

CHAPTER - V

SUMMARY, CONCLUSION, IMPLICATION
AND SUGGESTIONS
FOR FURTHER RESEARCH

5.0.0 INTRODUCTION

It may be restated that the objectives of the study were to arrive at the set of factors that make a lecture effective at the college level. As detailed under the caption 3.4.0, seven objectives were formulated. The methods and procedure of the research and the results obtained were presented in the previous chapters. In this chapter it is proposed to provide the summary, conclusions, implications and suggestion for further research.

5.1.0 Summary:

An effort is made to present the summary of the previous chapters under the following captions:

5.1.1 Introduction:

In the process of teaching learning, the method plays an important role. There are scores and scores of methods. Each method has its special significance. Lecture as a method of instruction has been the most popular one all through the history of teaching and learning. It is still the most commonly used method from kindergarten to post-graduation levels of instruction. Its necessity and feasibility seem to be operational right now and in the days to come.

The principles of liberal education result in growing numbers at the institutions of learning. The ever widening vistas of knowledge put a limit on the practicability of

any method, inspite of tremendous improvements in communication technology. However, lecture as a method of instruction stands out as the method which can withstand all these challenges. However inspite of the many limitations of the lecture method and in the prevalent conditions what other methods can do, lecture can do better. Albeit, the effectiveness depends to a large extent on the abilities and the practices of the person what utilizes it. In this context the present study sought to arrive at those of the abilities and practices or factors which can make a lecture effective in teaching subjects of arts, commerce and science at college level of instruction. This was sought by means of approaching the users of this method viz. the teachers and the clientele of this method (the students) to give preferences of the factōs and dimensions enlisted in the schedules.

5.1.2 Review of Literature:

Some research in the field of factors that make a lecture was reported. The surveys by the committee on Higher Education (U.K. 1963), Coopey and Foy (1967), Morris and Schonell (1970), point out that advance planning of a lecture, presenting subject matter clearly, logical sequencing of the concepts of the subject matter, and synoptic presentation are some of the factors which can make a teacher and his lecture effective. Studies by Ternaman (1966), found that concreteness of the subject matter increases comprehension of the students, research efforts by King (1972), Tillerson (1972) found lecture method could effect cognitive changes and form desired attitudes as compared with certain other methods. And the studies by White (1975) and Truex (1975) found that adequate advance preparation, clear explanation of the subject matter,

speaking clearly, generating students' interests in the subject matter, adequate knowledge of the subject matter, enthusiasm to teach and empathy with the students were some of the characteristics the teachers, the students and psychologists enlisted as the characteristics of a good teacher.

Paulson (1906), Barzun (1944), Hovland and Mandell (1952), Knoell (1953), Necholls (1955), Clark and Clark (1959), Mayhew (1960), Aisubel (1963), Argyle (1967), Hoover (1968), Samaloni (1970), Smithers (1970), Porter (1971), Brown and Thornton (1971), Lancaster (1974) and George (1975) have suggested certain of the factors that make a lecture effective.

Studies by Jones (1923), Lahti (1956), Feryberg (1956) Mc Clendon (1958), Eisner and Rohde (1959), Feryberg (1965), Hatly and Cameron (1967), Macmanaway (1968 & 1970) and Elton (1970) emphasised the significance of note taking of a lecture by students.

Marr et al., (1960) and Milton (1962) found the significance of attendance and non-attendance at a lecture period on the performance of students at tests.

Ternaman (1967) found that span of attention of students varies when listening to lecture. And Chanbarisov (1967) found that a well organised lecture to be economical of both students and teachers time.

Mc Leish (1968) studied the amount of lecture material retained by students, and the type of students and their liking towards a particular method of teaching. Hoover(1968)

tried to provide guidelines as to when to use a lecture method.

Allen & Ryan (1969) emphasized the importance of stimulus variation, while the students of Hudelson (1928), Nachman and Opochinshy (1958), Macomber and Siegel (1956, 1957 and 1960), found that smaller lecture classes had a positive effect on students performance. Studies by Remmers (1933), Ronere (1957), and De Cecco (1964) found no significant difference between different sizes of lecture classes and their effect on students' performance.

