

UNIT 9: TEACHING EFFECTIVENESS AND ASSESSMENT

Concept and criteria for assessing teaching effectiveness – Assessing teaching using observation schedules – Student evaluation of teaching – student's ratings of teaching effectiveness, dimensions and problems. – Uses of assessment for feedback for improving instructional process – System (Flander's) for observation for recording classroom interaction patterns and uses – Use of interaction analysis in the classroom for teacher assessment.

9.1 CONCEPT OF TEACHING EFFECTIVENESS

Teaching Effectiveness is the requirement that includes the demonstration of knowledge, skills and values to the learners for the successful completion of the task of teaching.

Teacher Effectiveness is the efficiency of the teacher to make successful teaching, in order to make students to reach their full academic potential.

Effective Teacher is one who inspires and motivates students, who has essential well developed pedagogy and who makes vibrant classroom activities.

There are three views in Teaching Effectiveness. They are: (i) The Style View: Teaching Styles as a weapon (of Teaching Effectiveness) makes the student Outcomes. (ii) The Outcomes View: Students' Outcomes determine (the Teaching Effectiveness) how the teaching actions are. (iii) The Inquiry Approach: Comparing the (a) achievements and (b) added values that contribute for achievements both taken together (as Teaching Effectiveness).

9.2 CRITERIA FOR EFFECTIVE TEACHING

Criteria 1: Care about helping your kids to do the best that they can: Effective teachers are passionate about helping their students to learn.

Criteria 2: Understand but don't excuse your students: Effective teachers seek to understand their students, and at the same time control their mistakes.

Criteria 3: Be clear about what you want your students to learn: Effective teachers are clear about what they want their students to learn and they share this with their students.

Criteria 4: Disseminate surface knowledge and promote deep learning: Effective teachers want their students to be able to think critically and to develop a deep understanding of the material being taught in class.

Criteria 5: Gradually release responsibility for learning: Effective teachers offer ongoing cumulative practice, spaced out over time, to help students retain what they have learned.

Criteria 6: Give your students feedback: Effective teachers give feedback to students that tell how students could improve and allows students to adjust their understanding and efforts.

Criteria 7: Involve students in learning from each other: Effective teachers supplement teacher-led, individual learning, with activities that involve students in learning from each other. These activities must be carefully structured and used in conjunction with more traditional teaching.

Criteria 8: Manage your students' behaviour: Effective teachers know their students' behaviour and implement strategies that nurture positive behaviour and minimize misbehaviour. They are consciously aware of what is going on in the classroom and they identify problems in the bud before quickly returning the focus to the lesson at hand. They follow up on more serious misbehaviour and help students to change any entrenched bad habits.

Criteria 9: Evaluate the impact you are having on your students: Effective teachers regularly assess student progress and they then use this insight to evaluate the impact that they are having on their students.

Criteria 10: Continue learning ways that you can be of even more help to more students: Effective teachers love learning and are always seeking to improve their own practices. They seek out evidence-based insights and they are happy to challenge their existing beliefs about teaching.

9.3 ASSESSING TEACHING USING OBSERVATION SCHEDULES

Observation is a method to collect information on assessing teaching through observation schedules by an observer. An observation schedule should include items that (i) are relevant to the research questions or other objectives of the survey, (ii) are appropriate for the culture and environment, (iii) do not require effort beyond observation, (iv) can be completed within the time constraints of the survey and (v) are clearly formatted and leave space to write observations

TYPES OF OBSERVATION METHODS

Structured and Unstructured Observation: Structured Observation is done by characterizing style of recording the information, standardized condition of observation, selection of pertinent data of observation and definition of the units to be observed. An Unstructured Observation is done without any thought before an observation.

Controlled and Uncontrolled Observation: When an observation takes place according to a definite pre-arranged plan, with experimental procedure, then it is called as Controlled Observation, that is, observation done in laboratory under controlled conditions. When an observation takes place in natural conditions, then it is called uncontrolled observation.

Participant and Non-participant Observation: When observer is a member of group which he/she is observing, then it is called Participant Observation. When observer is observing people, without giving any information to them is called Non-participant Observation.

