

CHAPTER - IV

ANALYSIS AND INTERPRETATION

IV.1 INTRODUCTION

The researcher has described the research design of the present research study in the previous chapter i.e. Chapter III - Research Design. Accordingly he had conducted his research study during the academic year 1993-94 in the colleges of education affiliated to Shivaji University, Kolhapur. He purposes to analyse and interpret the results obtained through the administration of the questionnaire. He has prepared in the present chapter viz. Chapter IV - Analysis and Interpretation of the data collected.

The complete data were collected. The data were as good as raw data. It was the most important work to keep in systematic manner. Because the data were in scattered form and to draw conclusions upon the data was very difficult. To get the clear understanding from the data, two processes were essential, 1) Classification 2) Tabulation.

To study the student teaching programme of the student teachers of colleges of education was one of the objectives of the study. So while visiting the eight colleges of education for an interview and questionnaire, the researcher received the response of 329 student teachers. The researcher analysed the data according to questionwise as following.

IV.2 STUDENT TEACHERS PERSONAL INFORMATIONTABLE NO. 1

STUDENT TEACHERS QUALIFICATIONS

Sr. No.	Name of the College	D.Ed. B.A.	B.A.	B. COM.	B.Sc.	M.A.	M. Com.	M.Sc.	TOTAL
a)	S.P.S. Sangli	-	08	-	04	21	-	04	37
b)	S.M.T. Kolhapur	02	14	-	09	22	-	11	58
c)	Azad Satara	-	12	-	06	20	-	11	49
d)	Kasturbai Solapur	01	08	-	07	12	-	04	32
e)	S. S. Solapur	-	27	-	12	16	-	02	57
f)	Karad Education Karad	-	14	-	07	12	-	01	34
g)	Savitribai Kolhapur	-	11	-	05	13	-	03	32
h)	Late S.M. Vasant Patil Miraj	-	10	-	06	10	-	04	30
TOTAL		03	104	-	56	126	-	40	329
PERCENTAGE		0.9	32.22	-	17.02	38.30	-	12.16	100

Table No.One shows the total number and percentage of the qualification of student teachers of Shivaji University area. The

total number of 329 student teachers' qualifications are given from the eight colleges of education of Shivaji University area.

The table is organized under the seven major qualifications which are useful for Bachelor of Education admission. i) D.Ed., B.A., ii) B.A., iii) B.Com., iv) B.Sc., v) M.A., vi) M.Com., vii) M.Sc. The percentage of D.Ed., B.A. is 0.91, the percentage of B.A. is 33.22 , the percentage of B.Com. is 0.00 , the percentage of B.Sc.is 17.02 , the percentage of M.A. is 38.30 and the percentage of M.Sc. is 12.16 and the percentage of M.Com. is 0.00 .

M.A.students have obtained the first place in the study, B.A. students have obtained the second place in the study, B.Sc.students have obtained the third place and B.Com. and M.Com.students have obtained 0.00 percent.

The percentage of student teachers possessing M.A. qualification is 38.30 % as compared to 12.16 % of M.Sc. qualification. The percentage of student teachers possessing B.A.qualification is 32.22 % as compared to 17.02 % of B.Sc. qualification.

It is evident from the table number one that M.A.percentage is the highest of all qualifications. B.Com & M.Com percentage is Zero, so it is clearly evident that B.Com and M.Com students didnot get the admission in B.Ed.Course. Through this table the investigator comes to know that the post-graduate students have joined in B.Ed.course.

TABLE NO. 2

VARIOUS METHODS OF STUDENT TEACHERS

Sr.No.	Subjects	Total Nos.	Percentage
1	English	61	9.27
2	Marathi	125	18.10
3	Urdu	08	1.22
4	Hindi	63	9.57
5	Sanskrit	01	0.15
6	History	111	16.87
7	Geography	105	15.96
8	Social Science	05	0.76
9	General Science	88	13.37
10	Biology	08	1.22
11	Physics	08	1.22
12	Mathematics	75	11.40
13	Any other	00	0.00
TOTAL		658	100.00

Table No.2 shows that 329 student teachers have offered only two methods for practising the lessons of teaching. Out of these methods, such as English, Marathi, Hindi, Urdu, Sanskrit, History, Geography, Economics, General Science, Biology, Physics and Mathematics, student teachers have selected only two methods which are relevant to their degree level. The percent programmes of teaching practicals

are normally consisted of practice teaching lessons by the student teachers.

They are twelve methods. Out of twelve methods two methods are chosen by the student teachers of Shivaji University area. The percentage of the student teachers who chose Marathi is 18.10 % which is the highest. The percentage of the student teachers who chose History is 16.87 which has the second place. The percentage of the student teachers who chose Geography is 15.96 which has the third place. The percentage of the student teachers who chose General Science is 13.37. The percentage of the student teachers who chose Mathematics is 11.40. The percentage of the student teachers who chose Hindi is 9.57. The percentage of the student teachers who chose English is 9.27. The percentage of student teachers who chose Urdu, Biology and Physics is 1.22. The percentage of student teachers who chose Sanskrit is 0.15 which is the lowest.

It is found that Science student teachers have selected General Science, Biology, Physics and Mathematics. Arts student teachers have offered the maximum subject such as Marathi, History and Geography. The investigator concludes that Marathi, Geography, History have been selected by the maximum student teachers.

Sanskrit, Urdu, Economics have been selected by very few student teachers. These methods have very bad days because

these subjects have less weightage in schools. These methods are coming near to close in the future in the colleges of education. Main reason is the lackness of teacher educators and the Government's limitation of 80 student teachers of Bachelor of Education course. Sanskrit which is the mother of all languages has been neglected in Shivaji University area.

TABLE NO. 3

STUDENT TEACHERS' EXPERIENCE

Sr. No.	Different levels of experience	Total Numbers	Total positive responses	Percentage
a)	No experience	329	286	86.93
b)	Primary level	329	4	1.22
c)	Secondary level	329	19	5.78
d)	Junior College level	329	7	2.13
e)	Senior College level	329	2	0.61
TOTAL			329	100.00

Table Number three shows the experience of teaching of student teachers who have admitted in Bachelor of Education course of Shivaji University area.

Table Number three is organized with the five levels of experience such as a) No experience b) Primary level experience c) Secondary level experience d) Junior college

level experience and e) Senior college level experience.

It is observed that i) No experience level has obtained 86.93 % which is the highest of all levels of experience. ii) The percentage of Secondary level experience is 5.78 % which has the second place in the study. The percentage of Junior College level experience is 2.13 which has the third place in the study. The percentage of primary level experience is 1.22 which has the fourth place. The percentage of Senior college level experience is 0.61 which is the lowest in all the levels of experience in the study.

It is obvious that the number of experienced student teachers are less admitted in colleges of education in Shivaji University area as compared to fresh graduates and post-graduates. The investigator comes to the conclusion that the fresh graduates and post-graduates get admission in a large number and experienced teachers are less due to many reasons. In-service teachers have other sources of admission like Yeshwantrao Chavan Open University or vocational courses.

IV.3 MICRO TEACHING

Q.1 What type of introductory lectures are organised in your college ?

TABLE NO. 4

DIFFERENT TOPICS OF LECTURES

Sr.No.	Topics of Lectures	Total positive responses	Percentage
a)	Lecture on microteaching	320	97.26
b)	Lecture on skills	315	95.74
c)	Lecture on Observation of micro-lesson	306	93.01
d)	Lecture on integrated lesson	317	96.35
e)	Any other	00	0.00

The table number four shows the different types of introductory lectures of micro-teaching which are organized by the colleges of education. The table is organized with the four topics or the four lectures which give more particular information about the availability of microteaching activities in the eight colleges of education which are selected for the study.