Bligh (1972) after reviewing as many as 158 studies undertaken to compared the effectiveness of lecture as a method, with other methods held that lecture is good for transmitting information but not effective either to develop students' thinking ability or to change students attitudes.

In a number of studies to compare lecture and discussion method while Spence (1928), Bane (1925), Husband (1957), Eglash (1954), and Eyeston (1966), found no significant difference between these two methods. Ruja (1954) found lecture method to be superior, and studies by Di Vesta (1954) Tistaert (1965), favoured discussion method.

Yet another number of studies were done to compare the relative effectiveness of the lecture method with PLM. Here again the researches do not indicate a clear trend. While the studies by Desai (1966), Sharma (1966), Shah (1968), Sharma (1968) & Shah (1969), Patel (1975) and Patel (1977) have found that PLM to be superior to the lecture method/conventional method. Studies by Keeling and Linz (1966) Owen (1965), and Govinda (1975) found that

PLM and Lecture method do not differ significantly in their effectiveness. And studies by Porter (1961), Huges and Reid (1975), and Bhusan and Goswami (1979) found that lecture to be superior to PLM. Yet another set of studies by Chandrakala (1976) and Ankleswaria (1980) found the effectiveness of either PLM or lecture method were subjected to certain conditions. In fact a survey conducted by Hartley (1972) of a total 110 studies forty-one studies found PLM to be superior, whereas fifteen of the studies found traditional method to be superior and the rest fifty-four studies found no significant difference between the two methods.

Another set of studies were done to compare a number of teaching strategies with or without lecture as one of the constituents of the multiple combinations of methods. Studies by Joyce and Weatherall (1957), Kushdil (1960), Yost (1972), Coats (1975), Mc Camey and Bullock (1977), Roy (1977), Chakraborty (1978), found that lecture method in combination with demonstration-question-answer strategy was inferior to other strategies like discussion-feed back while studies of Joyce and Weatherall (1959), Churchill and John (1958), Tillerson (1972), Padma (1973), Kingra (1981) did not find lecture combination strategy yielding significantly different results when compared to other methods combination strategies.

A review of the literature available shows that not much of a holistic research effort was made to derive the factors of an effective lecture. And secondly, lecture when organised or structured, can be second to none of the other methods besides having certain advantages, the problem for the present study was formulated.

5.1.3 The Problem:

Factors that make a lecture effective at the college level.

5.1.4 Objectives of the study:

The objectives of the present study were to find out:

- 1) The factors that make a lecture effective in teaching arts subjects according to the (1) teachers and (2) students of arts faculty;
- 2) The factors that make a lecture effective in teaching commerce subjects according to the (1) teachers and (2) students of commerce faculty;
- 3) The factors that make a lecture effective in teaching science subjects according to the (1) teachers and (2) students of science faculty;
- 4) The dimensions of various factors that make a lecture effective in teaching arts subjects according to the (1) teachers and (2) students of arts faculty;
- 5) The dimensions of various factors that make a lecture effective in teaching commerce subjects according to the (1) teachers and (2) students of commerce faculty;
- 6) The dimensions of various factors that make a lecture effective in teaching science subjects according to the (1) teachers and (2) students of science faculty; and

- 7) The factors and dimensions of various factors in common that make a lecture effective in teaching arts, commerce and science subjects according to the (1) teachers and (2) students of arts, commerce and science faculties.

5.1.5 Methods and procedures:

The following method and procedures were adopted:

The study employed survey method of research.

Diagrammatic representations of the research designs are presented in the figures 5.1-factors and 5.2-dimensions.