ADVANTAGES AND DISADVANTAGES OF OBSERVATION METHODS

Advantages: (i) It is relatively inexpensive, (ii) It can be stopped or begun at any time, (iii) Subjects are usually available and (iv) It gives current information.

Disadvantages: (i) It requires more time and (ii) Extensive training is needed for the researcher.

9.3.1 STUDENT EVALUATION OF TEACHING

Student evaluation of teaching is to check the quality of teaching. The goal of the student evaluation is to identify the good practices in teaching. These good practices are acknowledged and practiced by the student-teachers again and again. Student Evaluation of Teaching includes the following questions as given by NAAC: (i) How regular is your teacher in the class? (Least/Seldom to Regularity rating 1 to 5) (ii) How punctual is the teacher in your class? (Always Late to Punctual/on time 1 to 5), (iii) How thorough is your teacher with the concepts and topics of this paper? (Least clarity to complete clarity 1 to 5), (iv) Is the teacher able to maintain discipline in the class? (Yes/NO), (v) How knowledgeable is your teacher in general? (Least/Well informed 1 to 5) and (vi) How well does the teacher communicate in the class? (Least/Excellent)

9.4 STUDENT'S RATINGS OF TEACHING EFFECTIVENESS, DIMENSIONS AND PROBLEMS.

Student ratings of teaching effectiveness provide feedback that can be used to identify the teaching strengths and weaknesses, as perceived by the students. Analyzing this information objectively provides valuable insights that can be used to make positive changes in teaching and lead to enhanced student learning. The next step is to determine how to act on the analysis of student feedback.

The Effective uses of student ratings (i) focus on accurate, timely usable measures of learning outcomes and are commonly understood and accepted and (ii) serve to improve instruction as well as to evaluate faculty performance.

The Dimensions of Effective Teaching includes (a) Student Learning – Learning Outcomes and Student Effort and Involvement, (b) Teaching Practice – Organization and Preparation, Communication and Faculty/Student Interaction and (c) Course Elements – Grading, Examinations and Assignments.

9.5 USES OF ASSESSMENT FOR FEEDBACK FOR IMPROVING INSTRUCTIONAL PROCESS

Feedback is an essential part of education and training programmes. It helps learners to maximize their potential at different stages of training, raise their awareness of strengths and areas for improvement, and identify actions to be taken to improve performance. The Feedback can be given by Teachers, Parents, Peers and colleagues and the learner themselves. Feedback can be seen as informal (encounters between teachers and students, between peers and between colleagues) or formal (as part of written/clinical assessment). Feedback is part of the overall interaction between teacher and learner, but not a one-way communication.

Learners value feedback highly, and valid feedback is based-on observation. Deal with observable behaviours and be practical, timely, and concrete. The one- to-one relationship enables the student to give feedback with sensitivity and in private. It makes the student to feel confident of having done well and how to improve. Follow up has to be made for better improvement.

9.6 FLANDERS' INTERACTION ANALYSIS SYSTEM

Flanders' interaction analysis system

Flanders' system is an observational tool used to classify the verbal behavior of teachers, and pupils as they interact in the classroom. Flanders' instrument was designed for observing only the verbal communication in the classroom and non-verbal gestures are not taken into account.

Basic theoretical assumptions of Interaction analysis

The various theoretical assumptions, which are basic to very idea of interaction analysis, are as follows:

1. In a normal classroom situation, it is verbal communication, which is predominant. (Flanders 1965)
2. Even though the use of spoken language might be resort to non-verbal gestures in classroom, verbal behavior can be observed with higher reliability than most non-verbal behavior and also it can reasonably serve as an adequate sample of the total behavior in classroom.
3. We can normally assume that verbal statements of a teacher are consistent with his non-verbal gestures and, in fact, his total behavior. This assumption was sustained in terms of experience in Minnesota studies. (Flanders, 1966).
4. The teacher exerts a great deal of influence on the pupils. Pupil's behavior is affected to great extent by this type of teacher behavior exhibited. (Anderson and others, 1946).
5. The relation between students and teacher is a crucial factor in the teaching process and must be considered an important aspect of methodology. (Haggerty, 1932)
6. It has been established that social climate is related to productivity and to the quality of interpersonal relations. It has been proved that democratic atmosphere tends to keep work of a relatively high level even in the absence of the teacher. (Lewin and other, 1939)
7. Children tend to be conscious of a warm acceptance the teacher and to express greatest fondness for the democratic teacher. (H.V. Perkins, 1950)
8. The role of classroom climate is crucial for the learning process. (Perkins 1956)
9. The teacher-classroom verbal behavior can be observed objectively by the use of observational technique designed to 'catch' the natural modes of behavior, which will also permit the process of

