

INTEGRATION OF TEACHING SKILLS

UNIT TWO

Use of Blackboard Work and Its Management in  
Classroom Teaching

Synopsis :

1. Programme
2. Terminal Behaviours
3. Flow Chart
4. Instructional Material
5. Guidelines for Discussion
6. Exercise 1 : Writing Important Words and Main Teaching Points
7. Exercise 2 : Developing Flow Chart on Blackboard representing the Concept
8. Exercise 3 : Developing Simple Diagrams on the Blackboard
9. Exercise 4 : Summary Writing on Blackboard

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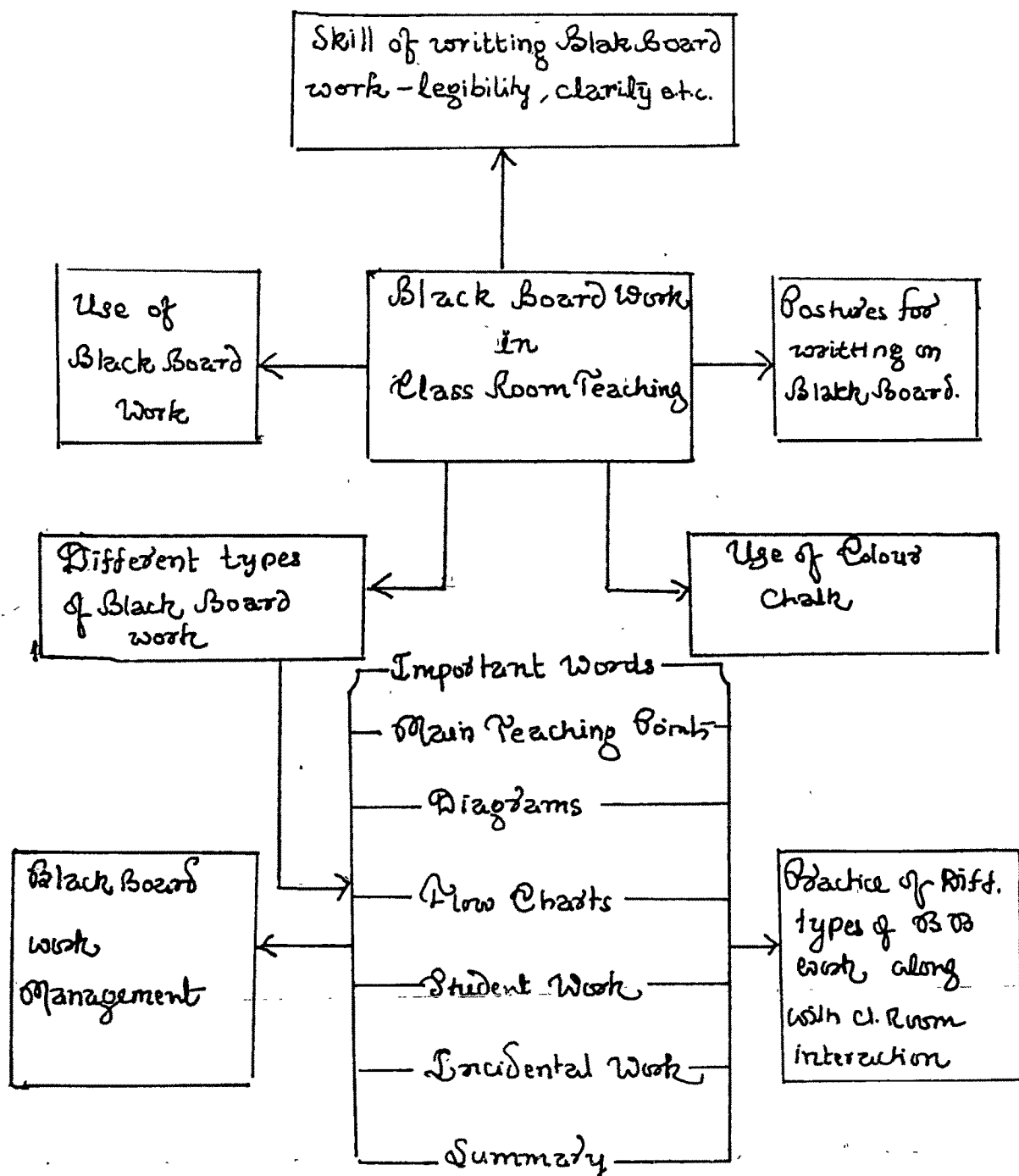
1. Programme :