Fig. 5.1 DIAGRAMMATIC REPRESENTATION OF THE RESEARCH DESIGN - FACTORS

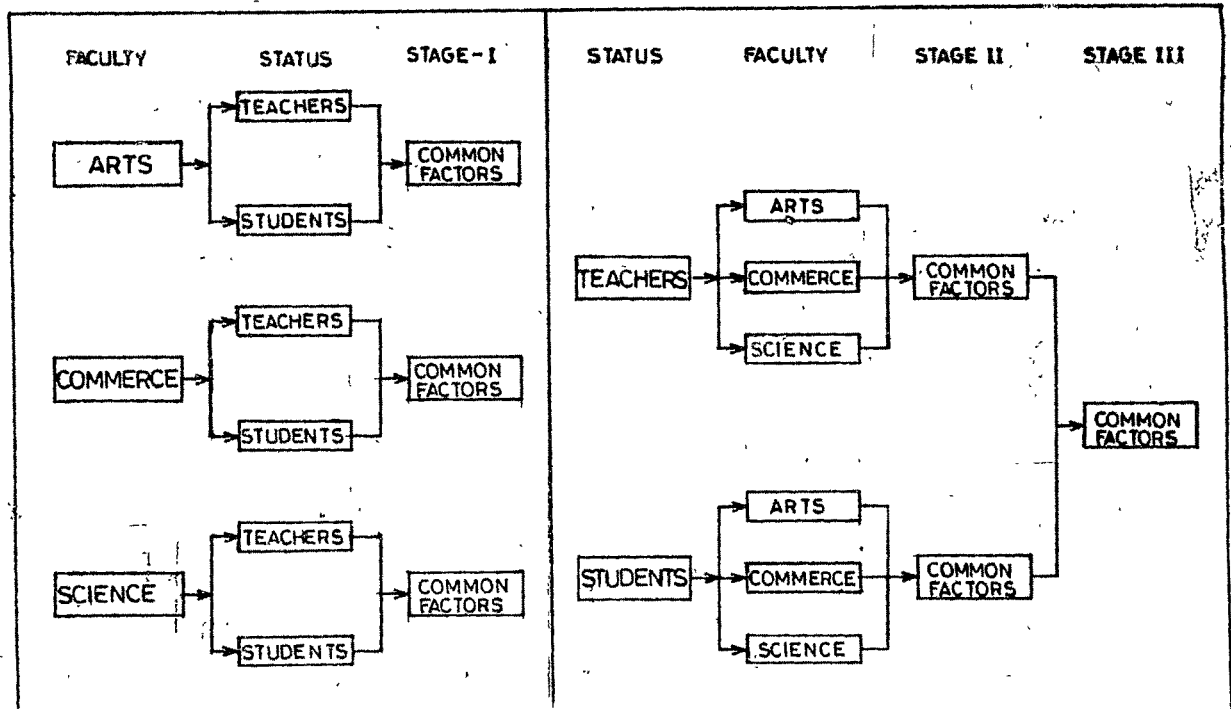
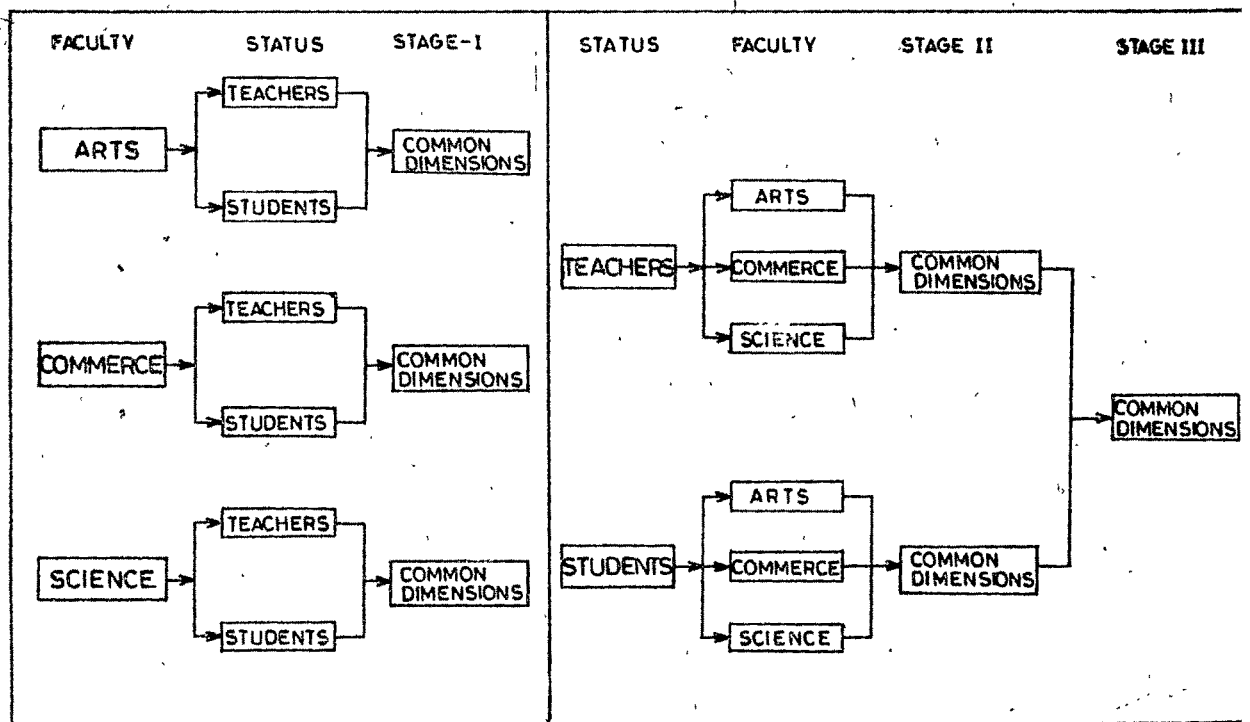