measurement with a minimum disturbance of normal activities of the group of individuals.
(Wrightstone J. Wayne, 1958)

- 1 0. Modification of teacher classroom behavior through feedback is possible (Flanders 1963), though how much can change occur and more knowledge relating to the permanence of these changes will require further research. (Flanders, 1963, 1966)
- 1 1. Teacher influence is expressed primarily through verbal statements. Non-verbal acts of influence do occur, but are not recorded through interaction analysis. The reasonableness of this assumption rests upon the assertion that the quality of the non-verbal acts is similar to the verbal acts; to assess verbal influence, therefore it is adequately a sample of all influences.

These assumptions focus our attention on the verbal participation of teachers and students in teaching-process.

Flander's Ten Category System

The Flander's system attempts to categorize all the verbal behavior to be found in the classroom. It has two main categories: teacher talk and pupil's talk. A third category covers other verbal behavior, that is, silence or confusion.

Flander's Interaction Analysis Categories (FIAC)

		Category number	Activity
Teacher talk *Indirect influence	Response	1.	Accepts feeling: Accepts and clarifies an attitude or the feeling tone of a pupil in a non-threatening manner. Feeling may be positive or negative. Predicting and recalling feelings are included.
		2.	Praises or encourages: Praises or encourages pupil action or behavior. Jokes that release tension, but not at the expense of another individual; nodding head, or saying "Um hm?" or "go on" and included.
		3.	Accepts or uses ideas of pupils: Clarifying or building or developing ideas suggested by a pupil. Teacher extensions of pupil ideas are included but as the teacher brings more of his own ideas into play, shift to category five.
		4.	Asks questions: Asking question about content to procedure, based on teacher ideas, with the intent that a pupil will answer.
		5.	Lecturing: Giving facts or opinions about content or procedures; expressing his own ideas, giving his own explanation, or citing an authority other than a pupil.
		6.	Giving directions: Directions, commands or

*Direct influence	Initiation		orders to which a pupil is expected to comply.
		7.	Criticising or justifying authority: Statements intended to change pupil behavior from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reliance.
Pupil talk	Response	8.	Pupil-talk response: Talk by pupils in response to teacher. Teacher initiates the contact or solicits pupil statement or structures the situation. Freedom to express own ideas is limited.
	Initiation	9.	Pupil-talk Initiation: Talk by pupils, which they initiate. Expressing own ideas; initiating a new topic; freedom to develop opinions and a line of thought, like asking thoughtful questions; going beyond the existing structure.
Silence		10.	Silence or confusion: Pauses, short periods of confusion in which communication cannot be understood by the observer.

Procedure of Flander's Interaction Analysis

Encoding and decoding are the two process of interaction analysis. The encoding process is used for recording classroom events and preparing observation matrix by encoding the numbers of ten category system. The decoding is process of interpreting observation matrix.

a) **Encoding Process:** The first step in the process of encoding is to memorize the code Numbers, in relation to key phrase of words, which are indicated in capital in ten-category system. An observer sits on the last bench of the classroom and observes the teacher when he is teaching. At an interval of every three seconds he writes down that category number which best represents or communication event just completed. For instance, when teacher is lecturing the observer puts 5; when he asks question he puts 4; when student replies he put 8; when teacher praises he puts 2; when teacher asks to sit down he puts 6; when again the teacher starts lecturing he puts 5. The procedure of recording events goes on at the rate of 20 to 25 observations in per minute.