1. Reading Instructional Material
2. Discussion
3. Exercises : Writing important words, and main teaching points  
Developing Flow Chart  
Developing Simple Diagrams  
Summarisation

## FLOW CHART

FIG: A-2

## USE OF BLACK BOARD IN TEACHING



## 2. Terminal Behaviours :

1. Student teachers will be able to recall the advantageous of using blackboard in class room teaching.
2. Student teachers will be able to recall the different types of blackboard work.
3. Student teacher will be able to apply correct posture while writing on blackboard.
4. Student teacher will be able to locate new words and write on blackboard while teaching in class room.
5. Student teacher will be able to frame important teaching points and write on blackboard while developing concepts in the classroom teaching.
6. Student teacher will be able to develop flow-chart representing the concept under teaching while developing concept in the classroom teaching.
7. Student teacher will be able to draw simple diagrams representing the concepts under classroom teaching.
8. Student teacher will use the blackboard space economically, systematically so as to bring visual effects.
9. Student teacher will be able to write summary of the lesson during summarisation phase of classroom teaching.

## 3. Flow Chart :

### Synopsis :

- I Introduction
- II Different types of Blackboard work
  1. Important words
  2. Main teaching points
  3. Diagrams
  4. Flow charts
  5. Student responses
  6. Marginal work
- III Postures for Blackboard work
- IV Selection of Different Blackboard Work for a lesson.

### Introduction :

In the development of blackboard skill you have attained the ability to follow all the components that were mentioned. In spite of these, you may be getting many more problems about use of blackboard while teaching. This unit is to deal with the other aspects that are essential for a teacher to use it, along with other teaching skills.

Teacher can present any idea to the student instantly by two means - by speaking and by writing on the blackboard. When the subject is presented through verbal medium, students have to listen and comprehend at the same time. If the same thing is written on the blackboard, they can observe read and comprehend at their own time. Some of the information to be communicated may be related to concepts of shape and size which take lot of time to develop through verbal medium. On such situations it will be worth to use blackboard.

Certain ideas to be communicated requires repeated reference to develop them in children. Children will repeatedly use the information recalled by the teacher. This will be helpful, and economical if they are written on the blackboard. Similarly, it will be difficult to comprehend only by listening the new words, which they are hearing for the first time. Moreover the pronunciation varies from teacher to teacher. Any lesson will have sequential points leading from one to the other. If all the points are represented on blackboard by a few lines, students will be able to comprehend better. If they have any doubts they will be able to ask. Deduction type of teaching can also be more meaningfully developed using the blackboard.

From the above discussion we have learnt that -

1. Blackboard is one of the very useful media for teaching.
2. Blackboard provides a readymade reference for students, they can think and understand about each point depending upon their speed of comprehension.
3. Blackboard helps in reviewing whenever teacher wishes to do so.
4. New words - symbols, diagrams written on the blackboard helps students to understand better and recall easily.

## II Different types of Blackboard Works :

Depending upon the nature of blackboard work, it can be classified into six types. Each of these is explained with example.

1. Important Words : Words which need special emphasis while teaching viz. new words, difficult words wherein spelling and pronunciation differ (Ex. Pseudopodia, Coelome), words which are difficult to remember (Names of foreign scientist) words which are not familiar in Indian context, words ending with similar sounds (Reflection - Refraction, Proton-Photon) etc. are to be written on board. By writing them on Blackboard, students will be able to observe, read and listen. Students will be giving more attention to the words on the board. Writing on blackboard itself signifies to students that the teacher recognises it to be an important word.

Example : While teacher is teaching about the concept of Reflection, the blackboard work may look like this

Date: 5.8.80	VII	P 48 A 5 T 53
Reflection		
Smooth Surface	Transparent	
Opaque Body		
Ex: Mirror		
Marble		
Sun mica sheet		
Metal sheet		

2. Main teaching points : These represent the key points that teacher has developed in classroom. While developing a teaching point, through probing, the teacher will write the important ideas and information arrived at a particular time. Teacher continues to do it till the teaching point is completely developed. The main teaching points on the blackboard, help all the students to follow the discussion, and become class notes. By doing this teacher can avoid dictation of notes, at the end of the period.

