



# **TEACHING AND INFORMATION DISSEMINATION METHODOLOGIES**

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## **TEACHING AND INFORMATION DISSEMINATION METHODOLOGIES (WHAT)**

### **Expected outcomes**

- Participants equipped to teach in high schools, vocational schools and technical colleges
- Participants equipped to properly deliver extension and advisory services to farmers

### **WHO? (Target Groups)**

- Undergraduates
- Diploma students

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## INTRODUCTION

The educational landscape is constantly shaped by political, economic and social forces. What does it mean to be a teaching professional given today's challenges. Three questions must be answered by all who want to become teachers: what does it mean to be a highly scaled teacher? What are the obstacles that get in the way of that and, what can be done to overcome these obstacles? Nobody goes into the teaching profession for money, fame or status. There are many who accidentally enter the field when they cannot find placement or employment in their areas of specialization. But teaching is a profession guided by specific principles which must be employed by all interested in becoming professional teachers.

An individual might have specialization in specific subject matter, without the basic principles (pedagogy) of teaching, he/she will not exhibit professionalism as a teacher, and this makes it a matter of must for anyone interested in the teaching to acquire the pedagogical principles of teaching.

Materials in this manual are intended to expose future teachers to the techniques and methods (pedagogy) of teaching that will prepare them to adequately and professionally impart knowledge to their students.

## PLANNING

Planning can be defined as follow:

The process of making a plan;

The process of orderly arranging, preparing, developing, forecasting, designing or organizing something to achieve a specific goal.

A plan can be considered as a blue print, direction, police, idea, strategy, design, guide, proposal etc.

A Plan can be described as a long range (three or more years), medium range (one to two years) or short range (less than one year).

An educational plan is the systematic and orderly arrangement of materials to be taught.

## KINDS OF EDUCATIONAL PLAN

**Long range plan (curriculum)** – contains all of the materials that should be taught for a particular academic year. It is from the curriculum that the semester plan, weekly plan and the daily plan come from. The curriculum gives specific instructions as to how the lesson for specific grades should be taught.

**Medium range Plan (Semester)** – the semester plan comes from the curriculum for grade schools. The academic year for grade schools is divided into two semesters. Each semester contains specific materials that should be covered for that semester. For colleges and

universities, the plan covers specific courses offered for a particular period of time – a semester, etc.

**Short range plan (daily, weekly or periodically)** – the short range plan is actually a subset of the curriculum. This plan synthesizes or breaks down the materials obtained from the curriculum to the level of the learners – this is the job of the teacher.

Planning is important in whatever a person undertakes to do whether to build a house or take a trip. So too must the government, parents, teachers and the education of the youth in the society.

### **THE IMPORTANCE OF A PLAN**

Professionally minded educators do not question the need to plan lessons but may differ on way and the purpose the plan is made. Plan can be considered from two standpoints: 1. from the administrator's point of view, and 2. from the teacher's point of view.

From the administrator's point of view:

- To obtain evidence, especially from first-year teacher, or a teacher's ability to prepare a professional teaching plan.
- To evaluate how well a teacher prepare and implement a plan in actual teaching situations.
- To use the plan as a guide for substitute teachers, especially when the need for a long-term substitute is anticipated.

From the teacher's point of view:

- To view and prepare one-self in terms of what instructional activities to emphasize and how they should be directed.
- To avoid instant planning, impromptu or off-the cuff teaching, which because it lacks a good foundation, often results in poor teaching.
- To use as future reference; to re-inforce the strengths and improve the weaknesses revealed in the previous plan and the teaching of it.
- To earn respect from the students for the fact that the teacher prepares his/her work.
- To ensure coherence with respect to content.

Generally, planning is important for several reasons which are:

- It provides specific objectives against which students and teachers can be evaluated.
- It facilitates the effective use of class time.
- It provides for the listing and collection of instructional materials before teaching.
- It serves as a record of what has been taught and how it was taught.
- It can facilitate teacher substitution of instruction in case of his absence.

- It facilitates test construction for student assessment.

## THE CURRICULUM

The curriculum is a long range plan which may refer to the entire scope of activity for the primary school, or it may refer to the program for a particular grade level or subject. Thus, we speak of the primary school curriculum. Even though the curriculum is the responsibility of the ministry of education, but parents, teachers, other educators and even students contribute to its preparation. It includes the statement of goals selection of content, activities and the methods of evaluating the results.

## THE UNIT PLAN/SCHEME OF WORK

The unit plan is a medium range plan built around a specific topic. Units are specified in the curriculum and text books. A unit consists of several lessons and it may last for one to several weeks. It too includes the content, objectives, learning activities and means of evaluation.

Format/sample of a unit plan

Name of school: **Matilda Newport High School**

Name of teacher: **James Sumo**

Subject: **Agriculture**    Period/Duration: **First marking period/Week 1 – 4 (Feb. 1 – 28, 2015)**

Grade/Level: **12<sup>th</sup> grade/Freshman**

Unit topic: **Diseases of farm animals**

DATE	WEEK	TOPIC	OBJECTIVE	METHOD/PROCEDURE	MATERIALS & REFERENCE	EVALUATION	REMARKS
Feb. 1-7	1	Diseases KINDS OF DISEASE	Define List kinds Effect	Lectures Demonstration Role Play presentations	Animal husbandry in the tropics – G. Williams, 3 <sup>rd</sup> ed. Pp. 29-65	Oral. Classwork, Quiz, assignment	Out of 50 students 40(80%) passed; hence, objective was

							achieved
Feb 8-14	II	Poultry disease , Kinds Treatm ent	“ List poultry diseases; Identify poultry drugs; Practice usage of drugs	“	Animal Science in the tropics pp. 56 -75; <a href="http://www.animaldisease.com">www.animaldisease.com</a> ; syringes+ needles, drugs	“	“
Feb. 15-21	III	Ruminant disease s; Kinds; Treatm ent	List & identify ruminant disease; State which affect large and small ruminants;	“	Animal Science in the tropics pp. 56 -75; <a href="http://www.animaldisease.com">www.animaldisease.com</a> ; syringes+ needles; drugs	“	“
Feb. 22-28	IV	Swine disease s; Kinds Treatm ent	List swine disease; Identify drugs for swine; Practice usage of drugs	“	Animal Science in the tropics pp. 85 -95; <a href="http://www.animaldisease.com">www.animaldisease.com</a> ; syringes+ needles; drugs	“	“

## ***LESSON PLANNING AND PRESENTATION***

Introduction

There are several skills teachers need to acquire in order to satisfactorily and efficiently transmit the contents of lessons to pupils. The efforts teachers make toward learning and applying these skills in the practical teaching situation largely determine his/her status as committed or non-committed teacher.