The table has given five headings. (a) Lecture on micro-teaching, (b) Lecture on skills, (c) Lecture on observation of micro-lesson (d) Lecture on integrated lesson and (e) Any other.

The percentage of lecture on micro-teaching is 97.26 which is the highest in all lectures; the percentage of the lecture on integrated lesson is 96.74 ; the percentage of the lecture on skills is 95.74 ; the percentage of the lecture on observation of micro-lesson is 93.01 and the percentage of any other is Zero.

It is found that the percentage of student teachers' response is above 90 % so, the investigator has clearly concluded that all colleges of education have organised the orientation lectures on the micro-teaching which is very needful to train the skill of teaching in the student teaching programme. All colleges of education have honestly stressed and encouraged to student teachers towards micro-teaching which is the core of the student teaching programme.

Q.2 What are the advantages of introductory lectures to you ?

TABLE NO. 5

ADVANTAGES OF INTRODUCTORY LECTURES

Sr. No.	Different areas of information	Total Numbers	Total positive response	Percentage
a)	General information about micro-lesson	329	305	92.71
b)	Procedure of micro-teaching	329	312	94.83
c)	Information of integrated lesson	329	303	92.10
d)	Knowledge of observation	329	315	95.74
e)	Any other	-	-	-

The table number five furnishes the advantages of introductory lectures which the student teachers have achieved the important information through the introductory lectures. The table has given the five areas of information.

a) The student teacher gets general information about micro-lesson b) The student teacher knows the procedure of microteaching. c) The student teachers gets the information of integrated lesson. d) The student teacher gets knowledge of observation e) Any other.

The percentage of 'the student teacher gets knowledge of observation' is 95.74 which is the highest. The percentage of 'the student teacher knows the procedure of micro-teaching' is 94.83 which has the second place in the study. The percentage of 'the student teacher gets general information about micro-lesson' is 92.71 . The percentage of 'the student teacher gets information of integrated lesson' is 92.10 which is the lowest place in the study. The percentage of any other is Zero.

From the table number of five, it is clear that the percentage of a, b, c, and d is the above 92.10 which is significant to note all the colleges of education that all the introductory lectures are very useful in the beginning of the microteaching. So, the researcher comes to know that all introductory lectures must be kept and organized properly and systematically. The experienced teacher educators must participate. They must accept the responsibility of introductory lectures.

Q.3 What skills have been chosen in your college for micro-teaching ?

TABLE NO. 6

DIFFERENT SKILLS CONDUCTED IN SHIVAJI
UNIVERSITY AREA

Sr. No.	Title of skills	Total Numbers	Total positive response	Percentage
1.	Narration	329	37	11.25
2.	Motivation	329	32	9.73
3.	Solving questions	329	30	9.12
4.	Explanation	329	321	97.56
5.	Questioning	329	192	58.36
6.	B.B.Work	329	150	45.59
7.	S.Variation	329	260	79.03
8.	Reinforcement	329	200	60.79
9.	Introduction	329	213	64.74
10.	Demonstration	329	51	15.50
11.	Free association	329	30	9.19
12.	Free question	329	58	17.63

The table number six shows the different skills which were chosen in the eight colleges of education.

The researcher has asked all the student teachers to write the names of the five skills which they have conducted in their micro-teaching programme. The student teachers have

written the twelve skills as like i) Narration
 ii) Motivation iii) Solving questions iv) Explanation
 v) Questioning vi) Black-board work vii) Introduction
 viii) Stimulus variation ix) Reinforcement x) Demonstration
 xi) Free association xii) Free question.

It is observed that the percentage of explanation is 97.56 which is the highest. The percentage of stimulus variation is 79.03 which has the second in all skills. The percentage of introduction skill is 64.74 which has the third place in all skills. The percentage of Narration, Motivation, Solving questions, Demonstration, Free question Free association is the below twentyfive. The percentage of B.B.work is the below fifty. The percentage of Introduction, questioning and reinforcement is the below seventyfive and the percentage of Explanation, Stimulus variation is the above seventyfive.

It is clearly evident that Explanation and Stimulus Variation are conducted very widely in the colleges of education. It is observed that the basic skills like questioning, illustrating with examples, reinforcement, probing and management of class have not the priority as like explanation and stimulus variation. The most important skill 'Motivation' which has psychological and logical base to the growth of human mind which is needful to motivate the student teachers is neglected in many colleges of education.

Through this table the investigator comes to conclusion that the skill which has very few teaching components is chosen for conducting the microteaching. The skill of Explanation is chosen widely because it is very easy to the realisation of some aspects of instructional objectives purported to be realised by the component's of teaching skill. It is found that response management information, refocusing, accepting and rejecting; using teaching aids; pacing of the lesson; prompting pupil participation; achieving closure; giving assignment, evaluating the pupils' progress and management of class are completely neglected in colleges of education. But it is necessary that maximum skills must be implemented to develop the teaching skill efficiently and systematically. The investigator would like to mention the skill as like closure; Assignment; Evaluation and Management of class which are very useful in teaching profession. It must be kept some skills compulsory as well as optional. All skills are useful for developing the skill of teaching profession. It is necessary to student teachers that they must have mastery of certain skills.

Q.4 Which suggestions do you give to your peer-group before starting of your micro-lesson ?

TABLE NO. 7
DIFFERENT SUGGESTIONS GIVEN BY
STUDENT TEACHERS

Sr. No.	Suggestions given by student teachers	Total Numbers	Total positive response	Percentage
a)	Concentration of instructions	329	277	84.19
b)	Attention to teaching	329	299	90.88
c)	Planning of teaching	329	290	88.15
d)	Playing the role as a student	329	278	84.50
e)	Any other	329	00	00.00

The table number seven gives the different suggestions which the student teachers have given to the peer-group before starting a micro-lesson. The investigator has given the six alternatives in that question. The percentage of 'the student teacher tells to pay proper attention to teaching' is 90.80 which is the highest. The percentage of 'the student teacher tells to stop their own planning of teaching' is 88.15 which has the second place. The percentage of 'the student teacher tells to play the role as a student properly' is 84.50 which has the third place in the suggestions. The percentage

of 'the student teacher tells the peer-group to concentrate on the instruction' is 84.19 which is the lowest. The percentage of 'any other' is zero.

It is observed that the student teachers are very eager to teach their own lessons more effectively. So far the student teachers are planning their own lessons properly. Student teachers are helping one another because they have to teach in micro-lessons. It is just like a trap to each student teacher to escape from it.

The investigator comes to the conclusion that the student teachers are losing their confidence and courage. Therefore, the student teachers want their micro-lessons must be effective. Through this table, the investigator concludes that the student teachers must know how to give the instructions. The student teachers must know the instructions which are very effective for conducting the lessons.

Q.5 What efforts do you take before conducting your teaching of micro-teaching ?

TABLE NO. 8

EFFORTS MADE BY STUDENT TEACHERS BEFORE
CONDUCTING MICRO-TEACHING

Sr. No.	Different efforts made by student teachers	Total Numbers	Total positive response	Percentage
a)	Reading the unit	329	282	85.71
b)	Reciting the micro-lesson	329	239	72.64
c)	Memorizing difficult points	329	287	87.23
d)	Discussing the difficult points of micro-lesson with guide.	329	278	84.50
e)	Discussing the points with friends	329	278	84.50
f)	Making a plan of teaching	329	302	91.79
g)	Any other	329	-	00.00

The table number eight shows different efforts which the student teachers have taken before conducting teaching of micro-teaching. There are six alternatives in that question. The percentage of 'the student teacher makes a proper plan of teaching' is 91.79 which is the highest. The percentage of 'the student teacher memorises the difficult points of microlesson' is 87.23 which has the second place in the study.

The percentage of 'the student teacher reads the unit' is 85.71 which has the third place in the study. The percentage of 'the student teacher discusses the difficult points of micro-lesson with the guide and friends' is 84.50 which has the fourth place in the study. The percentage of 'the student teacher recites the micro-lesson is 72.64 which has the lowest place in the study.