Example : While teacher is teaching about photosynthesis, the teaching points written on blackboard may look like this -

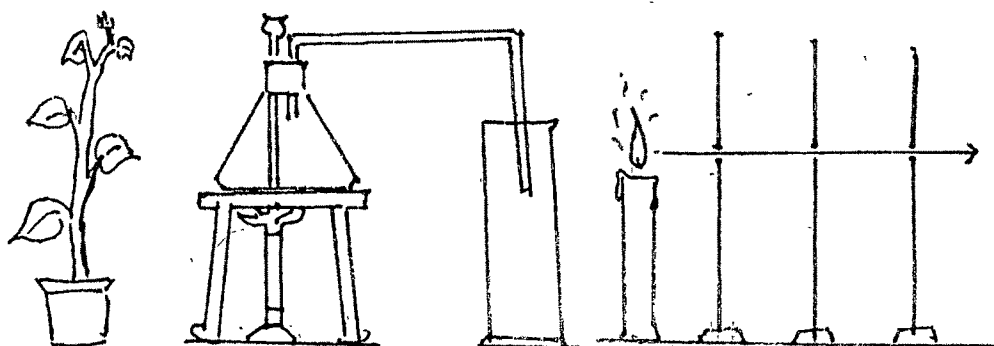
Example : Photosynthesis

Date: 5.8.80	VII	P 48 A 5 T 53
1. Plants have green leaves.		
2. Green colour is due to <u>chlorophyll</u>		
3. Photosynthesis is the process to produce food with the help of sunlight		
4. $CO_2$ and Sunlight are essential for photosynthesis.		
5. $O_2$ and $H_2O$ are released during photosynthesis.		

Example: Water conduction in Plant.

Date: 5.8.80	VII	P: 48 A: 05 T: 53
1. High concentration of $H_2O$ around root hair.		
2. Low concentration of $H_2O$ in the root hair		
Water moves inside the root hair		
Low concentration $H_2O$ in inner neighbouring cells.		
Water moves in inner neighbouring cells.		

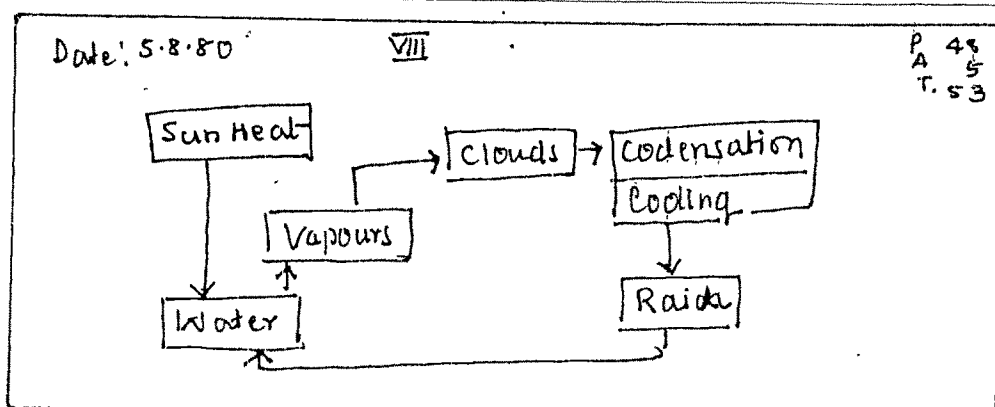
3. Diagram : Simple diagrams reduces the strain on teacher by lessening the unnecessary description to be given. Diagrams are to be simple unshaded, differentiating parts with colour for good understanding. Diagrams should be labelled clearly. Such diagram should be developed step by step along with discussion rather than drawing completely at a stretch, for instance while teacher is teaching parts of human digestive system. He may draw oesophagus, and develop the idea, and then he may draw the stomach to discuss that idea. In this way by the end of discussion all parts of the diagram will be also complete. This type of black board work makes students to concentrate on only a specific part of the diagram at a time about which teacher is discussing. This systematic development of the figure help the students to learn the drawing skill. Some of the simple diagrams which can be easily drawn on blackboard are :



(Diagram should be labelled wherever necessary - depending upon the needs).

4. Flow Charts : This is comprehensive way of writing the concepts and ideas about the phenomenon without using descriptive sentences. This type of representation is more useful when the teaching points are - classification, one thing leading to another in a chain form, many things related to each other, procedure followed for a work etc. The main words will be written on black board and they will be either framed by rectangular or ellipticals blocks, and are connected by arrows. Organisation of key words on blackboard is important for which teacher has to preplan.

