A Practical Guide to Education Chapter 7

HOW TO MAKE A LESSON PLAN & ASSESS LEARNING OUTCOMES

Teaching in schools happens in the form of lessons. Lessons are based on goals of the class and objectives that the learners are expected to meet by the end of a lesson. Once the teacher sets the goals and objectives, s/he must devise a lesson plan for teaching those objectives. This chapter provides guidelines for developing lesson plans and includes sample lesson plans for each subject area.

Goals are usually broad concepts, such as "students should know the geography of their country." Objectives are more specific. They reflect the new pieces of information or skills that you are actually teaching. There may be several objectives and lessons under a single goal. For example, an objective for the above goal might state: "At the end of this lesson the students should be able to name all of the major cities in their country." Teachers can use objectives to organize their classes and lessons, and to determine whether a student has actually learned information. Students can be tested on their knowledge of objectives.

A lesson plan is a guide for the teacher. It is a teaching schedule that is organized according to objectives. It is important that your objectives are very clear, so it will be easier for you to check that the students have learned what you intended them to learn. Thoroughly planned lessons will help to ensure continuity and progress in learning. The teacher should start every lesson with a very short period of questioning the students in order to find out what they know about a new subject or how much they remember from a previous lesson. Remember to check by asking questions to individuals, without allowing one student's answer to stand for the whole class. After a few minutes of questioning, the teacher should start the teaching portion of the lesson, by telling students new information or showing them how to do a new skill.

7.1 Making a lesson plan Every lesson should be planned before the teacher begins teaching. It is always a good idea to write down the plan before going into the class. There are several basic parts to a lesson plan, although there can be many ways of writing it out. The table below presents the basic parts of lesson planning and provides practical suggestions for developing a comprehensive lesson plan.

PARTS OF LESSON PLAN	SOME SUGGESTIONS FOR PLANNING
Objectives	

Content	State the objectives clearly at the beginning of the plan
Time	What do the students know already?What am I going to teach them? How long is the lesson? How long will each activity be? How do I start the lesson? How do I finish the lesson?
Teaching method and/or activity **Teaching materials**	**Note on timing:** The teacher must start and stop the lesson clearly. The teacher should not simply wait for the students to be attentive, rather s/he should command the attention of the students in order to maximize time. Remember to include preparation time (for example, when giving a test, a few minutes before and after are necessary for distributing and collecting the tests) in the plan.
Evaluation	What kind of teaching methods/activities will I use?What will the students do?How you will get the students to participate?
Comments	What is already available (for example, blackboard)?What is needed (for example, string, sand, sticks, leaves)? How will I check what has been learned and what is still to be learned? There should be space after the lesson plan for the teacher to record successes and difficulties with the lesson.

7.2 Assessment: What it is, Why it is done, How it is done

What is assessment? Teaching is a process of change. Measuring the amount of change is called "assessment," and it is an essential part of teaching and learning process. Assessment seeks to evaluate both the newly acquired knowledge of the learner, and also the effectiveness of the teaching. Assessment is critical to how students view their educational experience and achievement; to schools as guides for improvement; and to nation because they measure educational accomplishment.

Continuous assessment is the most popular and effective policy used around the world today.

Continuous assessment means that the students' work is done and marked throughout the term and the marks are carefully recorded. These marks are then accumulated and averaged to account for a percentage or total of the final grade. Assessment instruments vary; the most often used include the following:

- **Test (written or oral):** instrument created by the teacher to observe or classify students. Tests usually measure: (1) the amount the student knows; (2) the quality of the student's knowledge; (3) if the student has learned what was taught; and/or (4) whether the student knows enough to justify promotion to the next level.
- **Diagnostic test:** given to find out what the student knows before any teaching takes place. · Examination: Usually this is a serious type of test which is used to select or certify.
- **Other assessment techniques:** formal and informal observation of students, group projects, student homework, creative writing, project presentations, performances, etc.

Assessment of students should be open to the student and the student's parents or guardians. Often the marks are kept confidential to other students and persons, however. The teacher may devise his or her own system of testing, and a regular program is recommended (i.e., once a week or once every three weeks, etc.). However, a teacher should be careful not to spend all the time testing!

Why do we assess?