The topic under review is one of the skills and is the beginning of a good classroom management. Lesson planning is one of the most skills of instruction in relation to the contents of the school curriculum. It is however one of the one of the most neglected areas by educators. Lesson is not the same as preparing for class. Some teachers prepare for class by mastering the subject matter content, while others prepare by writing notes only. But planning a lesson on the other hand is the systematic and scientific approach to preparing for instruction

The Lesson Plan – What is a lesson plan? It is a step-by-step instructional design of the important elements in a lesson arranged in the order which the teacher expects to teach them. The lesson plan is a short range plan. From the curriculum, a teacher chooses a topic to develop a lesson plan which is a plan the teacher makes to use for a single class period. The Lesson Plan has various formats. They may use the format adopted by the system in which he/she works. Where there is no specific requirement he/she may use the format that is easy for him/her. In any case, all plans should include some essential elements. All lesson plans should include the following elements:

1. The name of the school,
2. The name of the teacher
3. The grade or class,
4. The room number. E.g.: room 02
5. The date on which the lesson is taught,
6. Time/Duration: How long lesson will be taught.
7. The subject: the source from which teaching is to be done. E.g.: Math, English, etc.
8. The topic: specific content(s) to be taught. E.g. Identifying nouns in sentences,
9. The objectives: why should students learn this lesson in English?) Objectives should be stated in terms of the learning outcome to be achieved by the students-what students must do as a result of the learning experience. What skills, attitudes and abilities we want the students to develop. A lesson plan should contain all kinds of objectives because all teaching should aim to produce a change in the whole child. It should help the student develop intellectual abilities, It should develop the right attitudes to acquire useful skills. Therefore, when a lesson is planned, it should have objectives that will develop all the areas. For example, when students learn facts or explain why something is as its, they are using the intellectual ability. When they show respect to a person or thing or appreciate something, they are using the area of their development that deals with attitudes and appreciations. Lastly, when they form their letters well or make things they are acquiring psychomotor skills.



10. Instructional materials: these are aids to be used to teach a particular lesson in order to achieve the objectives. Examples: Map, globe, plant specimens, charts, drawings, rule, graph sheets, etc.
11. References: Textbooks, magazines, web sites, encyclopedia, etc.
12. Procedure/Learning activities/Method: (teachers and students activities), this section must be written in actual term. Procedure involves all that students and teacher must do to achieve the stated objectives of the lesson. There are three categories of activities involved in the procedure: 1. Initiating activities or motivation – how will the lesson start? This activity would serve one of the several functions: getting the students interests; focusing on the problem; setting the stage for teaching. 2. Developmental activities – this includes or involves what the teacher and the students do to achieve the objectives. This includes a brief description of all learning activities to be used and key questions to be asked sequentially arranged. 3. Culminating activities – (sometimes called closure or summary) the teacher should give a brief overview of the content developed.
13. Evaluation – in this section you asks students questions that apply to what they have learned. Questions should measure the anticipated outcome. This is where you determine whether or not the objectives of the lesson taught were achieved. Evaluation should always be done at least five or ten minutes to the closure of class. This can be done orally or through short written questions.
14. Assignment – Give problems or activities related to the previous lesson. It should be relevant to the students learning experiences. It may reinforce the lesson or it may be intended to help students prepare for the next day’s lesson. Sufficient time should be allowed to give the assignment. It should be written on the board it is not given in a handout.
15. Conclusion/Remarks – Whether or not content was learned and why.

In addition to planning, teaching and evaluating teachers must also keep accurate records. Teachers must keep copies of their daily lesson plans as records.

Other important records that should be kept by teachers are the students’ attendance and performance records. Students’ performance on assignments, quizzes, and test individual or group projects must be kept.

### Importance of Lesson Planning

It is necessary to note that whatever to be done must be properly planned. This is observed in mankind’s life. If you don’t plan your lesson then you have already planned not to teach. In view of the foregoing, lesson planning does the following:

- Upgrades teacher’s academic performance and competency
- Enables the teacher to state specific objectives of his/her lesson clearly
- Aids the teacher in selecting relevant instructional materials.
- Gives the teacher confidence in what he/she teaches.
- Helps the teacher to organize his/her work so as to avoid beating around the bush and

- Compels the teacher to be in line with the curriculum prescribed.

### SAMPLE OF A LESSON PLAN

School: Newport Jr. High School

Teacher: John Flomo

Grade/Class: 2<sup>nd</sup> grade

Room #: 03

Date: Oct. 4, 2015

Time/Duration: 8 – 8:45 a.m. (45 minutes)

Subject: Arithmetic

Topic: Adding two-digits numbers vertically

Objective: At the end of the instructional period (45 minutes), students will be able to add two-digit numbers vertically with 75% accuracy. Examples:

$$\begin{array}{r} 34 \\ +23 \\ \hline 57 \end{array} \quad \begin{array}{r} 25 \\ +54 \\ \hline 69 \end{array} \quad \begin{array}{r} 82 \\ +27 \\ \hline 109 \end{array}$$

Reference/Teaching aids: Elementary math for Liberian School, Pages 37 – 39; twenty pieces of bottle stopples, stones or marbles.

Methodology: Demonstration, Lecture, Problem solving or roll play.