Example : While teacher is teaching about rain, the black board work may look like this :

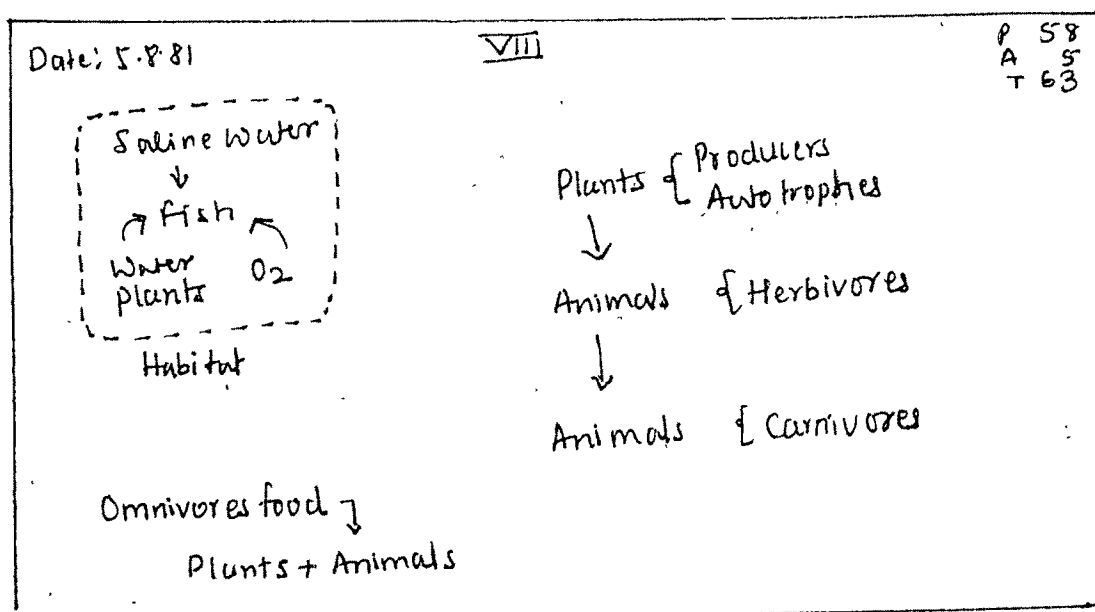


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Date :	VII	P
		A
		T
Sun heat	Clouds	Condensation
	Vapour	Cooling
		Rain
Water		

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When a teacher is introducing the concept of Ecology for the First Time, the Blackboard may look like this :



5. Student responses : Blackboard work is mainly to represent the main teaching points. While developing the teaching point, the teacher gets responses from students such responses can be written on blackboard. This will serve two purposes, namely for representing it as important statements or words and to reinforce the student for questions seeking information, many students will be giving responses part by part. These answers can be listed on blackboard and used for further development of lesson.

6. Marginal work : All the types of interaction in the class room cannot be predicted before the teacher enters the class. He has to give supplementary/additional information, sometimes

distantly related to a teaching point. For this purpose, he may reserve a part of the blackboard.

Posture for Blackboard :

Writing on blackboard is for the visual sensation. Whenever teacher writes on blackboard, students will be curious to know what he is writing. If the teacher blocks the written material by his body, students may lose the curiosity and interest in the lesson. If the teacher is right handed, he should keep his body to the left side without covering the writing part. If the teacher is left handed, he should keep his body to the right side without covering the writing part. This will facilitate at least  $\frac{2}{3}$  of the group to observe the written part while teacher is writing. If the teacher is completely facing to the blackboard while writing, students may feel ignored. To avoid this he may have to stand facing half towards the blackboard and half towards the students, while writing.

Improper holding of chalk, creates sounds, spreads chalk dust and breaks the chalk repeatedly. To avoid these defects the teacher should -

- (i) hold the chalk as near to the writing tip as possible,
- (ii) chalk should be always in a slanting position to the plane of blackboard rather than keeping it perpendicular,
- (iii) the pressure applied on the chalk while - writing should be just sufficient to make the writing clear, and bold.

If the teacher speaks loud the words, while writing on blackboard, they will be able to pronounce correctly, and listen while teacher is writing.