Fig. 5.2 DIAGRAMMATIC REPRESENTATION OF THE RESEARCH DESIGN - DIMENSIONS



5.1.6 Tools used:

The two constituents of the research, factors and dimensions were measured with the help of following two tools:

- Tool (1) factor categorization schedule, and
- Tool (2) dimension categorization schedule.

5.1.7 Sample:

The sample consisted of 808 teachers and students from various colleges of Andhra Pradesh. There were 366 teachers and 442 students of both sexes belonging to Arts, Commerce and Science subjects selected by the method of simple random sampling.

The following table gives the details of the sample.

Faculty	Teachers	Students	Total
Arts	133	143	276
Commerce	61	135	196
Science	172	164	336
Total	366	442	808
Percentage	45.29	54.70	100

5.1.8 Statistical techniques used:

Since the nature of the study was exploratory, simple percentages were worked out for each of the factors and the dimensions, group and faculty wise. Analyses based on the percentage of preference of each factor and dimension were made.

5.1.9 R e s u l t s:

Major findings of the study are presented in a tabular form.

Table 5.1: Factors and Dimensions preferred by Teachers of Arts, Commerce and Science faculties alongwith the percentages of preferred dimensions

Factor preferred	Dimension preferred	Percentage of preferred dimension
(1)	(2)	(3)

1) Preparation of lecture note:	1) Preparation of a list of headings and sub headings	66
2) Setting objectives:	1) Aiming at developing the ability of critical thinking in students	77
	2) Aiming at developing in students independent study habits and reading interests	77
	3) Aiming at developing in students ability to select and organize relevant material	71
	4) Aiming at presenting information	71
	5) Aiming at developing a sense of enquiry in students	68
	6) Aiming at developing the ability to express personal ideas of the students	67
3) Relevance of introduction to the topic of the Lecture:	1) By means of providing a brief revision of the last lecture topic	72

Table 5.1 (continued)-

		(1)	(2)	(3)
4)	Securing attention of the students	1)	By means of putting relevant questions	79
		2)	By means of providing relevant illustrations	70
5)	Presenting subject matter in logical continuity	1)	By means of proceeding from simple to complex concepts of the topic	70
		2)	By means of proceeding from general to particular concepts of the topic	67
		3)	By means of proceeding from known to unknown concepts of the topic	63
		4)	By means of providing concepts of the topic under convenient specified points and sub-points	61
6)	Presenting facts and figures accurately	1)	By means of presenting actual data on the black board	64
7)	Helping development of attitudes and values of the students	1)	By means of inviting comments of the students on the concepts of the topic	65
8)	Describing subject matter in detail	1)	By means of analysing each single concept of the topic	66
		2)	By means of explaining each single concept from different angles	58
9)	Evaluating concepts of the topic	1)	By means of enlisting arguments for and against each concept of the topic	66
10)	Providing concrete and coherent examples	1)	By means of giving examples from the day-to-day lives of the students	73