#### Procedure

Teacher's activities	Students' activities
Initiating: tell a story; give a joke or give some news	Listen and pay attention
Developmental:	
Give notes	Copy
Demonstrates/Explains	Watch, listen & take notes
Solves sample problems	Watch and take notes
Calls students to solve problems on board	Come one at a time and solve given problems; others watch.
Ask questions	Answer questions
Answers questions	Ask questions
Culminating: Summaries	Watch, Listen and correct notes

Evaluation: Two problems can be given to the students in the classroom for five minutes and the papers exchanged and corrected by the students. 45 38

<u>+23</u>	<u>+68</u>
<u>68</u>	<u>106</u>

Conclusion: 35 students out of 45(77.77%) answered the evaluation questions, hence the objective was achieved.

Words that should be used in stating instructional objectives in a daily lesson plan are called behavioral terms. They present activities that can be achieved and demonstrated in the classroom. These words include: jump, kick, run, solve, add, subtract, spell, read, dramatize, play, remove, measure, summarize, multiply, divide, calculate, walk, describe, etc.

Words that should not be used in stating instructional objectives are called loaded words. They are called loaded words because they cannot be easily measured in the classroom. Examples of loaded words are: to know, to understand, to comprehend, to use, to learn, etc. It is difficult to measure this objective: At the end of the lesson, students will understand the lesson. How do you know that the students have understood the lesson?

### ***LESSON PRESENTATION***

This is the act or process of presenting the lesson to the students. This actually the act of imparting a planned lesson to students.

In order to present a planned lesson to students, their interest must be aroused and their attention attracted. This should be done immediately upon entering the classroom, without which there will be a boring class and learning will not take place.

Teachers use different means to grasp the attention the attention of their students. No matter what the situation is, a teacher must arouse the interest of his or her students and make the lesson interesting enough to involve the full participation of every student in the classroom.

Teacher must learn to keep a smile on their faces while in the classroom, then don't teach for that period or day. Since a teacher must teach any how he/she must do all things possible to keep a lively class.

### ***CLASSROOM MANAGEMENT***

This is the orchestration of classroom Life: Planning the curriculum, organizing procedures and resources, arranging the environment to maximize efficiency, monitoring students' progress, anticipating potential problems and possible solutions.

## **What are the causes of student misbehavior?**

The teacher: the type of control produces a climate which has a powerful effect on learning. If the teacher employ a dictatorial control, it stifles initiatives, produces antagonism. On the other hand, if the climate is built on a laissez-faire type of control, it leads to anarchy and to cessation of most organized efforts. If the teacher creates favorites, coming to class late, did not plan and prepare well, your appearance, the choice of words during instruction, not audible and being impolite.

Other students: by mocking, teasing or pulling on them, move with rude or bad friends, etc.

Condition at home: the loss of a parent or supporter, rape (abuse), deprived of: food, love, care attention, affection, freedom of expression; suspicious of other people's attitudes and intention when unduly graded or negatively or excessively subjected to violence; develop excessive guilt about his/her body and its functions; social rejection of embroiled in parental discord; worry and physical condition.

## **How can I manage a class?**

There are basically two ways to control a class: (a) by preventing those things that will cause disturbances and (b) by correcting those behavior problems that will arise.

## **How can I prevent problems in the classroom?**

To start with, the teacher must first know himself. You can learn all the principles and techniques but without being creative or using experience, you will not get anywhere in the classroom. Publilius syruss said, "It takes a long time to bring and you need time to develop"

A teacher must have emotional maturity (control of temper), intellectual maturity (well informed about his subject); Social maturity (friendly and have interest in the students); sell his programs and ideas. When a teacher enters classroom, he/she should consider the organization or environment of the class. There should be: (1) good lighting; (2) good seating capacity; (3) good floor); (4) a black board that does not reflect; (5) cheerful and pleasant surrounding; (6) cleaned and furnished (flowers, desk, chair, etc.).

## **Getting the attention of the students/pupils**

The task of direction is to stimulate the constructive interest of students. There are two factors to get class attention in order to start:

By using a signal, being business like, reasonable and definite

By some kick-off device like the chalk board for cryptic phrase symbols or question.

Increasing the students interest

The Kind or person you are and your attitude toward boys and girls (students) may be much important in attracting their attention than any other thing you do. You don't have to tell them that you love them, but what you are speaks louder than what you say. If you antagonize them through poor attitudes, unduly harsh remarks, sarcasm, unreasonable threats, unfair comparisons

and similar actions is not the way to promote learning. Students learn by motivation. Motivation is the application or use of incentives (external and internal) for the purpose of using a pupil or student to perform in a desired way. Give commendation when and where it is due. Do not fail to recognize creative ability in a child.

### **Sources of problem in the classroom**

Problem in the classroom come from many source and they are of different dimension. A problem is an abnormal behavior by a person. Some problem that occur in the classroom are: Stealing, Subbornness, disrespectfulness, disobedience, spying/cheating, bribing etc.

### **Problem in the classroom**

School administration (b) Teacher (c) Students and (d) the society/ community

### **Problem from Administration**

Over- crowdedness (2) Poor ventilation (3) Lack of control over teachers and students doing their own thing (5) Lack of cooperation between teacher and Administration (6) Frequent interference: announcement, allowing vistors to classroom, calling out teaching etc.

### **Teacher Centered problem**

(1)Poor lesson planning (Vague instructional objective, poor method of teaching poor presentation, teaching above or below level (3) Unprofessional way of constructing test (3) Being Bias (picking and choosing (4) Groom and dressing (5) Displaced aggression (6) Emotionally unbalance (lack of self, suffering from phobia or feel inferior, feel insufficient) (7) Inadequate knowledge of subject (8) Being a teacher pepper.

### **Student centered problem**

Lack of basic needs (2) Poverty (3) Need for power (Firmer Tighter) Retardation/physical defects (5) Over-grown (too big to be in the class) (6) peer pressure (7) Kelp limerick (unseen impulses to seep).

### **Common works centered**

- Students from poor home.
- Don't eat well ( malnutrition)
- Don't sleep well (insufficient seep and rest)
- Chill labor: Selling before or after school
- No study
- Unemployment of parents leads to tuition not being paid.
- Fear of failure, punishment, social and family disapproval as well as low grades do not effectively serve as motivating factor. We should advocate for the discovery of the basic needs of pupils and the special interest of individual.
- Lacks of psychological needs. Needs are not met as love affection, parental care, and self-actualization;

- Other needs: Clothing, shelter, food etc.