After writing on the blackboard the teacher has to pause for a while. The duration of pause depends upon the type of blackboard work. If it is a single word or sentence that students have read and comprehended, it may be less. If teacher wishes the students to take the written work in their notebooks, then he has to provide sufficient time for that. While pausing, teacher should move at one side of the blackboard exposing it to the whole group.

The main points discussed in this part are :

- (i) Posture of teacher while writing on the blackboard
- (ii) Way of holding the chalk while writing
- (iii) Verbalisation of ideas while writing.
- (iv) Pause necessary as post blackboard step.



#### IV Selection of Different Blackboard Works for a Lesson

Now you are exposed to various types of blackboard works. Teacher has to select particular type of work for particular type of information. There are mainly 3 situations wherein teacher has to repeatedly take decision, viz.

1. Form : Information representation form :

- (a) In short forms and words.
- (b) Complete sentences, or
- (c) In the form of flow charts.

2. Organisation of information on blackboard.

(Referring to space organisation of writing material on blackboard).

3. Use of Colour Chalk.

These decisions should be taken depending upon the condition. The conditions necessary for each type of selection are given below :

1. For words sentences and flow charts :

- (a) Short form writing, when teacher has to write -
  - (i) Good many points
  - (ii) Easily understandable, and
  - (iii) Information with which students are familiar.
- (b) Complete sentences form of writing, when teacher has to write -
  - (i) Information which is new
  - (ii) Information that has to be given as notes for students reference.
  - (iii) Definitions, laws, etc. which will miss information if rephrased.
- (c) Flow charts, when teacher has information involving classification, and sequential steps leading one to another.

2. For blackboard space Organisation :

This depends upon the size of the blackboard if blackboard is of small size -

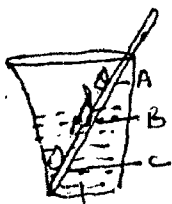
- (1) Words, phrases, marginal works can be repeatedly wiped and used.
- (2) Words, diagrams which teacher wishes to make use of repeatedly can be written at one side of the blackboard, so that rest of the information written can be wiped without disturbing them.

If the blackboard is large enough then -

- (1) Blackboard areas can be decided into few compartments.  
(This does not mean to draw lines on blackboard to form compartment).
- (2) While writing any information, the teacher can make use of the area for which he has predecided.
- (3) The central part of blackboard can be used to write the main points. The right side of blackboard can be used for important words and small diagrams, the left part for marginal work. The bottom few lines can be reserved for students writing.

Following is one of the ways to organise the Blackboard :

Date:	Std.	P A T
Statement of Aim:		
Important Words Diagrams Phrases etc.	Main Teaching Points Flow charts Diagrams	For extra information Rough work etc.

Date: 22-9-80	VIII
GROWTH IN LIVING ORGANISMS:	
Kitten - cat Puppy - dog Child - Man  Size - height } Increases weight } Plant A    Plant B Watered    No every day    Water grows.    dries	<ol style="list-style-type: none"> <li>1. Food - Main source of energy for all living organisms without which, cells will neither grow nor divide</li> <li>2. Sunlight - Necessary to produce food in plant. Necessary for animals to supply Vit-D.</li> <li>3. Water, Temp. regulation. Blood circulation are main functions for digestion and every activity. Water is necessary</li> </ol>
	 <p>Water A - Beam B - seeds C - Fast germination</p>

4. Discussion on Instructional Material

Before discussion session student teachers are supposed to read the content material on / blackboard work in classroom teaching. This session is to review the instructional content and clarify different points that might have remained unclear to student teachers. The guidelines for discussion are given below :

1. Clarifying the important functions viz. visual effectiveness, readymade reference for repeated use in developing concept, easy for students to form their notes from blackboard writing, perceptual clarity, symbolic representation, effective communication.
2. Elucidating different types of blackboard works viz. important words, new words, main teaching points, diagrams, flow charts, student work, marginal incidental work, summarisation.
3. Demonstration of postures for blackboard writing and explaining their advantages.
4. Clarifying blackboard management.
5. Demonstration of a few flow chart development on blackboard.
6. Demonstration of drawing a few diagrams on blackboard.
7. Recalling a few good and bad blackboard works, that, student teachers have come across during their microteaching practice.