Table 5.1 (continued)-

(1)		(2)	(3)
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11)	Emphasizing important points of the topic:	1) By means of repeating the important points of the topic more than once	77
		2) By means of noting important points of the topic on black board	76
		3) By means of focussing attention of the students	72
12)	Being sensitive to the students feelings:	1) Involving students with the topic by means of putting thought provoking questions	75
		2) Repeating certain points, not very well taken by the students	64
13)	Using black-board adequately:	1) Presenting only important points of the topic	74
		2) Presenting diagrams, numbers and names relevant to the topic	73
14)	Using the relevant instructional aids:	1) (no common preference for any particular dimension)	
15)	Consolidating the major points of the subject matter presented:	1) By means of repeating only important points of the topic	55
16)	Providing exercises to students:	1) By means of posing problems to be solved by the students	76
		2) By means of posing meaningful questions to the students	76
		3) By means of encouraging students' individual efforts in dealing with problems relevant to the topic	72
		4) By means of providing free atmosphere to enable students to express individual ideas	72
		5) By means of giving assignments	65

Table 5.1 (continued)-

	(1)	(2)	(3)
17) Expressing oneself clearly:	1) Speaking clearly	88	
	2) Putting forward concepts of the topic in simple language	86	
	3) Putting forward the concepts in a straight forward manner without digressions	73	
18) Making the tone pleasant:	1) Making use of tone which is full of expression	71	
	2) By not using an irritative tone	60	
	3) Making use of a tone which is of moderate bass pitch	57	
19) Employing an audible voice:	1) Making use of the voice to be audible enough even to the students who were are sitting in the back benches of the class	83	
	2) Making use of voice at a level of which all the words spoken are audible	79	
20) Employing modulations in the tone:	1) By means of changing stress on the words as and when necessary in the sequence of lecture delivery	62	
	2) By means of changing pitch at appropriate moment in the sequence of lecture delivery	56	
21) Employing adequate speed of delivery:	1) By means of maintaining a speed of delivery at which the listeners can follow the continuity of thought and expression	75	
	2) By maintaining a speed at which it is possible for the students to jot down the main points of the topic	69	

Table 5.1 (continued)-

	(1)	(2)	(3)
22)	Using intelligible language:	1) Making use of a simple language	89
		2) Making use of a language which is within the comprehensible vocabulary level of the students	71
23)	Using correct pronunciation:	1) Using an accent which makes the language intelligible to all students	70
		2) Using pronunciation which is phonetically correct	60
24)	Maintaining good eye contact with the students while giving the lecture:	1) By means of looking all over the class	81
25)*	Displaying a smiling disposition:	1) By maintaining pleasantness all through the lecture period	81
		2) By not being irritated	63
26)	Manifesting confidence about the knowledge of the subject matter:	1) By means of manifesting clarity and ease in communicating the subject matter	79
		2) By means of manifesting mastery over the subject matter	75
		3) By being able to explain illustratively the complexities of the subject matter	75

Table 5.1 (continued)-

(1)	(2)	(3)
27)* Manifesting smartness:	1) By means of manifesting presence of mind to deal with complex situations 2) By keeping up neatness in dress and physical appearance 3) By manifesting balanced modes of moving about	78 67 57
28) Being courteous to all the students of the class:	1) By means of treating all the students equally friendly 2) By means of encouraging students self efforts of learning in a positive manner 2) By means of showing adequate understanding of students and their problems inside and outside of the classroom	88 79 72

* Factors not preferred by majority but their related dimensions were preferred.

Table 5.2 Factors and Dimensions preferred by Students of Arts, Commerce and Science faculties alongwith the percentages of preferred dimensions:

Factor preferred	Dimension preferred	Percentage of preferred dimensions
(1)	(2)	(3)
1) Preparation of lecture notes	1) Preparing a list of headings and sub-headings	72
2) Setting objectives:	1) Aiming at developing the ability of critical thinking in students	70
	2) Aiming at developing students independent study habits and reading interests	70
	3) Aiming at developing the ability to express personal ideas of the students	65
	4) Aiming at presenting information	62
	5) Aiming at developing certain specified skills of the students	60
3) Relevance of the introduction to the topic of the lecture:	1) By means of providing a brief revision of the last lecture topic	66
	2) By means of providing a gist of the past and the present lecture topic	56
4) Securing attention of the students:	1) By means of putting relevant questions	77
	2) By means of explaining the benefits of the knowledge that will be gained due to the lecture	56
5) Presenting subject matter in logical continuity:	1) By means of providing the concepts of the topic under convenient specified points and sub-points	64