Let the students accept the subjects by telling them why are they studying it, what good it will do for them now and later and encourage them to have interest. Connect the day's work with a recent school happening, a current event, a news broadcast, a movie or any other information known by the pupils which can be tied directly to your objective for the class. Bring objects, picture, specimens and something else to heighten interest. With big pupils use big issues, a cleverly worded or other questions or other thing.

### Maintaining interest and attention

Pupils/students need motivation in order to develop and maintain interest. There are some helps:

We feel – the continuous use of “I” irritates. Many students will become sharply critical of you without justification, use let us now turn to, we want to do, what do you think? Democratic control can produce maximum of self-direction and can aid the pupil in acquiring skills and work habit without carry-over value. This make the pupil feel as part of the class.

Humor and good feeling – don't be frown all the time but laugh with pupil at time that are really humorous. Sometimes, share some jokes, not constantly.

Multiple – responds techniques – like let see the hand of all who agree, or disagree. While a math problem is being solved, let the others be given the task to the accuracy of the result.

Avoid the class Tate-a Tate- when one student is responding, don't look only at him but learn your hear in his direction to show that you are listening, run your eyes over the class and then gradually back away. By moving away he will speak louder.

### **Controlling or Managing the class**

You only need to be natural, sincere and genuinely interested in pupil and skills. Maintain your distance and your self-respect.

Physical Control – don't create fear or compulsion for student to work. Real learning takes place a a favorable rate when the attention, interest and effort are generated from within the learner himself. Some things a teacher can do:

1. Your posture can help in getting and holding pupil attention. Youngsters can be but not driven. Your enthusiasm, good posture and energetic attacks on the problem at hand will have a powerful influence on your class.
2. You don't need to hypnotize pupils to exercise eyes control but your gage not at a particular place. By directly looking at students whose attention is wandering from the lesson will claim his/her attention;
3. Move about the classroom to go close to the danger spot of interaction or disturbance; don't sit one place. If you bend over your desk slouch in your teacher's chair, it gives the

pupil the clue to take their ease too. It takes time and diligent work to build your own personal set of skills.

- Don't tear down student before other students,
- Don't brag about what you know
- Know your lesson or subject matter,
- Be patience to listen,
- Involve the students,
- Be punctual
- Be mindful of the methodology
- Be patience,
- Be eloquent,
- Have a reasonable grading system
- Be spiritual and prayerful,
- Be humble,
- Be modestly dressed,
- Be a disciplinarian

### **Using the corrective Method of controlling a class**

Before instituting this measure, you need to firstly know the condition of the student(s). It's because of physical, mental, emotional or social problem that cause the child to behave the way he/she did. What if the child is a slow learner which can be caused by glandular irregularities, emotional disturbances, physical defection (vision, hearing), lack of motivation, poor habits of study, reading deficiencies, too many out-of-school responsibilities, unsettled home condition or poor instruction. Will you punish him/her for not responding like others? If your answer is no, then you are correct. Here are some helps:

- Be patient, friendly and helpful,
- Use simple step-by- procedures,
- Arrange remedial sessions,
- Find materials adapted to the ability of the slow learner,
- Illustrate concepts in two or three different ways,
- Use many real objects and other aids in addition to the written and spoken words,
- Rely heavily on the chalk board for emphasis and repetition,
- Make each step of a demonstration graphic and obvious,
- Formulate real problem with pupils that arise from their own lazy lives to promote learning of concepts and generalization
- Enrich the activities with tape recordings, pictures, diagrams, sketches, films, slides etc.

- If the child is intuitive, always coming late, stubborn, stealing, always fighting, cheating or lying, you can firstly employ counselling while you take up time to study the child's background.

Here are some counseling procedures:

- Invite the student politely
- Pray with the pupil or student
- Inquire about behavior by using polite or kind words,
- Talk less (25%) let the pupil or student talk much (75%),
- Know how to ask questions,
- Why counseling, don't write,
- Don't interrupt when the pupil or student is speaking,
- Let the pupil initiate the solution.

The word discipline has various meaning depending on the area of concern. In the military it means observance of all basic regulations, unquestioning obedience, unthinking conformity, etc.

In the school setting it means self-control. However, there is no true discipline other than self-discipline. The one who wants to discipline must himself be disciplined. The reason for punishment should be to correct the pupil or student and not to harm him or her for deterrence and reformation.

### **Negative discipline**

Remember the following things:

- Stop when you are tempted to make rash threats. Think of the result before speaking,
- Stop before comparing a good student with a poor one
- Stop when you are tempted to use sarcasm, it will lower your dignity as a teacher,
- Stop when you are tempted to resort to corporal punishment,
- Stop before ordering a child to stay out of class,
- Stop before censuring a child publicly.

Learning situation – refers to the environment in which the learners find themselves, and in which the learning process takes place. Some may be immediate such as the classroom or the library in which students are applying themselves to the task of learning. Some may be remote but still relevant such as the relationship to the school board and the principal of the school.



When group of people comes together in one place, there must be problem. These must come from some area. The classroom is not an exception. The classroom is not an exception. Therefore we need leaders in the in the classroom to control these problems. The leader must be qualified. He/she must have some qualities in him as a teacher. These qualities will help him/her to make sound quality decisions and control the problem for effective learning.

### **The qualities of a classroom teacher**

Physical energy – the teacher must be strong. He/she needs to move around the classroom.. He/she needs to supervise the students. To be strong means he/she must be healthy. To have a healthy body, he needs food, enough sleep, or enough rest. The teacher who burn himself/herself up in his/her own affairs will have no fire left for his/her teaching. (Do not go to bed very late).

Perseverance: do not give up as a teacher. You must continue to press forward. Your goal should be, if the thing is worth doing, it is worth doing it well. Perseverance is not the same as stubbornness. It means despite every obstacle, you do not give up.