- **To measure the progress of the learners** You always hope that everything you have taught will have been learned. However, only a proportion has been learned, and not every member of the class has learned the same things. Your test results will show you what has or has not been learned, and which individuals have learned what.
- **To find out how deeply the learners know the material** In some cases, just being able to repeat information (i.e., writing capital letters) is sufficient. However, in other cases, you want to know that the learners can apply the knowledge (i.e., using capital letters properly in an essay).
- **To find out how many and which students learned the material** This will allow you to identify who needs extra help, and exactly what kind of help is needed. · To motivate the students Tests can force students to be serious, or students can regard them as a pleasant exercise. Either way, the students should desire to perform well.
- **To show the teacher what to teach next** Tests show the teacher what the students already know, and therefore they can amend their schedule to teach a certain part again, or to move on to the next segment.
- **To evaluate the effectiveness of the teacher** Tests should show the teacher where he or she has not been clear or where he or she was particularly successful.

How to test?

Instructions First, instructions should be very clear to the student, and should be placed at the very start of the test. For example:

Please fill in each answer blank. You will not lose marks for misspelled words. r You will lose marks for mistakes in grammar, spelling, or punctuation, or if the marker cannot read your answer.

There are several types of tests and assessment tools. A few will be explained here.

Objective questions. An objective question is one to which three is only one answer. Following are four possible formats for objective questions:
Fill in the blank: Delhi is the capital of _____.
Write the answer in the space provided: Which country is Delhi the capital of?

_____
Put in the correct form of the verb: Yesterday I (go) home at 19 hours.
Circle the correct answer: [It's/its/it's/Its] a long way to Cape Town.

Multiple-choice questions. This is a common type of objective test, and can be used to test most types of knowledge (except essay writing). For example:
Delhi is the capital of ... a) India b) Spain c) India d) Spain or
Delhi is the capital of ... a) India b) Spain c) Malawi d) China

Try to vary the placement of the correct answer, For example, try to avoid having the correct answer always be choice a) or choice d).

Subjective questions. A subjective question requires that the marker use his or her own judgment as to the correctness of the answer. Essays, summaries, and explanations are all subjective tests. In theory, subjective tests should be as reliable as objective tests, however, we recognize that many different teacher could mark the same essay answer differently. Therefore, it is important to "objectify" the marking as much as possible. One way to do this is to divide the question up into sections and allocate marks to each section. It is a good idea to tell the student how marks are being allocated. For example:

Describe your best friend (20 marks, total). Say how you met (3), what you like about each other (5), what you do together (5), and mention anything else which is interesting (7).

PRACTICAL SUGGESTIONS Essays can be exhausting and time-consuming to mark. A teacher may want to create a system in which, although all students would write an essay each week, the teacher read the whole essay on a rotating basis. The students know that the teacher is going to read his or her entire essay some weeks, but the students will not know when exactly the teacher will read his or her essay. This allows for maximum student writing, without the teacher overworking.

After the test! It is best to return to the student a fully-marked paper. However, if that is not possible, the student should be given back the test with a final mark. When returning papers, you should go over them, explaining why the correct answers are correct, and noting commonly made mistakes. It is also good to praise student with correct answers, being careful to praise as many students as possible, even those who are weaker.

How to mark tests All assessment should be evaluated and given a mark. Tests can be marked and tabulated in several ways.

Numbers. The most clear way of marking is to give the questions number values, and students can acquire points by answering questions correctly. At the end of the year (or set of lessons) the students with the most points have done very well, and the students with the fewest points may need to repeat lessons or may need extra help. An example of how to mark essay tests follows:

Essay 1	**Points possible**	**Points given**
Introduction contains the main idea	5	
Contains at least 5 pieces of information	5	
Well-organized	3	
Spelling and punctuation (no more than 5 errors)	3	
Contains concluding statement	3	
Legible handwriting	1	

In this manner, the teacher has set up a point system, where the students' goal is to get all 20 points.

Symbols. Another way to assess is to give one of three different symbols, such as a happy face (for excellent/good work), a passive face (for fair work), and a sad face (for poor/unacceptable work).

Letters. Letter grades are also effective, particularly in essay writing, group work, or general classroom management. Here are two examples given of how a teacher might give letter grades for general school activities, suing an A - NC scale where:
A = excellent, the highest mark
B = good, better than most other students
C = fair, acceptable, but needs improvement
D = poor, just enough to remain in the class
NC = not acceptable, the work must be repeated

Attendance, lateness (each teacher should decide on appropriate number of absences) Student misses school...

A	None to 3

B	4-10
C	11-20
D	21-30
NC	NC more than 30

Working with others Student is a leader, supports others, or helps others...