Table 5.2 (continued)-

(1)	(2)	(3)
6) Presenting facts and figures accurately:	1) By means of presenting actual data on the black board	66
7) Helping development of attitudes and values of the students:	1) By means of inviting comments of the students on the concepts of the topic	66
8) Describing subject matter in detail:	1) By means of explaining each single concept from different angles	61
	2) By means of analysing each single concept of the topic	60
	3) By means of dividing each single concept into as many sub-points as possible	55
9) Evaluating concepts of the topic:	1) By means of enlisting arguments for and against each concept of topic	54
10) Providing concrete and coherent examples:	1) By means of giving examples exclusively from the day-to-day lives of the students	68
11) Emphasizing important points of the topic:	1) By means of repeating the important points of the topic more than once	76
	2) By means of noting important points on the black board	74
	3) By means of focussing attention of the students	67
12)* Using pauses at appropriate places:	1) By means of giving time gap in between certain important words	57
13) Being sensitive to students' feelings:	1) Involving the students with the topic by means of putting thought provoking questions	66

Table 5.2 (Continued)-

(1)	(2)	(3)
14)* Using black-board adequately:	1) Presenting only important points of the topic 2) Presenting diagrams, numbers and names relevant to the topic 3) Presenting mathematical derivations, symbols etc., relevant to the topic	75 67 63
15) Using relevant instructional aids:	(noncommon preference for any particular dimension)	
16) Consolidating the major points of the subject matter presented:	1) By Means of repeating only important points of the topic	60
17) Providing exercises to students:	1) By means of providing free atmosphere to enable students to express individual ideas 2) By means of posing problems to be solved by the students 3) By means of encouraging students' individual efforts in dealing with problems relevant to the topic 4) By means of posing meaningful questions to the students 5) By means of providing co-operative or competitive situations	73 69 67 66 57
18)* Using adequate gestures:	1) Using expressive looks	58
19) Expressing oneself clearly:	1) Speaking clearly 2) Putting forward concepts of the topic in simple language	87 78
20) Making the tone pleasant:	1) Making use of a tone which is full of expression	70

Table 5.2 (continued)-

(1)	(2)	(3)
21) Employing an audible voice:	1) Making use of the voice to be audible enough even to the students who are sitting in the back benches of the class 2) Making use of the voice at a level of which all the words spoken are audible	74 66
22)* Employing adequate speed of delivery:	1) By means of maintaining a speed of delivery at which the listeners can follow the continuity of thought and expression 2) By maintaining a speed at which it is possible for the students to jot down the main points of the topic	69 64
23) Using intelligible language:	1) Making use of simple language 2) Making use of language which is well within the vocabulary level of the students	82 59
24) Using correct pronunciation:	1) Using a pronunciation which is phonetically correct 2) Using an accent which makes the language intelligible to all students	69 63
25) Maintaining good eye contact with the students while giving the lectures:	1) By means of looking all over the class	70
26)* Displaying a smiling disposition:	1) By maintaining pleasantness all through the lecture period	71

Table 5.2 (continued)-

(1)	(2)	(3)
27) Manifesting confidence about the knowledge of the subject matter:	1) By being able to explain illustratively the complexities of the subject matter 2) By means of maintaining clarity and ease in communicating the subject matter 3) By means of manifesting mastery over the subject matter	65 62 61
28)* Manifesting smartness:	1) By means of manifesting presence of mind to deal with complex situations 2) By keeping up neatness in dress and physical appearance	59 56
29) Being courteous to all the students of the class:	1) By means of treating all the students equally friendly 2) By means of encouraging students self efforts of learning in a positive manner 3) By means of showing adequate understanding of students and their problems inside and outside the classroom	83 64 60

* Factors not preferred by majority but their related dimensions were preferred.