It is clearly evident that the percentage of the alternatives a, b, c, d, e and f is the above 72.64 . It is seen that 91.79 percent student teachers are making effective planning of teaching. The student teachers are completely aware of the teacher educators' guidance as well as friends' guidance. This is very essential in microteaching to discuss the weakness of the student teacher with the teacher educators and peer friends. The investigator comes to know that the discussion is the best weapon to improve the teaching.

The investigator concludes that the student teachers are making different efforts to make the micro-lessons more impressive and decent. It is clearly obvious that the student teachers are making efforts. The student teachers are making the content of the lesson by heart.

Q.6 How do you avoid the mistakes of your own teaching of micro-teaching ?

TABLE NO. 9

MISTAKES AVOIDED BY STUDENT TEACHERS'
BEFORE TEACHING MICRO-TEACHING

Sr. No.	Areas of avoiding mistakes	Total Numbers	Total positive response	Percentage
a)	Reciting the piece of micro-lesson	329	194	58.97
b)	Removing errors suggested by supervisor	329	301	91.49
c)	Discussing the weakness with the friends	329	271	82.37
d)	Practising the micro-lesson at home	329	239	72.64
e)	Following the instructions of friends	329	260	79.03
f)	Giving more suitable illustrations	329	268	81.46
g)	Any other	329	-	00.00

The table number nine gives how the student teachers have avoided the mistakes in their teaching of microteaching. The investigator has given seven alternatives in that question.

The percentage of 'By removing errors suggested by the supervisor' is 91.49 which has the first place in the study. The percentage of 'By discussing the weakness of teaching with friends' is 82.37 which has the second place in the study. The percentage of 'By giving more suitable illustration' is 81.46 which has the third place in the study. The percentage of 'By following the instruction of friends' is 79.03 . The percentage of 'By practising the micro-lesson at home' is 72.64 . The percentage of 'By reciting the piece of micro-lesson' is 58.97 which is the lowest. The percentage of 'Any other' is zero.

It is seen that 91.49 percent student-teachers are the true follower of the guides' instructions. It is evident that 58.97 percent student teachers are reciting the piece of micro-lesson which is very poor. The content of teaching must be very clear and up-to-date. The student teachers must have mastery over the content. The student teachers have feared the failure of their micro-lesson. So, they are avoiding the weak points which are suggested by the guides and friends. The student teachers are very keen to enrich the skills of teaching. It is clearly obvious that micro-teaching is the foundation of the teaching. It must be well and perfect. The student teachers are ready to remove certain weak points and accept new techniques, devices and methods of teaching.

Q.7 What measures do you follow to enable the peer group to understand your micro-lesson properly ?

TABLE NO. 10

DIFFERENT MEASURES USED BY A STUDENT-TEACHER
TO UNDERSTAND A MICRO-LESSON

Sr. No.	Different measures used by student-teachers	Total Numbers	Total positive response	Percentage
a)	Introducing the component of a skill	329	277	84.19
b)	Explaining in simple language	329	311	94.53
c)	Selecting interesting unit for micro-lesson	329	309	93.92
d)	Participating in friends lesson	329	302	91.79
e)	Any other	329	-	0.00

The table number ten furnishes the different measures followed by the student teacher to enable the peer-group to understand the micro-lesson properly. The investigator has given the five alternatives ^{to} /respond the student teachers.

The percentage of 'the student teacher explains in simple language' is 94.53 which is the highest position of all measures. The percentage of 'the student teacher selects interesting unit for micro-lesson' is 93.92 which has the second place in the study. The percentage of 'the student teacher participates in friends lesson, is 91.79 . The percentage of 'the student teacher introduces the components of a skill' is 84.19 which is the lowest of all. The percentage of a, b, c and d is above 84.19.

It is observed that these four items are really depending on one another. These are very essential measures to enable the peer-group to understand the micro-lesson properly. Through this table, the investigator concludes that the student teachers are always thinking keenly that their micro-lessons must not be bored to the peer-group. The student teacher would like to think this micro-lesson must be an ideal model to other students. It is clearly seen that the student teachers are making hard efforts how to explain the content in simple language because the simple language is the only one mean to overcome the failure of micro-lesson.

Q.9 How have you been encouraged by your supervisor ?

TABLE NO. 11
SUPERVISORS' ENCOURAGEMENT TO
STUDENT TEACHERS

Sr. No.	Different encouragements	Total Numbers	Total positive response	Percentage
a)	By remarking	329	284	86.32
b)	By grading	329	170	51.67
c)	By discussing the important points	329	295	89.67
d)	By praising	329	241	73.25
e)	Guiding individually	329	255	77.51
f)	Any other	329	-	0.00

The table number eleven gives the detail of how the student teachers have been encouraged by supervisors. There are five positive encouragements. The percentage of 'By discussing the important points of microteaching is 89.67 which is the highest of all. The percentage of 'By giving remarks' is 86.32 which has the second place in the study. The percentage of 'Guiding individually' is 77.51 which has the third place in the study. The percentage of 'By praising is 73.25 . The percentage of 'By grading' is 51.67 which is the lowest.

It is observed that the discussion has the important place in microteaching to improve the weak points of the student teachers. The student teachers are fully qualified, they never alter their views with the help of praising. The student teachers are fully grown up of having the maturity of their wrong doing, as well as good doing.

Through this table the investigator comes to the conclusion that the teacher educators have to practise using positive reinforcers and avoid the use of negative reinforcers in the micro-class. 'Discussion' is the best principle to improve the student teachers. Discussing the important points, guiding individually have positive reinforcements which are strengthening of desirable behaviour of the student teachers. It is evident that the positive reinforcers are those behaviours of the teacher educators or student teacher supervisors which encourage the student teachers to participate more and more.

Q.10 Which common weak points do you find in your micro-group ?

TABLE NO. 12
DIFFERENT WEAK POINTS OF
PEER MICRO-GROUP

Sr. No.	Weak areas of peer micro-group	Total Numbers	Total positive response	Percentage
a)	Not playing the pupils role properly	329	245	74.46
b)	Not concentrating on the teaching	329	220	66.86
c)	Giving incorrect answers	329	263	79.93
d)	Thinking only own micro-lesson	329	236	71.73
e)	Not following proper instructions	329	190	57.75
f)	Boring work	329	185	56.23
g)	Any other	329	-	0.00

The table number twelve shows that the common weak points the student teachers find in the micro-group. This question has ^{been} given seven alternatives by the investigator to student teachers such as - 'They always give incorrect answers' Its percentage is 79.93 which is the highest. The percentage

of 'peer-group student teachers donot play the pupils' role properly' is 74.46 which has the second place. 'They think about their own micro-lessons' its percentage is 71.73. 'They don't concentrate on the teaching of the student teachers' its percentage is 66.86. 'They don't follow proper instruction of a student teachers' its percentage is 57.75. 'They think that it is a boring work' its percentage is 56.23 which is the lowest.

It is seen that all the student teachers are graduates or post-graduates. So, they have maximum knowledge of the subject content. The subject content of V Std.to IX Standard is to that particular peer-group is very easy. So, they give incorrect answers of questions because their subjects are different and they are busy in the preparation of their own lessons. There is a definate difference between fresh learners and experienced learners. Above fortyfive percent student teachers think microteaching is boring. There is again and again repetition of the same work. It is very difficult to concentrate the attention. It makes man bore. One of the difficult points is playing the role of a pupil properly. It is found that many student teachers are not following proper instructions.

Through this table the investigator concludes that the micro-lesson must be kept on real school children.

Q.11 What efforts do you make while taking a micro-lesson ?