A	Almost all of the time
B	Most of the time
C	Sometimes yes, sometimes no
D	Needs improvement
NC	Not acceptable

7.3 Sample lesson plans

Grade 1 LANGUAGE: Mystery pictures

Purpose Many children have difficulty accurately giving or following verbal instructions. The purpose of this lesson is to encourage students to focus on the importance of clear, oral communication.

Objectives 1. Students will distinguish between words/phrases that help clarify communication and those that impede it. 2. Students will practice giving clear oral directions and will see the results produced by students who follow their instructions.

Activities

1. Give 1 pencil and 2 blank papers to each child. Read the instructions below, aloud, pausing after each one. Ask students to draw the "secret picture" on their paper, following the instructions as carefully as possible. THEY MAY NOT ASK ANY QUESTIONS. NO TEACHER HAND GESTURES ARE ALLOWED. KIDS MUST SIMPLY DRAW THEIR INTERPRETATION OF THE INSTRUCTIONS.

- Draw a short line.
- Draw another line touching the first line you drew.
- Put your pencil at the other end of the second line and draw half a circle.

2. After children are finished, post pictures on one half of the chalkboard. Discuss the differences among the drawings on display. Ask, "What questions did you want to ask, as we were doing this activity?" (e.g. How long should the line be? Should the line be horizontal, vertical or diagonal? Should the lines be straight?) DO NOT SHOW THE "REAL" PICTURE OR GIVE ANY HINTS.

3. Ask, "What words or phrases could I have used to help you draw the picture more accurately?" Write suggestions on board. (E.g. straight, 1" long, horizontal, right end, middle, etc.) DO NOT SHOW THE "REAL" PICTURE OR GIVE ANY HINTS ABOUT IT.

4. Thank students for their help in clarifying your language. Ask them to try again. Promise them that you will use clearer language during the classtime.

5. Have students follow your instructions again. Modify your instructions to make them clearer to the students.

6. Have students display their second pictures on the other half of the board. Show them your picture of the number 5. (Most pictures should be similar.) Discuss why the second set of pictures are more alike than the first. (It's easier to get your message across if you use clear, specific, language.)

7. Pass out 4?5 more sheets of paper, per child. Have children take turns picking a "Mystery Picture" from the stack. Being careful not to show the picture to the class, the child should give verbal directions for drawing the picture. The student reading instructions MAY NOT say letter names or geometric shapes. Class follows directions, without asking questions.

8. Place pictures on board and compare with "real" picture.

Time 30-40 minutes

Materials Chalkboard, chalk, Blank paper, pencils, "Mystery Picture" Cards (5?10 cards with a simple geometric design or a capital letter drawn on each card so the drawings can't be seen from the other side).

From: *gopher://ericir.syr.edu:70/00/Lesson/Subject/LanguageArts/ceclang.46*

Grade 2 MATHEMATICS: Relations and graphs

Objective By the end of the lesson, children should understand the concepts of greater than, less than and equal to. As well, they will practice making and using a graph to measure quantities.

Teaching method and activities

1. Divide the class into small groups of four or five students each. Have the students draw lines on a large sheet of paper to form a grid. Each square of the grid should be large enough to contain a letter or a character and there should be at least 15 squares across and 15 squares down. Each student can draw their own grid, but only one per group is needed for this exercise. Perhaps the others could be saved and used for another lesson.

2. Each group member should print his or her own name as well as the name of a friend on the paper, with one letter in each box. There should be a total of 8 to ten names on the single piece of grid paper.

3. Have the students refer to the names on the grid paper to answer these questions:

- Who has the longest name?

- Who has the shortest name?
- Can you find someone with a name the same length as yours?
- Can you find someone whose name has one more (or one less) letter than your name?

4. On the board, organize the names into some type of graph. Plot the names on the graph by length. Ask students questions such as:
- Which name length is most popular?
- [fill in name] was not here today. Where should his/her name go on our graph?
- Can you think of anyone with a shorter name than [fill in name]?

Time 30-40 minutes

Materials Paper, pencils, straightedge (ruler or edge of a book)

From: *Mack, Nancy. Bosnia Project: Elementary Mathematics Module: Patterns, Relationships, & Number Sense. University of Pittsburgh.*

Grade 2 SOCIAL STUDIES: Storytelling

Objective By the end of the lesson, children should understand that stories have a beginning, a middle, and an end. Sometimes they can have a moral, or a lesson, or a conflict. Students should be encouraged to identify parts of the story and teachers might suggest a creative exercise where the children make up their own ending to a story. Students should practice listening skills, by discussing the story or even trying to retell the story after it is read to them.