Table 5.3 Factors and Dimensions preferred by both Teachers and Students of Arts, Commerce and Science faculties alongwith the percentages of preferred dimensions:

Factor preferred	Dimension preferred	Percentage of preferred dimension
(1)	(2)	(3)
1) Preparation of lecture note:	1) Preparation of a list of headings and sub-headings	69
2) Setting objectives:	1) Aiming at developing the ability of critical thinking in the students	73
	2) Aiming at developing in students independent study habits and reading interests	73
	3) Aiming at presenting information	66
	4) Aiming at developing the ability to express personal ideas of the students	66
3) Relevance of the introduction to the topic of the lecture:	1) By means of providing a brief revision of the last lecture topic	68
4) Securing attention of the students:	1) By means of putting relevant questions	78
5) Presenting subject matter in logical continuity:	1) By means of providing concepts of the topic under convenient specified points and sub-points	63
6) Presenting facts and figures accurately:	1) Presenting actual data on the black board	65

Table 5.3 (Continued)-

(1)	(2)	(3)
7) Helping development of attitudes and values of the students:	1) By means of inviting comments of the students on the concepts of the topic	66
8) Describing subject matter in detail:	1) By means of analysing each single concept of the topic 2) By means of explaining each single concept from different angles	63 59
9) Evaluating concepts of the topic:	1) By means of enlisting for and against each single concept of the topic	60
10) Providing concrete and coherent examples:	1) By means of giving examples exclusively from the day-to-day lives of the students	70
11) Emphasizing important points of the topic:	1) By means of repeating important points of the topic 2) By means of noting important points of the topic on the black board 3) By means of focussing attention of the students	76 75 70
12) Being sensitive to students feelings:	1) Involving students with the topic by means of putting thought provoking questions	70
13)* Using black board adequately:	1) Presenting only important points of the topic 2) Presenting diagrams, numbers and names relevant to the topic	74 70
14) Using relevant instructional aids:	(no common preference for any particular dimension)	
15) Consolidating the major points of the subject matter:	1) By means of repeating only important points of the topic	58

Table 5.3 (continued)-

(1)	(2)	(3)
16) Providing exercises to students:	1) By means of providing free atmosphere to enable students to express individual ideas 2) By means of posing problems to be solved by the students 3) By means of posing meaningful questions to the students 4) By means of encouraging students individual efforts in dealing with problems relevant to the topic	73 72 71 70
17) Expressing oneself clearly:	1) Speaking out clearly 2) Putting forward the concepts of the topic in simple language	87 82
18) Making the tone pleasant:	1) Making use of a tone which is full expression	70
19) Employing an audible voice:	1) Making use of the voice to be audible enough even to the students who are sitting in the back benches of the class 2) Making use of the voice at a level of which all the words spoken are audible	78 72
20)* Employing adequate speed of delivery:	1) By maintaining a speed at which the listeners can follow the continuity of thought and expression 2) By maintaining a speed at which it is possible for the students to jot down main points of the topic	72 67
21) Using intelligible language:	1) Making use of simple language 2) Making use of a language which is well within the comprehensible vocabulary level of the students	85 65

Table 5.3 (continued)-

(1)	(2)	(3)
22) Using correct pronunciation:	1) Using an accent which makes the language intelligible to all	67
	2) Using pronunciation which is phonetically correct	65
23) Maintaining good eye contact with the students while giving the lecture:	1) By means of looking all over the class	75
24)* Displaying a smiling disposition:	1) By means of maintaining pleasantness all through the lecture period	76
25) Manifesting confidence about the knowledge of the subject matter:	1) By means of maintaining clarity and ease in communication of the subject matter	70
	2) By being able to explain illustratively the complexities of the subject matter	70
	3) By means of manifesting mastery over the subject matter	68
26)* Manifesting smartness:	1) By means of manifesting presence of the mind to deal with complex situations	68
	2) By keeping neatness in dress and physical appearance	62
27) Being courteous to all the students of the class:	1) By means of treating all students equally friendly	85
	2) By means of encouraging students self efforts of learning in a positive manner	72
	3) By means of showing adequate understanding of the students and their problems inside and outside the class	66

* Factors not preferred by majority but their related dimensions were preferred.