TABLE NO. 13
EFFORTS MADE BY STUDENT TEACHERS WHILE
TAKING A MICRO-LESSON

Sr. No.	Various efforts of student teachers	Total Numbers	Total positive response	Percentage
a)	Asking questions	329	296	89.96
b)	Giving suitable points	329	302	91.79
c)	Using audio-visual aids	329	261	79.33
d)	Avoiding mistakes	329	283	86.01
e)	Giving attention only on the particular skill	329	283	86.01
f)	Any other	329	-	0.00

The table number thirteen furnishes the efforts made by the student teachers while taking a micro-lesson. This table is organized under the six headings such as - 'The student teacher gives suitable points', its percentage is 91.79 which is the highest. 'The student teacher asks questions', its percentage is 89.96 which has the second place in the study. The percentage of 'the student teacher avoids mistakes' and 'the student teachers give the attention only on the particular skills' is 86.01. The percentage of 'the student teacher uses audio-visual aids' is 79.33 which is lowest.

It is clearly evident that the percentage of a, b, c, d, e is above 79.33 percent which give the clear picture of all student teachers make hard efforts while taking a micro-lesson. It is found that the student teachers are selecting the unit which has the suitable points. It is seen that the percentage of the student teacher uses audio-visual aids is the lowest. It is clearly evident that audio-visual aids are very essential in a micro-lessons.

Q.12 What are the major weak points of present procedure in microteaching programme ?

Student teachers have given their responses as follows.

1) Azad College of Education, Satara

One student : from Azad College of Education, Satara said, "Use of peer-group, lack of proper guidance and lack of using video-tapes."

Another student : from Azad College of Education Satara said, "Student teachers don't play their role properly. All the skills are not used in teaching. The series of skills are not gypical one. So it finds very difficult for teaching."

2) College of Education, Karad

One student from College of Education, Karad said, "It is very dull process. It is distributed in many points. We cannot get knowledge of teaching."

Another student from College of Education, Karad said, "There are nineteen skills and we cannot develop each and every skill properly."

3) S.M.T.College of Education, Kolhapur

One student from S.M.T. College of Education Kolhapur said, "We have to first take a micro-lesson then when the peergroup give us feedback. After that again we have to take the same lesson and it is boring for us and for the listener too. More time is spent on this procedure. We cannot develop all the skills simluteniously in the lesson."

Another student from S.M.T.College of Education, Kolhapur said, "It stresses only skill. It is necessary to think about the time and practice."

4) Savitribai Phule College of Education, Kolhapur

One student from Savitribai Phule College of Education, Kolhapur said, "Time should be increased."

Another student from Savitribai Phule College of Education, Kolhapur said, "The student teachers cannot learn skills properly."

5) S.P.S. College of Education, Sangli

One student from S.P.S. College of Education, Sangli said, "It is not suitable to teach whole syllabus by microteaching method. Although it looks ideal in fact microteaching is partly idle one."

Another student from S.P.S. College of Education, Sangli said, "Colleagues are not taking active participation. This method is not suitable for this age-group. If you want to prove student teachers, you must give more burden on students."

6) Late S.M.Patil Mahila College of Education, Miraj

One student from Late S.M.Patil College of Education, Miraj said, "With the help of micro-teaching, I got confidence of teaching."

Another student from Late S.M.Patil Mahila College of Education, Miraj said, "The peer-group student teachers don't behave like school children therefore it is quite difficult to get correct atmosphere."

7) Solapur Social College of Education, Solapur

One student from Solapur Social College of Education, Solapur said, "Peer-group cannot help us well, everybody plays attention on his own work."

Another student from Solapur Social College of Education, Solapur said, "Student teachers frighten to stand on the stage. But student teachers daring will be grown up."

8) Kasturbai College of Education, Solapur

One student from Kasturbai College of Education, Solapur said, "I think student teachers should think clearly, discuss the weakness of the student teachers and act like the real students of sixth or seventh standard students which they donot."

Another student from Kasturbai college of Education Solapur said, "Student teachers who are selected for observation, donot remark properly. They donot observe the micro-lesson carefully. They give remark ~~æ~~ roughly."

Q.13 What difficulties do you face in teaching micro-lesson in the peer-group ?

TABLE NO.14

EFFORTS MADE WHILE TAKING A MICRO-LESSON

Sr. No.	Different difficulties	Total Numbers	Total positive responses	Percentage
a)	Peer-group	329	234	71.12
b)	No experience of teaching	329	206	62.61
c)	Inferiority complex	329	177	53.79
d)	Errors of speaking	329	211	64.13
e)	Errors of writing	329	205	62.31
f)	Errors of pronunciation	329	194	58.96
g)	Errors of presentation	329	212	64.43
h)	Fear of an observer	329	207	62.91
i)	Errors of reading	329	160	48.63
j)	Any other	329	00	0.00

The table number fourteen shows the various difficulties faced by the student teachers in taking micro-lesson in peer-group. This table is organized under ten headings as like (a) Peer-group : Its percentage is 71.12 which is the

highest of all. (g) Errors of Presentation : Its percentage is 64.43 which has the second place in the study. (d) Errors of speaking : Its percentage is 64.13 which has the third place in the study. (h) Fear of an observer : Its percentage is 62.19 (b) No experience of teaching : Its percentage is 62.61 (e) Errors of writing : Its percentage is 62.31. (f) Errors of pronunciation : Its percentage is 58.98. (e) Inferiority complex : Its percentage is 53.79. (i) Errors of reading : Its percentage is 48.63 which is the lowest of all difficulties.

It is observed that the maximum student teachers have the problem of peer-group. In peer-group every student teacher is eager to find out the mistakes of a student teacher. Making mistakes in the school children is different but it is not so easy in the peer-group. A student teacher while taking lesson in microteaching suffers many difficulties in speaking, reading, writing, pronunciation and presentation. The language must ^{be} fluent and effective. So, it is essential that a student teacher must have command over language. Microteaching practice may lead to frustration because of inferiority complex which has psychological base. It is not possible to have content courage to the fresh student teachers. Many student teachers afraid to the teacher educators because the student teacher cannot speak freely and frankly.

Through this table the investigator concludes that many student teachers find under the pressure of observers. The student teachers must have fluency and mastery over language. Many student teachers have psychological drawback of inferiority complex. Many student teachers loose their confidence and courage because of peer-group.

Q.14 What are the difficulties of role playing in micro-lesson ?

TABLE NO. 15

DIFFICULTIES FACED WHILE PLAYING
A ROLE AS STUDENTS

Sr. No.	Areas of difficulties in role playing	Total Numbers	Total positive responses	Percentage
a)	Age	329	243	73.86
b)	Mastery over subjects	329	254	77.20
c)	Feeling of shyness	329	185	56.23
d)	Difficulties of making mistakes	329	175	53.19
e)	Difficulties of making certain movements	329	194	58.96
f)	Any other	329	00	0.00

The table number fifteen furnishes the difficulties of role playing in micro-lesson.

The percentage of (b) Mastery over the subject, its percentage is 77.20, which is the highest. The percentage of (a) Age is 73.86 which has the second place in the study. The percentage of (e) Making certain movements is 58.96. The percentage of (c) Feeling of shyness is 56.23. The percentage of (d) Difficulties of making mistakes' is 53.19 which is the lowest.

It is clearly obvious that the percentage of Mastery over subject is the highest. Many student teachers suffer this difficulty because they have studied the subject from the examination point of view but not from the teaching view. This shows that many student teachers are very poor in the subject-matter. Again it is observed that the problem of 'Age'. It is natural because many student teachers are not able to make certain gestures, pauses and movements because of the old age. The student teachers afraid of the others criticism. It is seen that playing the role of children is very difficult.

Through this table, the investigator comes to the conclusion that the peer-group faced many difficulties. So, it is necessary that the micro-lesson must be conducted on the school children. It is very easy to know the natural difficulties of the school-children.