Teaching method and activities Teacher tells a story and children listen. Group discussion, analysis of elements of the story (plot, characters, beginning, ending, conflict, etc.).

1. The teacher reads a story to the children, for example, The Wise Men and the Elephant. Once upon a time, there were five wise men who lived together in a small town. The five wise men were blind. One day, an elephant came to the town. The five men wanted to see the elephant, but how could they? "I know," said the first man. "We will feel him!" "Good idea," said the others. "Then we'll know what an elephant is like." So the five men went to see the elephant. The first one touched the elephant's big, flat ear. He felt it move slowly back and forth. "The elephant is like a fan," the first man cried. The second man felt the elephant's legs. "He's like a tree," he cried. "You're both wrong," said the third man, who was feeling the elephant's tail. "The elephant is like a rope." Just then the fourth man pricked his hand on the elephant's sharp tusk. "The elephant is like a spear," he cried. The fifth man was holding the elephant's trunk. "You are all wrong," he said. "The elephant is like a snake." "No, no, like a rope." "Snake!" "Spear!" "You're wrong!" "I'm right!" The five blind men shouted at each other for a whole hour. And they never found out what an elephant was like.

2. The teacher then begins a discussion by asking the children to remember how many wise men there were, how many characters there were (including the elephant), and make sure the children know what the different words mean (elephant, spear, etc.). A vocabulary lesson could also be given before the story is told, so the children will know all the words beforehand.

3. The teacher can then guide a more thoughtful discussion, by asking, "What was the problem?" The students should answer that each man could see in his mind only what his hands could feel. Therefore, each man believed he had the truth, and no one wanted to listen to what the others had to say. "Were the wise men really wise?"

4. For more advanced students, the teacher can present a challenge by asking, "How could the wise men have discovered what an elephant really looks like?" In either oral or written form, have them reconstruct the ending.

Time 30-40 minutes

Materials You need only a story for this lesson. It does not need to be written down. However, you may want to write on the board some of the children's ideas, list the characters, etc.

Grade 1 NUTRITION: Clean water, dirty water

Goals and objectives The purpose of the lesson is help children recognize clean water and dirty water and know how to get clean water.

Teaching method and activities

DISCUSSION

1. Spend some time discussing water with the class:Where does water come from? What do we use it for?What will happen if we have no water at all?

2. Then lead the class into the next stage
:Is water the same wherever we find it? Can water do us harm? Where would we find the best water? What water should we avoid?Can we always see what water is good/bad?

3. Present the following facts to the class:

- Water can have bacteria, worms, and other living organisms in it which are too small to see.
- We can get diseases by drinking water which has been affected by animals.
- Children can be very badly affected by dirty water (diarrhea, worms, etc.)
- Boiling water reduces most of the danger.
- Importance of collecting water from clean sources.

4. Ask children to think/discuss the following question:If everyone knows that water should be boiled, why don't they do it?

5. Children may give you the following questions:People don't believe they will get diseases from the water. I cannot tell my mother to boil the water. I know we cannot get/afford enough firewood to boil water. Etc.

ROLE-PLAY
6. Break the class into groups. Each group will prepare a small role-play to act out the situation discussed in Question #5. Ask the children to suggests HOW to convince their mother, community members to change their behavior.

Time 30-40 minutes

Materials No specific materials needed.

From: The Spark handbook: A guide for teacher in Zambia's community schools. Zambia: UNICEF.

Grade 1 HUMAN GROWTH AND DEVELOPMENT: The Touch-n-Feel Box

Goals and objectives This lesson is used as an introduction to study of living and non?living things through the use of tactile perception or the sense of touch. The object of the lesson is for students to identify one or more living and non-living things through the use of tactile perception, better known as the sense of touch.

Teaching method and activities Have students put their hand in the box and attempt to describe to the other students what it is that he or she is feeling. This is a great place for the use of adjectives and to tie it to your language component. Also a great place to use words like fuzzy, smooth, jagged, etc.

You might also ask your older students to go out into the school yard and find a leaf or a rock or a seed that matches what he or she felt and bring it in to compare to the one in the box. This leads to classifying and more use of words like rough, hairy, smooth, etc.

An extension of this lesson would be for the students to each make their own touch n feel box. Encourage them to come up with difficult things to identify. Have students make a list of describing words used to identify the object in the box.

Caution must be used as to the objects used in the box. Nothing that could be dangerous to fellow students is to be used. This is a great place to introduce awareness for the environment. Also never allow any student to put a live animal in a box.