Students Manual :Exercise :

Writing important words and main Teaching Points on the Blackboard      Duration : Two sessions of 150 Minutes each

Students,

In this session you will be practising one type of blackboard work namely writing new words, important words and main teaching points on blackboard. The teaching will be in simulation as done before. You will be teaching a concept involving interaction in classroom with peers. Along with interaction you will be giving importance to use blackboard. Unlike in microteaching, you will be giving importance to develop the concept and bring learning outcome. The time duration for each of you will be roughly 8 - 10 minutes. The blackboard work should specifically involve writing important words, main teaching points on the blackboard. During discussion your lesson will be evaluated by observing the effectiveness of interaction, use of blackboard in writing important words, statements in co-ordination with concept development. You may prepare a lesson before you teach or you can give an extempore class if depending upon the confidence you have gained from previous exercises.

Teacher's Manual :

Exercise : 'Writing Important Words and Main Teaching Points on the Blackboard.

Following are a few guidelines for supervisor to conduct the exercise.

1. The microteach session will be similar to the previous microteach session as carried during questioning - explanation interaction development.
2. During practice, student teacher will be giving importance to practice interaction along with blackboard work while evaluating during feedback session, the discussion should focus on all aspects. However, importance should be given to the focal issue under the present exercise, namely working out blackboard work.
3. It is advisable not to allow to teach, those concepts which are already used, so as to increase the scope for variety of new concepts.
4. The supervisor should note the postures used by student-teacher while doing blackboard work, along with his writing. The student-teacher should be asked also to concentrate on blackboard management, namely to write new words, important words at one margine of the blackboard, providing space for writing sentences in the main body of blackboard. The blackboard work should be comprehensive, sequential, economical and visually effective.
5. Many students will raise individualised problems like student being to dwarf may not be able to reach the top lines of blackboard, a part of blackboard is not usable due to glaze and breakage, blackboard is too small etc. In such situation the supervisor should focus the discussion on using the available space of the blackboard for the given context. During real classroom teaching, it may not be possible to get always large, ideal blackboards but the teacher should know how best he can use the available resources and present visual effectiveness, the discussion should focus on this issue also during feedback.

Additional Activity :

Student teachers found poor in blackboard work can be supplied with 'Roll Up Blackboards' and be asked to practice individually during their free time.

Students Manual

Exercise : 'Developing Flow-chart during Class Room Teaching' Duration : Two Sessions of 150 minutes each

Students,

This exercise is to focus on development of flow chart on blackboard during concept development in classroom teaching. The exercise should be carried on similar lines as that of previous exercise. In this situation it is worth to plan the flow chart on paper before going to practice on blackboard. The basic purpose will be to develop the flow of content along with the development of concept in the classroom. This will help to focus a part of flow during development, and sequentially evolve the complete gestaltic outlook. Following lesson plan format will be useful during preparation.

Lesson Plan

Content Unit : \_\_\_\_\_

Objectives	Content Points	Main questions, examples explanatory statements
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Flow Chart :Students Manual

Individualised  
Practice

Exercise : 'Developing Simple Diagrams on Blackboard.' Duration: 90 Minutes

Students,

During this session you have to practice drawing diagrams and labelling on blackboard. This session does not involve simulated teaching. The main difficulty during drawing diagrams is to draw lines as one desires. The lines do not follow our orders, and so is the problem. You can select a few examples from the textbook, journal, practical work book and draw the pictures on blackboard. The characteristics of a good picture are already given in detailed instructional material. This exercise does not require any observer as such during drawing. So in this case all can try individually depending on the availability of blackboard. After drawing 4 - 5 drawings you can call your supervisor and peers whoever available to comment upon.

Additional Activity :

Weak students can be asked to practice at their free time on 'Roll Up Blackboard' or in Classroom Blackboard.

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Students Manual

Exercise :      'Writing - Summarisation Statements on Blackboard.'

Duration: Two  
sessions of  
90 Minutes each

Students,

In this session, you will practice teaching by presuming that, you have taught a forty minutes lesson and are in recaptualating stage. To recaptualate you will be doing two thing namely raising the main questions to the learner group to get the response, rephrase and secondly writing the response on blackboard. The lesson planned for exercise number one, of the first unit can be reused at this stage. The peers who will be acting as students will co-operate with you by giving almost correct answers without spending much time. As a teacher you should be able to ask main questions, if necessary rephrase questions in simpler form, evoke response from more than one student, rephrase and write on blackboard. The review and summarising should take roughly 7 - 10 minutes.

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