b) **Decoding process:** After encoding the classroom events into ten-category system 10x10 matrix table is prepared for decoding the classroom verbal behavior. The generalized sequence of the pupil-teacher interaction can be estimated in this matrix table. It indicates, what form a pair of categories. The first number in the pair indicates the row and the second number shows the column for example (10-6) pair would be shown by a tally in the cell formed by row 10 and column 6. For example the observer has written down the code numbers beginning with 6 as follows: 6,10,5,1,4,8,8,2,3,6,4,8,9,7.

tabulating a matrix

To tabulate these observations in a 10 into 10 matrix, the first step is to make sure that the entire series begins and ends with the same number. The convention is to add 10 to the beginning and end of the series, unless 10 is already present. So our earlier series now become 10, 6, 10, 5, 1, 4, 8, 8, 2, 3, 6, 4, 8, 9, 7, 10. The observations are now entered in a 10x10 matrix so that the sum of column one equals the sum of row one, the sum of column 2 equals the sum of row 2, etc. The numbers are tallied in the matrix one pair at a time. The first pair in this case is 10-6; the tally is placed in row 10, column 6 cell. The second pair is 6-10, tally this in row 6, column 10 and so on. 'N' always will be tabulated by N-1 tallies in the matrix. In this case, we started a series of sixteen numbers and the series produce 15 tallies in the matrix.

	1	2	3	4	5	6	7	8	9	10	Total
1				1							1
2			1								1
3						1					1
4								2			2
5	1										1
6				1						1	2
7										1	1
8		1						1	1		3
9							1				1
10					1	1					2
Total	1	1	1	2	1	2	1	3	1	2	15

Please have a check with classnotes for classroom Interactions.

Advantages of FIAC

Ned Flanders' technique of Interaction Analysis is a boon for observing student-teacher interaction. As Dr. M.B. Buch says, it is "a bold step in the right direction to improve the quality of education" Several advantages are claimed for this method of analysis. The following are a few among them.

1. The analysis of matrix is so dependable that even a person not present when observations were made could make accurate inferences about the verbal communication and get a mental picture of the classroom interaction.
2. Different matrices can be made and used to compare the behavior of teachers at different age levels, sex, subject-matter etc.,

- 3 - This analysis would serve as a vital feedback to the teacher or teacher trainee about his intentions and actual behavior in the classroom. The supervising or inspecting staff can also easily follow this system.
- 4 - It is an effective tool to measure the social-emotional climate in the classroom.

Precautions in use of Flanders Interaction analysis

1. The classroom encoding work should be done by an observer, who is familiar with entire process and knows its limitations.
2. It is an exploratory device therefore value judgments about good and bad teaching behaviors are to be avoided. This technique is not an evaluator device of classroom teaching.
3. The questions regarding classroom teaching can only be answered by inspecting the matrix table. The observer cannot answer the question relating to teacher behavior.
4. A comparison between the two matrices can be reliability terms of behavior ratios, interaction variables and percentage of frequencies in each category and calls frequency but value judgment is not possible.
5. The accuracy of the observation depends upon the reliability of the observer. The classroom recording should be done after estimating the reliability of observers.
6. At least two observers should encode the classroom interaction for analyzing teaching and teacher behavior.

Limitations of Flanders interaction analysis

1. The system does not describe the totality of the classroom activity. Some behavior is always overlooked and who is to say that the unrecorded aspects of the teaching act are more important than those recorded.
2. Efforts to describe teaching are often interpreted as evaluation of the teaching act and of the teacher. While descriptions may be used as a basis of evaluation, judgment can be made only after additional value assumptions are identified and applied to the data.
3. The system of interaction analysis is content-free. It is concerned primarily, with social skills of classroom management as expressed through verbal communication.
4. It is costly and cumbersome and requires some form of automation in collecting and analyzing the raw data. It is not a finished research tool.

5. Much of the inferential power of this system of interaction analysis comes from tabulating the data as sequence pairs in a 10 x 10 matrix. This is a time consuming process.
6. Once the high cost of tedious tabulation (electric computers) is under control but the problem of training reliable observers and maintaining their reliability will still remain.
7. Its potential as a research tool for a wide application to problems is to be explored.

The system devotes little attention to student talk and focuses a great deal of attention on direct/indirect nature of Teachers performance. It is considered a great drawback of Flanders system.