TYING IT ALL TOGETHER: This is a very good experience for the second grader who has not done very much classification but can also be used with fourth and fifth graders with a little bit of ingenuity and a variety of sets of objects suitable for the different grade levels.

Time 30-40 minutes

Materials
1 set of different textured rocks.
1 set of various fruits or vegetables.
1 set of nuts such as pine cones, acorns, pine nuts, etc.
1 set of leaves found in the school yard.
1 set of seeds found on the pant legs of the students.
The list could go on and on by using your imagination and available materials.

From: *gopher://ericir.syr.edu:70/00/Lesson/Subject/Science/cecsci.153*

Grade 2 PHYSICAL TRAINING: Snake in the Grass

Goals and objectives The major objective of the lesson is to help students develop basic mobility and quickness.

Teaching method and activities Game is played on the half court of a basketball court. They serve as boundary lines. One person lays down on the free throw line. They are the snake. The rest of the class gets inside the circle with the snake and must touch the snake with one finger. When you yell SNAKE IN THE GRASS, they all jump back away from the snake and run around. The snakes must stay on their stomach as they crawl around. They are trying to tag the runners. If a runner gets tagged or steps out of bounds, they must get down a become a snake, also. The game continues until there is only one runner left. If a runner tries to jump over a snake and steps on them they, also, become a snake. This game gets real crazy as there becomes more and more snakes. Runners really have to be quick at the end of the game not to get tagged.

Time 30-40 minutes

Materials No specific materials needed.

Grade 3 SAFETY AND FIRST AID: Safety rules in emergencies

Goals and objectives The objectives of this lesson are:

- to identify different types of emergencies;
- to set different safety rules for emergency situations.

Teaching method and activities
1.Encourage children to name or describe as many different kinds of emergencies as they can (such as a flood, an earthquake, a tornado, a hurricane, or an explosion, etc.) Record their ideas on the chalkboard or a large piece of newsprint.

2.Pick one of the suggestions, for example, explosion. Write its description at the center of a circle. Then ask children to picture themselves coming to school on a day

like that. Write children's responses outside the circle (or draw them), then connect them to the circle with straight lines.

3.Divide the class into several teams, each of which is responsible for thinking of common?sense rules for one type of emergencies. Be sure children understand that their common?sense rules should include safety rules.

4. Have teams brainstorm for a set period of time. Then, on poster card or chalkboard, record (or have a student?volunteer record) the common?sense rules for each type of emergency.

5. Encourage team members to make drawings of safety rules for their posters. Or they might draw themselves in an emergency situation. Add the drawings to the poster.

TEACHING OPTIONS Involve family members in developing safety rules for different kinds of emergencies. Divide a paper into quarters and list each set of rules under a descriptive title. Leave space for parents or other family members to add their suggestions if possible.

Refer to the posters as each kind of emergency occurs. Encourage children to re? evaluate the rules and amend them if necessary.

Should children become alarmed after hearing predictions of emergencies (such as blizzards, hurricanes, earthquakes, landmines, etc.), remind them of their safety rules and stress that there are ways of protecting ourselves in some kinds of emergencies.

Time 30-40 minutes

Materials Chalkboard and chalk

Grade 3 SCIENCE: Discovering the Earth's Journey Around the Sun

Purpose The revolution of the earth around the sun is a phenomenon that is hard for students to deal with concretely. The following lesson will help students to more fully understand our planet's relationship to the sun.

Students will observe the following about shadows:
1. The length of a shadow changes from day to day, week to week.
2. The angle of the suns rays to the earth changes from day to day, week to week.

Teaching method and activities On the school grounds find a shadow cast by a fence post, tree, or any other object. Have students observe the length and position of the shadow. Students may then make predictions about any changes that occur in the length and direction of the shadow throughout the day.

Allow students to observe the shadow throughout the day. Students should then make predictions about the shadow's length and angle of the ray to the earth if it is measured at the same time every day. Students should then measure the shadow each day and graph the results. (12:00noon is an ideal time)

At the end of each week find the average length of the shadow and angle of the suns rays to the earth. Students will see a change in the shadow's length and the angle of the sun's rays.

TYING IT ALL TOGETHER: Students should conclude from their data that the position of the earth to the sun changes with the seasons. Hence in spring the shadow will show that the angle between the rays and earth has grown bigger and the sun is more directly overhead thus producing warmer temperatures.

Time 30-40 minutes

Materials No special materials needed.

From: *gopher://ericir.syr.edu:70/00/Lesson/Subject/Science/cecsci.154*

Go to the Next Chapter