Responsibility: every teacher must be responsible because he/she might be taking care of the children of:

- A president of the nation
- Minister of the nation
- Preachers of the nation
- Community members of the nation
- Different cultural backgrounds

The teacher must be to account for these children during school hours. A sence of responsibility require that he/she should be aware of what has been entrusted to him or her and should always work in their interest (the children).

Initiative as a teacher: the teacher should be able to do things on his/her own. Do not wait for command from the principal or other school authority before you Cn control your class, etc. A wife with an initiative will always know the type of food her husband needs every day. The classroom teacher should know what lesson is unusual and interesting. He must always think of fresh approaches. Progress in society comes through the action of men of initiatives. The best teacher possesses the best great initiatives.

Self-control: a teacher must possess self-control. If a teacher is not able to control himself, he will not be able to control his class. The teacher must control his temper, when he/she is vexed. He must be able to control his anger. An emotional teacher will always do more harm than good in the classroom or school. Lively students always play on the mind of this quick temper teacher. When a teacher is vexed or angry, he should at least give himself some time before reacting or making a decision. The quick temper teacher always loses his respect.

**Decisiveness:** The teacher yes must be his yes and his no must be his no. The students understand leaders who make clear their intensions. The teacher should avoid making hasty decisions which may be regretted later. Children respect a teacher who is business like, know

what he wants and means what he says. The teacher must solve his own problems than run to the principal or supervisor always.

**Sincerity:** the teacher must be honest and sincere in dealing with issues. He should be fair in grading his students, in making decisions between students, in selecting his lessons- this means his lesson should depend on the age and level of the students. For a five day old baby needs only water and breast milk. Anything more than that may intent to kill the baby, so is a lesson. Insincerity comes about when you intent to do it your own way knowing it is not right. A sincere teacher gain respect from his students.

**Humor:** To be humorous means to be cheerful, friendly, sympathetic, and sincere. Keep some smiles on you face. Humor is a precious asset, so, if you want to be humorous you must be sincere and always put a smile on your face Humor is not the opposite of being serious but rather the force which restrains you from you from being too serious. It is not also the sign of weakness. It is what each teacher should strive for. It is an ideal relationship for both teaching and learning. Making fun of children is not humor. It is rudeness and bullying.

**Loyalty:** this means doing the best you can. As a teacher, the first thing you need to do is to hold on to your profession with unchanging hands. The second is to hold on to your school/organization. The third is to respect the authority of your organization/school. The fourth is to love your community. The fifth is to love your government. And the sixth is to love God. With many difficult children, teach things that are not connected to you your problems. Some will be insulting others. Some will be fighting the weaker ones. Some will say unpleasant words to you. While others will come to school smoked and drunk. You have been selected in the classroom to change these bad behaviors to good ones. This is why a teacher must have self-control and be emotionally balanced.

**Leadership:** by the nature of a teacher, he is a leader. He should lead his students to a positive direction. He must aim at his students becoming future leaders. Therefore his/life style must be good. He should serve as an example to be followed. He should be transparent. He should love every child in his class. He should respect them. He should take their views into consideration. These are the secrets of a good leader.

## **TESTING, MEASUREMENT AND EVALUATION**

Anyone who aims at accomplishing something in life should have some criteria for measuring his/her success. The first step is to select the goal which one hopes to achieve. This has to be well defined for one to be able to tell for certain when it has been reached. The progress one makes toward the goal can give orientation for further progress one makes toward the goal can give orientation for further progress; guiding one's, effort in the right direction. The Knowledge of success or failure is necessary for any goal directed behavior.

To evaluate, we must measure; and while measurement is important in all aspects of life, it has especially vital role in the teaching/learning process. The knowledge of results can help the teachers plan future lessons based on what students have or have not learnt. Students can see which areas they need to study more as a result of their scores in examination.

One value to be maintained in school measurement is fairness. Evaluation must benefit the student rather than to fail or eliminate students from school. Evaluation should seek to find out the students know instead of revealing only what he/she does not know. Measurement of student's achievement is to be therefore fair, accurate and relevant if it is to be of use to anyone.

Testing and Measurement are aspects or stages of an evaluation process. Measurement involves the assigning of numerals (a quantitative value) to objects or events according to rules; it deals with techniques or goals. Some measurement questions are: are we getting the result we expect? How much learning has actually taken place? If the answer to these questions expressed qualitatively is not satisfactory, the teacher or administrator has to find out why and try to remedy the situation.

### **What is evaluation?**

There are several views on evaluation. We shall however consider these two:

1. Evaluation is a process of identifying, collecting and analyzing information to enhance rational objective decision making.
2. Evaluation is also considered as a process of measuring the different impact of an instructional program on the development of the child. In this regard, it refers to the extent to which the aim of instruction has been achieved.

The primary purpose of educational evaluation is to interpret measured performances. When you say that student Moore is good in science, you are making an evaluation statement, and passing a qualitative judgement which can prove valid only if you have accurate and reliable (quantitative) information on student's Moore performance in science. You must be certain on how much science this student knows. The question, "How much?" is answered by measurement. The concept involves assigning figures/numerals to activities, events or objects, according to rules.

Students should not only be on tests or exams score, but on class participation, assignments, attendance, etc. To make a valid decision on students' performance, the class overall performance must be taken into consideration. This can be achieved by looking at the average performance of the class or the standard deviation and using the normal curve.

### **What is a test?**

A test is operationally defined as a systematic procedure for measuring a sample of student behavior using standardized measuring instrument.

Systematic Procedure – indicates that a test is constructed, administered and scored according to prescribed rules:

Stating test purpose, specifying test format, finding time to write and score the test (using a predetermined scoring scheme), analyzing scores and showing test scores to student and parents.

A test should cover a sample of what has been taught. This indicates that no test covers all and every fact, concepts, skills or values we teach. Our test consequently should contain only a representation or sample of all possible questions on the syllabus.

## **Measurement**

Measuring Instrument: A test paper is a measuring instrument. It must be regarded as a precision tool teachers use to measure how much learning has taken place. The concern here is fairness to students and use of test scores. Fairness in testing situation denotes that questions must be valid (accurate) and reliable/consistent.