5.2.0 C o n c l u s i o n s :

Based on the results of the study the following conclusions are arrived at

- 1) In the view of teachers and students at the college level the most important factors which make a lecture effective in teaching arts, commerce and science subjects are; (a) teachers' preparation, (b) screwing students' attention, (c) explaining subject matter clearly and (d) describing subject matter in detail.
- 2) The personal factors involved in an effective lecture according to all the teachers and students are: (a) ability on the part of the teacher to speak clearly, (b) using simple language and (c) treating all the students equally friendly.
- 3) Both teachers and students at the college level do not like preparation of teaching aids, especially for arts and commerce subjects.
- 4) Arts students do not expect their teachers to make use of the black board.
- 5) Teachers at the college level do not prefer to use gestures, while students prefer their teacher, to have an expressive look while teaching.
- 6) Students at the college level do not expect their teachers to be humorous in the class while teaching.
- 7) Teachers and students at the college level do not expect the use of voice modulation by teacher.

- 8) Speed of lecture delivery is not believed to be an important factor by teachers and students at the college level.
- 9) In general teachers and students at the college level do not expect the teachers to exhibit a smiling and a smart disposition.
- 10) Teachers of commerce faculty do not expect to develop specified skills in their students.
- 11) Students of commerce faculty do not expect their teachers to develop in themselves a sense of enquiry.
- 12) Teachers and students expect an introduction to a lecture to be brief and related to previous topic.
- 13) Teachers and students believe that the use of question is the best means of securing students' attention.
- 14) By concreteness the teachers and students mean giving examples relevant to students' life.
- 15) Commerce students at college level do not expect their teachers to give assignments.
- 16) Students want their teachers to be pleasant in the class while lecturing and the teachers too want to be pleasant.
- 17) Both teachers and students believe in the significance of the teachers' neatness in physical appearance.

- 18) Students have a strong desire to express personal idea and expect a free atmosphere in the classroom situation.
- 19) Students of all the three faculties and teachers of science faculty believe in creating cooperative and competitive situations for classroom activity, and
- 20) The teachers and students of all the faculties do not seem to prefer presenting handouts by the teachers at the beginning of a lecture. May be the teachers and students are not aware of the advantage of such a practice, as they had never ~~have~~ had the experience of such a practice.

5.3.0 Implications of the Study:

The results reveal that the teachers of arts and commerce faculties are not enthusiastic about displaying teaching aids while delivering lectures. The science teachers, because of the inevitability of demonstrating the experiments, appear to be inclined to use teaching aids.

Let it be arts, commerce, science, or mathematics subjects, teaching aids, as they add to the visual dimension, are essentially effective in strengthening the lecture whatever might be the level of education of the recipients of the lecture.

In a school situation the teachers' reaction could probably be in favour of using teaching aids even in subjects covered by social sciences and humanities. This could mainly be because the school teachers are oriented towards

the use of teaching aids and they are aware of the benefits of such aids.

At college level the teacher is not oriented in the direction of the use of the teaching aids and so he is not aware of the utility of such aids in a class room situation and hence, his disinclination to make use of the teaching aids. It could be suggested that only a proper orientation and the demonstration of the utility of teaching aids in a classroom wherein the lecture is the main vehicle of communication alone could make the teacher aware of the usefulness of teaching aids.

5.4.0 Suggestions for further research:

The results of the research under report have generated a few research problems which are as follows:

The present research has evolved a set of factors and dimensions that make a lecture effective at the college level. The reactions of teachers and students were obtained with regards to the set of factors and dimensions.

A research could be built upon the findings of the present investigation by making use of the sets of factors and dimensions evolved in this research as frames of reference and on that basis the lectures delivered by all types of teachers (effective, not so effective and poor from the standpoint of the students) could be assessed at the college level.

A method akin to Flander's technique of classroom interaction could be employed to find out the effectiveness of the lectures delivered in various subjects and the results of such investigation could be compared with the results of the present study which are based on the opinions of teachers and students regarding the factors and dimension already evolved. Such a comparison would add reliability and credibility to the findings of the present investigation. And the results could enrich the lecture as such.

Higher education is supposed to realize certain objectives set by the universities, commissions curricula etc., Finding out the extent to which the lecture method is found to be instrumental in achieving those objectives is an important area of possible research. If the research concludes that the lecture method fails to achieve the said objectives, some other methods which have got the potentialities of realizing the set of objectives need to be used as supplementary methods of teaching in a College.

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