Q.15 Are there sufficient audio visual aids in your college ?

Q.16 If yes, What are those ?

TABLE NO.16

DIFFERENT AUDIO-VISUAL AIDS USED IN THE
SHIVAJI UNIVERSITY AREA

Sr. No.	Different audio-visual aids	Total Numbers	Total positive responses	Percentage
a)	Pictures	329	283	86.01
b)	Charts	329	309	93.92
c)	Models	329	283	86.01
d)	Flannel Boards	329	221	67.17
e)	Radio	329	237	72.03
f)	Tape-recorder	329	193	58.66
g)	Television	329	182	55.31
h)	V.C.R.	329	84	25.53
i)	Films	329	92	27.96
j)	Film-strips	329	111	33.73
k)	Slide-projector	329	119	36.17
l)	Any others	329	00	0.00

Table number sixteen furnishes the detail information whether there are sufficient audio-visual aids which are used in the eight colleges of education of Shivaji University area. These colleges of education have been selected to know the

facilities of audio-visual aids provided to student teachers in the microteaching.

The percentage of V.C.R., Films, Elm-strips and slide projector is below fifty percentage. The percentage of Flannel boards, Radio, Tape-recorder and Television is below seventyfive percent. The percentage of pictures, charts and Models is above seventyfive percent. It is observed that charts have the highest percentage in the study. Pictures and Models have the second place in the study. Radio has the third place in the study.

It is seen that the student teachers have used pictures, charts, models and flannel boards widely because they are easily available to the student teachers. It is obvious that tape-recorder and films occupied well position in microteaching but these aids are rarely used in the colleges of education. These aids are very essential to develop the technique of feedback which is used to improve the weakness of the student teachers.

It is very sad surprising to note that non-aided colleges of education donot have essential aids such as Television, V.C.R., Film, Slide-projector and Tape-recorder. Through this table, the investigator concludes that audio-visual aids must be provided by colleges of education.

Q.18 How much improvement did you experience in your teaching and re-teaching ?

TABLE NO. 17

PERCENTAGE OF IMPROVEMENT IN TEACHING
AND RE-TEACHING

Sr. No.	Percentage	Total Numbers	Total positive response	Percentage
a)	Upto 5 %	329	08	2.43
b)	Upto 25 %	329	67	20.36
c)	Upto 50 %	329	110	33.43
d)	More than 50 %	329	144	43.76
e)	Not at all	329	00	00.00

The table Number seventeen shows the improvement of the student teachers experience in the teaching and re-teaching. There are 329 student teachers of the eight colleges of education who have participated in the investigation of the problem.

This table is organized under five points. Improvement (a) upto 5 % is shown in eight student teachers out of 329 student teachers and the percentage is 2.43. Improvement (b) upto 25 % is shown in 67 student teachers out of 329 student teachers and the percentage is 20.36. Improvement (c) upto 50 % is shown in 110 student teachers out of 329 student

teachers and the percentage is 33.43 which has the second place in the study and (4) Not at all improvement is zero percentage. It is evident that the improvement more than 50 % has the first place in the study.

Through this table the investigator concludes that there is very good improvement in the teaching. So, it is very necessary in the teacher's profession to correct the mistakes. To correct the mistakes mean to follow feedback. The investigator would like to mention that teaching and re-teaching is the best opportunity to the student teachers' improvement.

Q.19 Explain your planning of an integrated lesson.

Student teachers have given their responses as follows.

1) Azad College of Education, Satara : One student said, "I read the unit, I memorize the difficult points, I make a proper plan of teaching in my mind."

Another student said, "Unit selection, Guidance from supervisor and actual lesson."

2) Karad College of Education, Karad : One student said, " I had used painted picture to develop the story. I used all skills of English language. I used proper teaching method. I asked questions."

Another student said, "I made lesson plan according to the instruction of my guide. I selected the content and used all skills in it."

3) S.M.T.College of Education, Kolhapur : One student said, "For integrated lesson I selected a unit in which I could use five skills easily."

Another student said, "I chose the best unit for an integrated lesson for which I could prepare some teaching aids and then kept the skills before my eyes and planned the lessons."

4) Savitribai Phule College of Education, Kolhapur : One student said, "I take for integrated lesson subject on construction.. then I take all skills in this lesson."

Another student said, "I planned lesson-note properly."

5) S.P.S.College of Education, Sangli : One student said, "We revise all the skills which are used previously and make efforts to bring them in single channel."

Another student said, "I have selected a unit in which I can use more skills and for that unit I prepare myself for those skills and also prepare myself to stand fifteen minutes in front of student teachers and observe for teaching."

6) Kasturbai College of Education, Solapur : One student said, "I have chosen a proper unit. Units must be having more skills."

Another student said, "I planned well the skills in time in integrated lesson. I was not afraid and took lesson daringly."

7) Solapur Social College of Education, Solapur: One student said, "I planned the proper introduction and questions."

Another student said, "I choose proper unit for the purpose of skills. In this unit, we cover all skills properly."

8) Late S.M.Patil Mahila College of Education, Miraj: One student said, "I selected the poem for my integrated lesson. I followed the guidance of Professor Patil madam and Professor Mane."

Another student said, "I tried to cover all the components of skills in my integrated lesson."

Q.20 How much time do you require for a proper micro-lesson ?

TABLE NO. 18

REQUIREMENT OF TIME FOR MICRO-LESSON

Sr. No.	Minutes	Total Numbers	Total positive responses	Percentage
a)	5 minutes	329	168	51.06
b)	8 minutes	329	60	18.23
c)	10 minutes	329	68	20.66
d)	12 minutes	329	14	4.25
e)	Any other (15 minutes)	329	6	1.82

The table number eighteen gives how much time the student teachers require for a proper micro-lesson. This question is asked to 329 student teachers and asked them to right mark any one out of the five items.

The percentage of (a) five minutes is 51.06 which is the highest of all. The percentage of (c) ten minutes is 20.66, which has the second place in the study. The percentage of (b) eight minutes is 18.23 which has the third place. The percentage of (d) twelve minutes is 4.25 and (e) any other (fifteen minutes) has 1.82 percent which is the lowest of all.

Through this table, the investigator concludes that the duration of micro-lesson must be of five minutes. Five minutes time is adequate for the practice of a teaching skill.

Q.21 What steps are required for minimising the element of subjectivity of micro-teaching ?

TABLE NO. 19

STEPS OF SUBJECTIVITY OF MICROTEACHING

Sr. No.	Different elements	Total Numbers	Total positive responses	Percentage
a)	Observation of more supervisors	329	263	79.93
b)	Tape-recorded	329	231	70.21
c)	Video-taped	329	241	73.25
d)	Rating-scales	329	123	37.38
e)	Any other	329	00	0.00

The table number nineteen furnishes the various elements are required for minimising the subjectivity of microteaching. The table is organized with the five elements of subjectivity of microteaching.

The percentage of (a) More than one supervisors should observe the same lesson and assign the average grade/marks to micro-lesson is 79.93 which is the highest. The percentage of (c) the microlesson should be video-taped and cassettes should be replayed is 73.25 which has the second place in the study. The percentage of (b) The micro-lesson should be tape-recorded and the cassetts should be replayed is 70.16 which has the third place in the study. The percentage of

(d) Rating-scales should be used for assessing the different micro-lesson is 37.38 which is the lowest of all.

It is evident that the percentage of a, b, c is the above 70.21 percent. Many teacher educators are not observing by heart; they are doing the work as routine, they never think it is very serious matter. For the sake of feedback the tape-recorder is essential in micro-lesson. It is essential to know the weakness of the student teachers for this video-tape is the best mean for feeding in the micro-class. Through this table, the investigator concludes that video and tape must be applied in the micro-teaching. Two supervisors must observe the micro-lesson of a student teacher.

