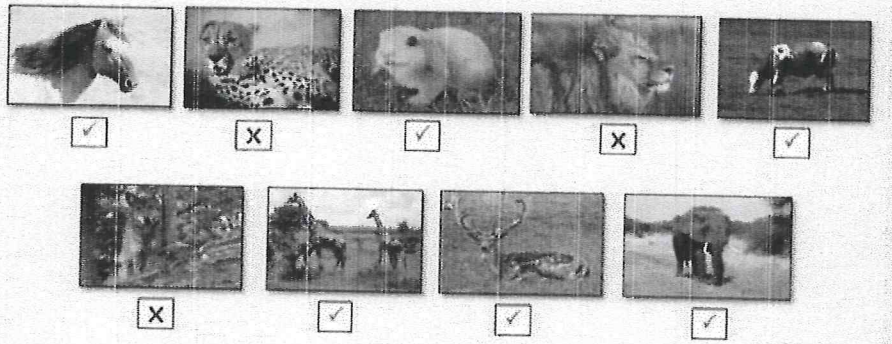
CONCEPT

- Concepts are the basic tools of thinking.
- Concepts reduce need for constant learning.

MEANING OF CONCEPT

Concepts is mental representation or a mental picture of some objects or experience. It represents a category of objects which share common properties.

Exercise



What is the similarity in the animals marked with ✓

Elements of concepts

According to Bruner a concept includes five elements. They are,

1) **Name**
2) **Exemplars**
3) **Attributes**
4) **Attribute value**
5) **Rule**

FUNDAMENTAL ELEMENTS OF BRUNER'S CAM

1) **Focus**
2) **Syntax**
3) **Social system**
4) **Principles of reaction**
5) **Support system**

DESCRIPTION OF THE MODEL

SYNTAX

- **Phase 1: Presentation of data and identification of concept**

  Teacher presents labelled exemplars, students compare attributes and generate hypothesis, attempts a definition.

- **Phase 2: Testing the Attainment of concept**

  Teacher presents unlabelled examples as Yes or No, teacher confirms hypothesis, gives the name and helps arrive at the restatement of the definition, students generate more examples.

- **Phase 3: Analysis of thinking strategies**

Discussion of the process, the pupil recollect how they attain the concept.

EXAMPLE

- **STEP1: Create a "Yes" and "No" section.**
- **STEP2: Provide two or three very strong "Yes" examples.**
- **STEP3: Provide two or three very strong "No" examples.**
- **STEP4: Show more examples and non examples.**
- **STEP5: Let students discuss and provide either an example or non example.**
- **STEP6: Show a new non example.**
- **STEP7: Students share, discuss and refine their definitions**

MERITS OR ADVANTAGES OF CAM

- This model develops the power of reasoning in the students.
- It develops the imagination ability of students.
- It helps the students in their intellectual development,
- It helps in making the students very good observers.
- The students learn to analyse things systematically.
- The students remain activity engaged during the process of teaching learning.
- It develops the habit of self study among the students.
- It is possible to pay individual attention.
- Students learn a natural way, they do not face any type of stress or strain.
- It enables the students to apply their knowledge in different situations.

DEMERITS OF CAM

- A students may have wrong hypothesis for some time and he may go on thinking in wrong direction.
- Some students in the classroom may remain absent minded.
- All the students in the classroom may not be able to participate in the teaching learning process, the students who are active may participate fully and other may not find any opportunity to participate.
- Time consuming

CONCLUSION

- Concept attainment model has great relevance for teachers who intend to improve the instructional system. This model guides teachers to go to the depth of the content. And helps students to attain new concepts. So the model has a great attribute on teaching learning process.

REFERENCE

- https://blog.teachmint.com/concept-attainment-model/
- https://www.slideshare.net/NishaPandey42/bruners-concept-attainment-model

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