Test Validity: The validity of a test is determined by the extent to which it serves the purpose for which it must have been designed.

Test reliability: This means the extent to which the test measures in a consistent way what it is supposed to measure. Test scores must be dependable and reproducible if they are to be used to predict future performance. Wrongly worded questions or inadequate sampling of content under review may affect reliability of a test.

## **Functions of a test**

Tests are not given for the mechanical process of merely passing or failing students. The most cited uses of tests are as follows:

To group students for the purpose of instruction-placement/selection;

To adapt instruction to the ability, level or background of student groups: grades A,B,C;

To help students understand their own abilities;

To help parents understand the performance of their children at school;

To compare growth from year to year;

To identify weakness in the curriculum that may need revision or difference among students;

To improve school supervision.

In summary, the purposes of educational evaluation are:

To determine the extent to which students benefited from a course of instruction;

To satisfy ourselves as teachers and administrations that the methods of teaching and materials we selected and used are effective and

To diagnose the strength and weakness of our students' future performance

## **Writing a good test**

Experiences with the testing situation in our schools have shown that a minimal attention is being paid to the writing of good tests by every teacher. Many of our schools' tests have drawbacks which include the following:

Omission of vital areas of the syllabi –inadequate coverage;

Over-emphasizing areas of the syllabi far beyond their normally implied importance in relation to the class being taught;

Underemphasizing areas of the syllabi far below their normally implied importance in relation to the class being taught;

Inclusion of questions from areas of the syllabi not covered at all in class.

The writing of good test cannot be taken for granted. An untrained teacher may by chance write a good test items but this is not common. Test writing must follow a number of principles without which one cannot guarantee that the responses given to the test will be valid, relevant and consistent. For a test to be considered good:

All students must answer the same questions;

Instruction should be clear and simple;

No undue advantage must be given to anyone student or group; and Apply a pre-determined scoring scale, i.e. each question should be assigned a score.

## **AREAS OF STUDENT BEHAVIOR THAT CAN BE MEASURED**

These areas are referred to as learning objectives. They are classified into groups as follow:

Comprehension: ability to understand what is learnt to interpret, translate, estimate, explain or simplify;

Application: the ability to use rules or principles learned in particular situation: to choose, classify or organize;

Knowledge: the ability to recall or remember facts ideas, formulas, etc.;

Analysis: the ability break down concepts for principles into its constituents parts so that the relations between the items expressed are made clear;

Synthesis: The ability to put together parts of elements of a concept to form a whole; and

Evaluation: ability to make objective judgements about the quality or value of events.

Other objectives to be measured are the affective and psychomotor domains. The affective domain refers to the ability to respond, create awareness, organize and characterize by value. Psychomotor domain refers to the ability to carry out motor skills or do physical work.

## **TYPES OF TESTS**

There two broad types of tests: 1. Teacher made test and 2. Standard test. Teacher made test are of two types namely, subjective (essay) tests and objective tests ( multiple choices, fill in the blanks, matching and true or false).

Essays: there are two forms of essay:

1. Short answers – students are required to provide written answers of a few lines in length of brief questions. Examples: write short notes on any of the below:  
Soil profile  
Plant disease  
Cash crop
2. Long essays – students are required to write long comprehensive written answers of two or more pages to a question. Example: dis the feasibility of mechanical farming in Liberia.

Merits of Essays: each test form has advantages and disadvantages. Essay tests are often used where the purpose of the test is to: evaluate ability to sustain an argument or gather evidence, communicate effectively and summarize organized knowledge.

Limitation of essays:

- Inadequate sampling of course content due to small number of questions;
- Score is influenced by irrelevant factors such as writing, spelling or grammar and verbal fluency of presentation;
- Personal feelings: what the teacher knows about a student often affect scores.
- Considerable care and time are required in constructing and marking essays.

Objective tests: These forms of tests are popular with teachers because they seem easier to grade and they cover wider content areas, providing a great deal of factual information in a little space. There are two groups of objective tests:

1. The supply types (fill in the blank) in which the examinee supplies/writes down or completes the answer with a word or two. Example: An example of a cereal crops is \_\_\_\_\_.
2. The selection types: the examinee is required to select among a series of given responses that he/she considers to be the correct answer. Forms of the selection tests include: Multiple choices, Matching, and true or false.

### **Multiple choices**

In this type, a problem or idea is stated and a list of plausible answers or responses are given with one being the most correct answer. The problem may be given as a direct question or an incomplete idea. This is the stem of the item. The responses or answer may be words, phrases, or symbols. These are called options, distractors or alternatives.

### **Guidelines for Multiple choices**

- Make a stem or introductory statement as complete as possible;
- Ask for the best answer where there is similarity in the answers/options;
- Make responses as short as possible; and
- Each response must appear to be the possible answer to the average examinee.

### **True/False**

A statement is made as cleverly as possible in relation to the contents of the lesson covered and the examinee is required to state whether or not the statement is true or false. Example: Butterfly is an insect found in the class of reptile. True or false

### **Matching test**

It consists of two columns (usually A & B). One of them is a stimulus part and the other a response part. The examinee selects the correct response which is generated from the stimulus part of the test.

A matching test is essentially a compound multiple choice item. Example: Match the number of the list of West African countries in column A with those of the list of major economic products in column B.

#### **Column A**

1. Liberia
2. Sierra Leone
3. Gambia
4. Nigeria
5. Cote D'Ivoire

#### **Column B**

- a. coffee \_\_\_\_\_
- b. Rubber \_\_\_\_\_
- c. peanut \_\_\_\_\_
- d. Cocoa \_\_\_\_\_
- e. diamond \_\_\_\_\_

### **Writing direction for a test**

All test must have written directions. Directions in test state exactly how examinee should answer the items in the test, hence directions must be clear and concise.