Q.22 What suggestions would you like to give for the improvement of micro-lessons ?

TABLE NO.20
SUGGESTIONS FOR IMPROVEMENT OF MICRO-LESSON

Sr. No.	Areas of suggestions	Total Numbers	Total positive responses	Percentage
a)	Tape-recorded	329	197	59.87
b)	Discussion of micro-lesson	329	292	88.75
c)	Observation of micro-lesson	329	215	65.34
d)	Any other	329	01	0.30

The table number twenty furnishes the different suggestions of the student teachers who would like to give the suggestions for the improvement of micro-lessons. The investigator has given the four alternatives to respond the answer of the question.

The percentage of (b) 'The weakness in microlessons should be discussed immediately after the microlesson' is 88.75 which is the highest. The percentage of (c) 'For increasing the objectivity in micro-teaching at least one microlesson of each student teacher would be observed by all supervisors' is 65.34. The percentage of (a) 'The microlesson should be tape-recorded' is 59.87 and (d) 'Any other' its percentage is zero.

It is clearly evident that the weakness in the microlesson should be discussed immediately after the micro-lesson. Many student teachers suggest that atleast one micro-lesson of each student teacher should be observed by all supervisors. Through this table, the investigator would like to suggest that the weakness of the microlesson must be discussed immediately after the micro-lesson freely and frankly. Again the investigator would like to suggest that one micro-lesson must be observed by all supervisors. Their suggestions would improve the weakness of the student teachers.

Q.23 What type of matrix have you used in your college ?

TABLE NO. 21

DIFFERENT TYPES OF MATRIX USED IN
EDUCATION COLLEGES

Sr. No.	Different types of matrix	Total Numbers	Total positive responses	Percentage
a)	Ready made matrix	329	154	46.80
b)	Self made matrix	329	102	31.00
c)	College made matrix	329	203	61.70
d)	Writer made matrix	329	25	7.59
e)	Teacher made matrix	329	329 76	23.10
f)	Any other	329	00	00.00

The table number ~~twentyone~~ shows the different types of matrix of the student teachers have used in eight colleges of education. This table is organized under the six matrices as like (d) 'The percentage of 'College made matrix' is 61.71 which is the highest. The percentage of 'Ready made matrix' is 46.80. The percentage of 'Self made matrix is 31.00. The percentage of 'Writer made matrix' is 7.59 which is the lowest. The percentage of 'Teacher made matrix' is 23.10 and the percentage of 'Any other' is zero.

It is clearly observed that 'college made matrix' is widely used in all colleges of education. It is essential to observe all the movements carefully. It needs careful attention ^{of} the student teacher's activities in microlessons.

Through this table, the investigator concludes that the writer made matrix is neglected by many student teachers. It is found that the student teachers are attracted towards ready made matrix. It is clearly evident that ready made material is used for observing the lesson.

The investigator comes to know that self-made matrix must be used to observe the lessons. It is very useful to collect important incidents. Teacher educators must avoid to give college made matrix.

Q.24 What benefits do you gain from demonstration lesson ?

TABLE NO.22

DIFFERENT TECHNIQUES OF DEMONSTRATION LESSON

Sr. No.	Different techniques	Total Numbers	Total positive responses	Percentage
a)	Teaching	329	308	93.61
b)	Speaking	329	287	87.23
c)	Discussing	329	271	82.37
d)	Presenting the subject matter	329	265	80.54
e)	Solving the problems of students	329	263	79.93

Sr. No.	Different techniques	Total Numbers	Total positive responses	Percentage
f)	Controlling the class	329	278	84.49
g)	Particular skill	329	274	83.28
h)	Adjusting with the students	329	270	82.06
i)	Teaching aids	329	243	73.86
j)	Any other	329	00	0.00

The table number twentytwo gives the benefits the student teachers gained from demonstration lesson. The table is organised under ten important benefits.

The percentage of (a) Techniques of teaching is 93.61 which is the highest benefit from the demonstration lesson. The percentage of (b) Technique of speaking is 87.23 which has the second place in the study. The percentage of (g) Technique of controlling the class is 84.49 which has the third place in the study. It is obvious that the percentage of (c) Technique of discussing, (d) Technique of presenting the subject matter properly, (e) Technique of solving the problem of the students, (h) Technique of the particular skill is above 75 percent. It is found that the percentage of (i) Technique of handling teaching aids is 73.86 which is the lowest of all.

It is evident that the demonstration lessons must be kept maximum in numbers because it is clearly known that the percentage of all headings is above 73.86. Through this, the investigator concludes that demonstration lessons give the guidelines to the student teachers. The student teachers are making the true copies of the teacher educators. The investigator would like to mention that the demonstration lessons of each skill must be at least two in the beginning.

IV.4 CONTENT-CUM-METHODOLOGY

Q.25 What should the overall weightage be given to two content-cum-methodology workshop in Bachelor of Education practicum ?

TABLE NO.23

WEIGHTAGE OF MARKS TO CONTENT-CUM-METHODOLOGY
WORKSHOP

Sr. No.	Marks	Total Numbers	Total positive responses	Percentage
a)	80 marks	329	118	35.86
b)	100 marks	329	149	45.28
c)	Less than 80 marks	329	35	10.63
d)	More than 100 marks	329	27	8.20

The table number of twenty three furnishes the overall weightage of marks to be given to the two content-cum-methodology workshops in Bachelor of Education practicum. So, the investigator has given four alternatives as (a) 80 marks; (b) 100 marks, (c) less than 80 marks and (d) more than 100 marks.

The percentage of (b) 100 marks-is 45.28 which is the highest. The percentage of (a) 80 marks-is 35.86 . The percentage of (c) Less than 80 marks-is 10.63 . The percentage of (d) More than 100 marks-is 8.20 which has the lowest position in the study.

It is clearly evident that the weightage of 100 marks overall should be given to two content-cum-methodology workshops in Education Practicum. Through this the investigator would like to suggest that weightage of 100 marks must be given instead of 80 marks which is prescribed in the Education practicum.

Q.26 What type of activities are organised in the content-cum-methodology workshop in your college ?

TABLE NO. 24DIFFERENT ACTIVITIES OF
CONTENT-CUM-METHODOLOGY

Sr. No.	Different activities of content-cum-methodology	Total Numbers	Total positive responses	Percentage
a)	General lectures on content-cum-methodology	329	317	96.35
b)	Relationship between textbook and syllabus	329	298	90.57
c)	Structure analyses of the subject	329	280	85.10
d)	Analysis of the text book	329	300	91.18
e)	Content analysis of the unit	329	290	88.15
f)	Conducting three lessons on one unit	329	285	86.63
g)	Making teaching aids	329	293	89.05
h)	Conducting written examination	329	251	76.29
i)	Any other	329	00	0.00

The table number twenty four gives the detail information of different type of activities ^{which} are organised in the content-cum-methodology workshop in the colleges of education. The table is organized under the nine important activities which are organized in the eight colleges of education.

The percentage of (a) General Lecture on content-cum-methodology is 96.35 which is the highest of all. The percentage of (d) Analysis of the text-book is 93.18 which has the second place in the study. The percentage of (b) Relationship between the text-book and syllabus is 90.57. The percentage of (g) Making teaching aids is 89.5. The percentage of (e) Content analysis of the unit is 88.15. The percentage of (f) Conducting three lessons on one unit is 86.63. The percentage of (c) Structure analysis of the subject is 85.10. The percentage of (h) Conducting written examination is 76.29 which is the lowest of all and (i) Any other, its percentage is zero.

It is clearly evident that the percentage of (a) to (h) is above seventyfive. It is seen that all these activities are very necessary in the content-cum-methodology workshop which are organized carefully. Many student teachers are not interested in the activity of conducting written examination. Through this table the investigator comes to know that all colleges of education know the importance of these activities. The content-cum-methodology is new in the Bachelor of Education Course.

