

Quadrant II – Notes

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Unit - Aims and Objectives of Secondary School Mathematics and Planning for Instruction

Module Name: Part-I Writing a Lesson Plan

Module No- 07

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Lesson planning

Need of the lesson planning

- A lesson plan achieves the predefined learning objectives.
- It gives proper direction to execute a lesson.
- It also reduces wastage of time during a lesson.
- A lesson plan enables the teacher to think about teaching in a systematic way.
- A lesson provides a useful framework to organize instructional activities for teaching.
- It provides guidelines for organization and utilization of learning resources.

Types of Planning



- **Unit Plan:** A unit is a long-range plan to direct the instructional plan. A unit takes care of the logical unity of the subject matter and the psychological considerations of the learner - his needs, interests and ability to learn. A unit generally consists of the purposes or objectives, learning experiences and evaluation tests to find out how well. A unit plan is planning of work for the year or year's work.
 - It is distribution of all lessons and other activities throughout the year.
1. **Unit Plan:** A unit is a long-range plan to direct the instructional plan. A unit takes care of the logical unity of the subject matter and the psychological considerations of the learner - his needs, interests and ability to learn. A unit generally consists of the purposes or objectives, learning experiences and evaluation tests to find out how well. The purposes have been achieved.
 - A unit plan is instructional plan for entire unit.
 - It gives idea of distribution of content, teaching method, learning resources and assessment strategies required for learning the unit.
 - Objectives are stated in terms of the understanding or the ability of the learners.
 - The learning experiences or activities are such that they contribute to the growth of the child and help them move towards the stated objectives.
 - Evaluation includes plans to determine whether growth has taken place.
 2. **Lesson Plan:** Lesson planning relates to the organization of a 40 minute period for teaching. Since mathematics is a sequential subject, each day's lesson is a necessary foundation for understanding a subsequent lesson. The lesson plan should contain objectives, previous knowledge, introductory activities, developmental activities, summary and evaluation.
 - A lesson plan is an action plan of a single lesson
 - It indicates the objectives, instructional materials, teacher-student activities, learning experiences and evaluation to be adopted for the lesson.

Definitions of Lesson Plan

A lesson plan is usually designed for one class period. It also refers to a sequence of such plans designed for content from the unit of study.

1. "Lesson plan is an outline of important points of a lesson arranged in the order in which they are to be presented to students by the teacher". - **Good**
2. "Lesson plan is an arrangement of learning, planning and organizing controlled by a teacher". - **Davies**

Guidelines for Preparing a Lesson Plan

- Select the suitable subject matter for Lesson plan.
- Analyze the selected material in a systematic manner.
- Stating the learning objectives and their specifications.
- A lesson plan should assess learner's previous knowledge, capacities and interest.
- Design careful estimation and select proper instructional activities.
- Arranging the instructional activities and learning experiences in the proper order.
- Evaluating the content for attainment of objectives.

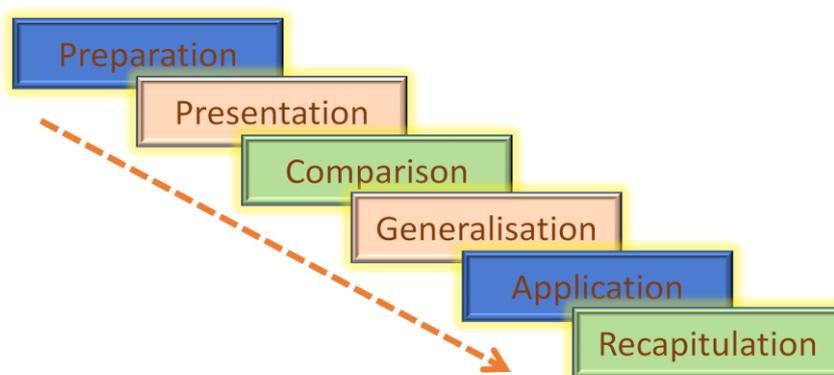
Importance of a lesson plan

- Lesson plan gives confidence to teacher, no stammer or mumble during the class period
- It provides invaluable guidance for substitute teacher in absence of subject the teacher.
- It creates a feeling of confidence in the teacher during the classroom teaching.
- It minimizes the understanding gap between topic sequences.
- It is helpful to increase teacher's success in the classroom teaching.

Herbartian Steps of a Lesson Plan

John Fredrik Herbart, a German philosopher and educationist (1776-1841) advocated pedagogy based lesson planning.

The following steps are involved in the Herbartian lesson plan;



- **Preparation/Introduction:** this step is concerned with the task of preparing the students for receiving new knowledge. In introduction, nothing new is taught to

students. Relevant to the topic in hand the teacher should make herself sure of that the pure of what the learner already know, by putting a few questions or activities, based on learner's previous knowledge.

- **Presentation:** It is the key step and only through which the actual process of teaching is going to take place. The main aim of presentation is to make the concept understandable to the student. Therefore simple language is used. Appropriate and specific examples and illustrations of the concept will make the understanding better.
- **Comparison:** More importance should be given in this stage to compare the facts observed by the students with another concept by way of giving examples. Bay making use of this comparison, the students can derive definitions or theories.
- **Generalization:** This step is concerned with arriving at some general ideas or drawing out the necessary conclusion by students on the basis of the different comparisons, contract and associated observed in the learning material presented by teacher.
- **Application:** In this stage, the teacher makes the students to use the understood knowledge in an unfamiliar situation. Unless the knowledge of Mathematics is applied in new situation or in day-to-day life, the study of Mathematics will become meaningless.
- **Recapitulation:** This stage is meant for the teachers to know whether students have grasped and understood these concepts taught or not. This can be achieved by reviewing a lesson or by giving assignment to the students.

Important Features for Designing a Lesson Plan

- ✚ Knowledge of students entering behavior: The teaching method will be advantageous only when the nature of the pupils is known along with knowledge of the subject matter.
- ✚ Teacher should know the knowledge of his subject.
- ✚ The teacher should possess general knowledge of all subjects.
- ✚ There should be clarity of objectives to make the both pupils and the teachers.
- ✚ Teacher should divide the topic in unit.
- ✚ The teacher is free to make changes in the lesson plan.
- ✚ The teacher should know the previous knowledge of the pupils.
- ✚ The teacher should have time duration sense.
- ✚ The teacher must know the principles of teaching, maxims of teaching, teaching methods and techniques.
- ✚ While preparing the lesson plan the teacher should decide at what step the material aid is to be used and what is to be clarified with that aid.