Methods used in teaching and disseminating Extension and Advisory Services

Several methods and tools can be used in teaching and disseminating extension and advisory services. Among them are individual, group and mass media teaching methods, Brainstorming, Advisory group methods, farmer-to-farmer method, T & V(Training and visit method), FFS(Farmers Field School), focus group method, rapid rural appraisal etc. (MEAS Participatory methods)

### **Training and Visit System: Introduction of Training and Visit System**

This Training and Visit system was developed by World Bank Expert Daniel Benor. Initially (13) Major states in India adopted Training and Visit system but later on most of the states are practicing this system since 1984 onwards.

The Training and Visit system has a simple organization and infra structure with defined objectives. It is based on regular visit to the farmers and periodical trainings to the extension workers. It has wide popularity because it provides problems oriented guidance, flexible management and continuous feed back from the farmers.

### **Meaning and Concept of Training and Visit System:**

The Training and Visit system in Agricultural Extension Education is designed for building a lined professional extension service that is capable of guiding the farmers in agricultural production and raising their income by providing appropriate plans for country development.

The extension workers working at various levels are updated with latest technology feasible and viable to the needy farmers by arranging frequent training programmes. Similarly, they have scheduled programme of the visits to the contact farmers for advising and directing to follow appropriate technology and solving the vary problems faced by the farmer on his field. These are the basic requirement of the Training and Visit system.

At the beginning Training and Visit system was introduced in Satara, Solapur and Jalgaon Districts in April, 1981 in Maharashtra (western Region)

### **Farmer field school approach**

The farmer field school (FFS) approach was developed by FAO and partners nearly 25 years ago in Southeast Asia as an alternative to the prevailing top-down extension method of the Green Revolution, which failed to work in situations where more complex and counter-intuitive problems existed, such as pesticide-induced pest outbreaks.

In a typical FFS a group of 20-25 farmers meets once a week in a local field setting and under the guidance of a trained facilitator. In groups of five they observe and compare two plots over the course of an entire cropping season. One plot follows local conventional methods while the other is used to experiment with what could be considered “best practices”. They experiment with and observe key elements of the agro-ecosystem by measuring plant development, taking samples of insects, weeds and diseased plants, and constructing simple cage experiments or comparing characteristics of different soils. At the end of the weekly meeting they present their findings in a plenary session, followed by discussion and planning for the coming weeks.

Alternative practices are not automatically assumed to be superior to conventional practices. It is up to the farmers to decide what works best through his or her testing and observations. What the FFS does is provide a risk-free setting in which to discuss, dissect, modify and experiment with new agricultural management ideas.

In this field-based setting, farmers are able to investigate a wide range of topics, such as management of soil fertility and water resources; methods of local varietal selection and issues of seed quality; risks associated with toxic pesticides and implementation of low-toxicity alternatives; development of marketing skills; and diversification of farming systems with new crops for food, fodder and profit.



At a national and regional scale, the list of topics continues to expand. The learning-by-doing approach promotes farm-based experimentation, group organization and decision-making; thereby increasing the likelihood that farmers will eventually “own” and adopt improved practices.

At the end of the season, a typical FFS group holds a field day to show local politicians, government agriculture workers and other farmers what they are doing. Exchange visits with other FFS are also encouraged. The season-long approach helps build stronger social ties that carry on after the initial FFS.

Not all topics can be addressed in one season, and FFS groups often continue with new topics and activities in subsequent seasons. Exploring past trends, current status and future scenarios helps groups to prioritize needs, interests and actions for the future.

FFS national programmes are more than just a collection of FFS. They typically work at multiple scales to build social capital, for example by helping strengthen producer organizations and by contributing to greater organizational capacity along the entire value chain – from financing, post-harvest processing and marketing, to investments. FFS national programmes are now beginning to work together with other participatory, community-based initiatives, notably the Community Listeners’ Clubs.

### **Farmer field school facilitators**

FFS facilitators come from a wide variety of domains. They typically include extension workers, NGO workers, farmer organization staff or previously trained farmers. Their role is to encourage active exploration and understanding of how farming systems work. They introduce new ideas through guided exercises and stimulate discussion “by farmers, for farmers”, without dominating the scene.

Facilitators go through rigorous, season-long training conducted by “master trainers” and follow the same “learning-by-doing” approach as the farmers they will eventually train in FFS. At the beginning of a country programme, master trainers are often brought in from other countries, where substantial experience already exists; thereby ensuring the highest possible quality in training through “south-south” cooperation. The facilitators and master trainers ensure linkages with district and national-level resources, helping to improve flows of information and knowledge sharing.

### **Extension-teaching methods:**

The extension-teaching methods are the tools & techniques used to create situations in which communication can take place between the rural people & the extension workers. They are the methods of extending new knowledge & skills to the rural people by drawing their attention towards them, arousing their interest & helping them to have a successful experience of the new practice. A proper understanding of these methods & their selection for a particular type of work are necessary.

## **Classification of extension teaching methods.**

### **(A) ACCORDING TO USE.**

One way of classifying the extension methods is according to their use & nature of contact. In other words, whether they are used for contacting people individually, in groups or *in masses*. Based upon the nature of contact, they are divided into individual, group & mass-contact methods.

***Individual-contact methods.*** Extension methods under this category provide opportunities for face-to-face or person-to-person contact between the rural people & the extension workers. These methods are very effective in teaching new skills & creating goodwill between farmers & the extension workers.

***Group-contact methods.*** Under this category, the rural people or farmers are contacted in a group which usually consists of 20 to 25 persons. These groups are usually formed around a common interest. These methods also involve a face-to-face contact with the people & provide an opportunity for the exchange of ideas, for discussions on problems & technical recommendations & finally for deciding the future course of action.

***Mass or community-contact methods.*** An extension worker has to approach a large number of people for disseminating a new information & helping them to use it. This can be done through mass-contact methods conveniently. These methods are more useful for making people aware of the new agricultural technology quickly.

Source: [agridr.in/tnauEagri50/AEXT392/leco3.html](http://agridr.in/tnauEagri50/AEXT392/leco3.html)

### **Farmer-to-farmer extension**

**Farmer-to-Farmer (F2F)** is a program of the United States Agency for International Development (USAID). The program provides for the transfer of knowledge and expertise from U.S. volunteers to farmers, farm groups, and agribusinesses in developing and transitional countries.