Q.27 What topics are proper for conducting the three lessons by different methods in your two methods ?

Student teachers have given the responses as follows.

1) Azad College of Education, Satara

One student said, "Frog, leaf and characteristics of chemicals are suitable topics for conducting the three lessons in standard VIII in Science."

Another student said, "Parts of flowers, stem and characteristics of acids and alkalies are the topics which are useful for conducting the three lessons in Science in Standard VIII and IX."

2) Karad College of Education, Karad

One student said, "Different stories in Marathi in Standard VI, VII; Regional Geography, Water in Geography in VIII Standard, Second World War in History in VII Standard are suitable topics for conducting the three lessons in Content-cum-methodology workshop."

Another student said, "Akbari Lotha in Hindi in Standard IX, The power of music in English in Standard IX are the suitable topics for conducting the three lessons."

3) S.M.T.College of Education, Kolhapur

One student said, "Transformation of sentences, Direct and Indirect speech in English in Standard VIII and IX; ocean resources and water resources in Geography in Standard VII and VIII are the suitable topics for conducting the three lessons in the content-cum-methodology workshop."

~~XXXX~~ Another student said, "Problem solving in Mathematics in Standard V to IX; Characteristics of acid in Science in Standard IX are suitable topics for conducting the three lessons in content-cum-methodology workshop."

4) Savitribai Phule College of Education, Kolhapur

One student said, "Grammar, prose and lyric poems in English in Standard VIII and IX are the suitable topics for conducting the three lessons in the content-cum-methodology workshop."

Another student said, "Brain storming, Flower and leaf in Science in Standard VIII are the topics for conducting the three lessons in the content-cum-methodology workshop."

5) S.P.S. College of Education, Sangli

One student said, "River Cycle of crossion in Geography in Standard VIII is the suitable topic for conducting the three lessons."

Another student . said, "All important topics of historical incidents in History in Standard V to IX; All small stories in Marathi in Standard V to IX are the suitable topics for conducting the three lessons."

6) Smt.Late S.M.Patil Mahila College of Education,Miraj

One . student . . . said, "Structure of cell, function of cell and atom in Science in Standard VIII are the suitable topics for conducting the three lessons."

Another student . said, "Flower and its parts in Science in Standard VIII, is the suitable topic for conducting the three lessons."

7) Kasturbai College of Education, Solapur

One . student . . . said, "Magnets, Air, Transmission of heat in Science in Standard VIII and Indices, Trangle and Theoram in Mathematics in Standard VIII and IX are the suitable topics for conducting the three lessons."

Another student . . . said, "London's Natal - P.L.Deshpande in Marathi in Standard VIII;"Kidnapped" in English in Standard VIII are the suitable topics for conducting the three lessons in content-cum-methodology workshop."

8) Solapur Social College of Education, Solapur

One student ... said, "Expansion of $(x + b)^2$ in Mathematics in Standard VIII is the suitable topic for conducting the three lessons."

Another student said, "Magnets, Air, and Transmission of heat in Science in Standard VIII are the suitable topics for conducting the three lessons."

Q.28 Which efforts do you make to develop your teaching in your content-cum-methodology workshop ?

TABLE NO. 25

VARIOUS EFFORTS FOR DEVELOPING THE TEACHING IN
CONTENT-CUM-METHODOLOGY WORKSHOP

Sr.	Various efforts of content-cum-methodology	Total Numbers	Total positive responses	Percentage
a)	Analysing the content	329	304	92.40
b)	Using teaching aids	329	296	90.57
c)	Relationship of method and content	329	302	91.79
d)	Discussing the errors	329	297	90.27
e)	Any other	329	00	0.00

The table Number twentyfive furnishes the different efforts the student teachers make to develop teaching in the content-cum-methodology workshop. The investigator has given

five alternatives in this question. The student teachers marked right marks as the answer of the question.

The percentage of (a) The student teacher analyses the content is 92.40 which is the highest. The percentage of (c) The student teacher think about the method in relation to content is 91.79 . The percentage of (b) The student teacher uses teaching aid is 90.57 . The percentage of (d) The student teacher discusses the errors in peer-group is 90.27 which is the lowest.

It is observed that the percentage of (a), (b), (c) and (d) is above 90.27. It is evident that the student teachers make hard efforts to develop the teaching of content-cum-methodology workshops. Through this table, the investigator concludes that the student teachers are ready to make hard efforts in the content-cum-methodology workshop.

Q.30 How have you been encouraged by your supervisor ?

TABLE NO. 26

DIFFERENT ENCOURAGEMENT OF SUPERVISORS

Sr. No.	Different encouragement of supervisors	Total Nos.	Total positive responses	Percentage
a)	By giving remarks	329	206	62.61
b)	By giving grades	329	171	51.97
c)	By discussing the improvement points	329	222	67.47
d)	By praising	329	143	43.46
e)	By guiding individually	329	215	65.34
f)	Any other	329	00	0.00

The table number twentysix furnishes how the student teachers have been encouraged by supervisors. The investigator has given five alternatives of encouragement as following.

The percentage of (c) 'By discussing the important points' is 67.47 which is the highest. The percentage of (e) 'By guiding individually' is 65.34 which has the second place in the study. The percentage of (a) 'By giving remarks' is 62.61. The percentage of (b) 'By giving grades' is 51.97. The percentage of (d) 'By praising' is 43.46 which is the lowest in the study. The percentage of (f) 'Any other' is zero.

It is observed that the discussion has the important place in the content-cum-methodology workshop, to improve the weakness of the student teachers. It is essential to give reinforcement for improving the student teachers. Through this table, the investigator concludes that the student teachers must be given more and more opportunity to discuss with the guide or friends in the content-cum-methodology workshop.

Q.31 What difficulties do you face in conducting the three lessons on the unit in the content-cum-methodology workshop ?

TABLE NO.27

AREAS OF DIFFICULTIES IN THE CONTENT-CUM-
METHODOLOGY WORKSHOP

Sr. No.	Areas of Difficulties	Total Numbers	Total positive responses	Percentage
a)	Difficulties to find out proper unit	329	255	77.50
b)	Fear of observer	329	173	52.58
c)	Repetition of the content creates dullness	329	222	67.47
d)	Fear of the peer-group	329	164	49.84
e)	Any other	329	00	0.00

The table number twentyseven gives the different difficulties the student teachers face in conducting the three lessons on one unit in the content-cum-methodology workshop. The investigator has given the five alternatives in the question. The student teachers have marked the right marks more than one or more. The alternatives are (a) Difficulty to find out proper unit, its percentage is 77.50 which is the highest. (c) Repetition of the content creates dullness, its percentage is ~~52.58~~ 67.47. (b) Fear of observers, its percentage is 52.58. (d) Fear of the peer-group, its percentage is 49.84 which is the lowest of all. (e) Any other, its percentage is zero.

It is obvious that the student teachers face the main difficulty to find out proper unit. Many student teachers lose the confidence because of fear of teacher educators' observation. The repetition of the content in the content-cum-methodology workshop creates dullness in teaching. Through this table, the investigator concludes that the student teachers face the difficulty of choosing the proper unit for the content-cum-methodology workshop lessons. The student teachers must be supplied ready made charts of unit and different topics for lessons.

Q.32 What are the major weak points of present procedure in content-cum-methodology workshop ?

Student teachers have given their responses as follows.

1) Azad College of Education, Satara

One student said, "It is lengthy process and time consuming. They never get proper guidance of the content-cum-methodology."

Another student said, "It is very difficult to find out the proper unit and that unit which we find should not be repeated."

2) Karad College of Education, Karad

One student said, "We cannot get sufficient time. We cannot develop all the skills in subject. There is lackness of experienced teacher educators."

Another student said, "It is a dull process. It takes the time of student teachers. It is dull work for student teachers."