The Farmer-to-Farmer Program was initially funded in 1985 under Title V of Public Law 480 of the U.S. Farm Bill. The U.S. Congress authorized the current phase of the F2F Program (covering fiscal years 2009 through 2013) in the 2008 Farm Bill, designating it the "John Ogonowski and Doug Bereuter F2F Program". John Ogonowski was the pilot of one of the planes that crashed into the World Trade Center on September 11, 2001; the project was renamed the **John Ogonowski Farmer to Farmer Program** to honor his extensive work with immigrant Southeast Asian farmers using his land in rural Massachusetts. Former Congressman Bereuter was the initial sponsor of the program.<sup>[1]</sup>

Initiated as a P.L. 480-funded pilot project and authorized first under the Food Security Act of 1985 (P.L. 99-198), the program taps U.S. agricultural expertise to provide technical assistance to farmers in developing, middle income, and emerging market countries. The 2002 farm bill

(P.L. 107-171) extends funding authority through FY2007 and requires that no less than 0.5% of P.L. 480 funds be used for the program.

The Farmer to Farmer Program was reauthorized in the current Farm Bill, known as the Food, Conservation, and Energy Act of 200

**Farmer-to-farmer extension:** This approach places farmers at the center of the knowledge generation and dissemination process. Farmers' abilities to spread innovation (perhaps more effectively than professional extensionists), due to their comprehensive local knowledge and location, make them potentially better able to communicate with fellow farmers, and at lower cost.

Though there has been a burgeoning of farmer-to-farmer extension including farmer field schools, there is limited evidence of their impact at household level, sustainability and even potential for scaling up.

The other complexity of this approach is that if the lead farmers advance too far ahead of their neighbors technologically, their farming system appears too complex for the others to address.

### **Focus Group**

Focus groups are used to gather information from a targeted population

about their experience and opinions on a particular topic. Its purpose is to promote self-disclosure among its participants and provide useful analysis of a program or problem. When deciding to use a focus group, it is important to determine, the purpose of the group, the specific kind of information needed from the group and how the information is to be used.

The group is carried through a facilitated discussion on a clearly defined topic. The goal is to solicit the opinions of the focus group members. Focus groups can be used for a wide variety of purposes such as:

- Determining program needs
- Program design
- Pilot testing
- Program improvement
- Policy making and testing
- Outcome evaluation

**Choosing Participants:** Members of a focus group should have some characteristic they share in common. Participants should be chosen intentionally and invited personally.

**Conducting the Interview:** Focus group interviews should last for no more than 90 minutes. A moderator would welcome the group, and ask between six and ten open ended questions, with an assistant who is recording or taking notes.

**Types of Questions:** The questions should be short, open-ended and address only one topic at a time.

**Moderating the Group:** An effective moderator allows each participant to give their view; looks at them while they speak; refrains from expressing personal views and has a working knowledge of the topic.

The success of the focus group method depends on the skillful moderation of group discussions.

The moderator should be friendly, engaging and able to win the group's trust.

Major Source: Rennekamp, R. and Nall, M., *Using Focus Groups in Program Development and Evaluation*, University of Kentucky College of Kentucky Cooperative Extension Service.

Prepared by Oliver Ferguson and Kathryn Heinz, July 2014  
University of Illinois at Urbana-Champaign  
Available at [www.meas-extension.org/tip-sheets](http://www.meas-extension.org/tip-sheets)



Figure 1: Focus Group discussion in Muononga Village, Malawi (MEAS Evaluation series March 2014)



Figure 2: Focus Group Discussion with the DOWA extension workers, Malawi (MEAS Evaluation Series March 2014)

## **Advisory groups**

**Advisory Groups** are formed to carry out any of a number of possible functions that can serve community groups well. Because of the range of applications, advisory groups are formed in a variety of ways. With this in mind, there are a number of issues to consider before forming a group:

- What will the composition of the group be? Will it be made of experts, lay persons, or a combination thereof?
- Will the group be formed for the purpose of disseminating information, gathering information, planning, advising, creating public awareness, or problem solving?
- How long will the group be responsible for carrying out its responsibilities?
- Will there be regular or occasional meetings? Who will assume leadership and what will that look like?
- Is there a budget to cover member expenses?
- How will members be rewarded for their contributions?

After addressing these questions and deciding to form an advisory group and how it will operate, an advisory group could help to identify the appropriate method to be used for a need assessment, build community awareness, identify relevant stakeholders and give technical advice.

### **Advantages**

- The opportunity to involve a people of diverse backgrounds (professionals and lay persons).
- Local residents may have technical expertise or knowledge about the community that professionals don't have.
- It can take the pressure of the experts, as they do not need to know all the answers.
- Engaging with an advisory group usually results in more creative problem solving.

### **Disadvantages**

- It can be time consuming to maximize the skills of the group.
- It takes a skilled facilitator or leader to manage the group effectively.
- Depending on how they were selected, members may not represent all points to views in a community.
- The advisory group could threaten the work of decision makers, planning officials and others in formal organizational roles.

Major Source: Butler, Lorna M. and Robert E. Howell. 1980. "Community ... Assessment Techniques." Western rural Development Center, Oregon State University.

Prepared by Oliver Ferguson and Kathryn Heinz, July 2014  
University of Illinois at Urbana-Champaign

## **Preparation of Extension training materials**

Extension training materials can be prepared through the use of power point presentation, posters, videos, flip charts, photographs and etc.

### **Video presentations**

Elements to use within a video presentation

1. Who is the Audience?
2. What is the Aim or Objective?
3. What is the Content?
4. The Production Process
5. Scripting
6. Do's and Don'ts
7. Practical tips
8. Interviewing
9. Planning for Filming
10. Video Equipment
11. Filming
12. Logging
13. Selecting Material
14. Rough or First Editing
15. Review of Rough Edit
16. Final Editing
17. Compiling accompanying material

Source: A guide to producing farmer-to-farmer training videos. By Phil Molone and Josephine Rodgers MEAS – 2013)

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