3) S.M.T.College of Education, Kolhapur

One student said, "It wastes time. It needs more time. It is boring method. It cannot be taken in actual teaching."

Another student said, "It is very difficult to take one unit with the three methods."

4) S.P.S.College of Education, Sangli

One student said, "The same peer-group donot follow the teaching of a student teacher."

Another student said, "Repetition of the content of the unit creates dullness in teaching."

5) Late M.V.Patil Mahila College of Education, Miraj

One student said, "I donot feel any weak points of present procedure in the content-cum-methodology workshop."

Another student said, "It is boring work."

6) Savitribai Phule College of Education, Kolhapur

One student said, "Content-cum-methodology's procedure is very difficult. But it is very useful for student teachers."

Another student said, "Content-cum-methodology workshop must be kept in the B.Ed.Course."

7) Kasturbai College of Education, Solapur

One student said, "It is not easy to find a unit that can be taught using the three methods. How to teach effectively in all lessons is also a problem. We don't go through all the syllabus."

Another student said, "Again doing the same thing, it becomes a dull thing. It is better to have the workshop on one method only."

8) Solapur Social College of Education, Solapur

One student said, "There is difficulty in the content-cum-methodology workshop because it is not useful in teaching."

Another student said, "This method is complete failure. Student teachers cannot give the importance to it."

Q. 33 What steps would be taken for the improvement of the 'Content-cum-methodology workshop' according to you ?

TABLE NO. 28

DIFFERENT AREAS OF IMPROVEMENT OF
CONTENT-CUM-METHODOLOGY WORKSHOP

Sr. No.	Different areas of improvement of content-cum-methodology workshop	Total Numbers	Total positive response	Percentage
a)	One method only	329	207	62.91
b)	Cut of three lessons one lesson	329	198	60.18
c)	Guidance of guide to student teachers	329	275	83.58
d)	Rating-scales of assessment	329	212	64.43
e)	Any other	329	00	0.00

The table number twentyeight gives the different steps which should be taken for the improvement of the content-cum-methodology workshop according to the student teachers.

The table of improvement is consisted of five important steps such as (c) 'Teacher-educators must give proper guidance and knowledge to student teachers'. Its percentage is 83.58, which is the highest. (d) 'Rating scales should be used for assessing the different content-cum-methodology

lessons of student teachers." Its percentage is 64.43.

(a) Content-cum-methodology workshop must be on one method only. Its percentage is 62.91. (b) Conducting only one lesson out of the three lessons. Its percentage is 60.18 which is the lowest.

It is evident that the percentage of (a), (b), (c), and (d) is above sixty. All student teachers are puzzled by the newness of content-cum-methodology workshop because this is newly introduced in Bachelor of Education Course. All student teachers demand the guidance from the teacher-educators. Through this table the investigator concludes that these four steps must be implemented. These four steps are necessary to improve the teaching of content-cum-methodology workshop.

IV.05 OPINIONS OF TEACHER EDUCATORS IN INTERVIEW

The researcher had taken the interviews of the thirty two teacher educators of eight colleges of education. The researcher asked the following questions to know the student teaching programme.

The researcher asked, "What skills have been chosen in your college for micro-teaching ? Which skills do you want to introduce for microteaching ? State the names of skills. "

More than 90 % teacher educators had expressed their opinions freely and frankly that the skills were chosen in the colleges of education were enough in B.Ed.course. But all teacher educators said, "There is no need to introduce the new skills". Very few teacher educators had expressed that the B.B.work and 'Motivation' skills must be introduced in the B.Ed.course. Then the researcher concluded that the skills which were chosen in the college were enough.

The researcher asked to the teacher educators, "How many student teachers do you require for a micro-group?" All teacher educators had expressed that between seven to ten student teachers were enough for a micro-group. But more than ten student teachers' group was not suitable to develop, to guide and to conduct the skill properly. So, the researcher had concluded that at least eight student teachers were enough for a micro-group.

The researcher asked the third question, "How much time do you spend to guide to your student teachers ? Is it sufficient time for guidance ?" More than 75 % teacher educators had mentioned that the time which was given for micro-guidance was not sufficient. They were not giving proper guidance because of many quick activities of B.Ed. course. But nearly 25 % teacher educators had expressed that

the time which was given for micro-guidance was sufficient. They must utilise it properly. The researcher concluded that more time must be given for micro-guidance.

The researcher asked, "What do you want to say about the subject knowledge of student teachers?" All teacher educators had clearly stated that they were not satisfied about the subject knowledge of student teachers. The student teachers, were very poor in the content. Many teacher educators said that they did not construct the questions properly. They never knew the basic things of the subject. They were also very poor in language. The researcher concluded that the student teachers had not enough subject knowledge. They were poor in subject knowledge.

The researcher asked, "Do you believe that micro-teaching practice affect the practice lessons of student teachers? Do you see some good results of micro-teaching?" All teacher educators had agreed that student teachers were well improved after micro-teaching. After microteaching they were standing properly in front of pupils. They had enough courage and confidence to speak and express the ideas properly. Many student teachers were losing their confidence while they were conducting the lessons. The researcher knew that the microteaching affected the practice teaching. Not only that, but also they had well confidence.

The researcher asked about practice lessons, "Are there twenty practice lessons sufficient in B.Ed.Course ? What do you feel ? " All teacher educators had stated that the twenty practice lessons were enough for B.Ed course. But these lessons must be guided and conducted properly in the classes. The researcher concluded that twenty practice lessons were enough for B.Ed course.

The researcher asked, "Is there sufficient time for guidance of practice lessons ? " All teacher educators had stated that they had not sufficient time for guidance. They were very hurry to finish the work which was prescribed by college. The researcher understood that the time which was given for guidance was not sufficient.

The researcher asked, "Do you think the content-cum-methodology workshop tiresome ? If yes, what efforts should be taken for making it joyful ?" All teacher educators replied, "It is boring work. It spends lot of time of student teachers". Many teacher educators expressed their dislike for Content-cum-methodology workshop. Eventhough it was new activity. It must be guided and conducted by the Department of Education.

Then the researcher asked the question on reference books, "Are there sufficient reference books in your college ?

If yes, how many student teachers have been using in their study?" Seventyfive percent teacher educators answered, "There are sufficient reference books. But student teachers are not using in their study. They are using the ready made materials." Twentyfive percent teacher educators said, "Very few student teachers are using reference books." The researcher concluded that they were using notes and guides for study.

The researcher asked, "Are there sufficient audio-visual aids in your college? If yes, how many student teachers have been using them in teaching?" All teacher educators said, "They have enough general teaching aids. But Video, Television, V.C.R., Tape-recorders and films are not available". They said that student teachers were not using teaching aids while conducting the practice lessons. Very few student teachers told that they were using teaching aids while they were conducting the final lessons.

IV.06 OBSERVATION OF TEACHER EDUCATORS' REMARKS ON LESSON-NOTES

It was very difficult for the researcher to observe all twenty lesson-notes of each student teacher. The researcher observed some lesson notes of student teachers from eight colleges of education. The researcher had gone through the

remarks which were written by the teacher educators on lesson-notes. Through the remarks of teacher educators, he concluded general conclusions. Those conclusions are as follows :

1) Teacher educators wrote negative remarks on the lesson-notes. They wrote positive remarks which were useful for the improvement and encouragement of student teachers. Some teacher educators wrote positive and negative remarks on lesson-notes.

2) Many teacher educators' remarks were vague and ambiguous.

3) Many teacher educators wrote the words such as 'Yes', 'No', 'Stated', 'Near', 'Fluent', 'Effective', 'Good', 'Very good' and 'Excellent' as their remarks on lesson-notes.

4) Many teacher educators marked only right/wrong on lesson notes.

5) Many remarks which were written on statement of aim by teacher educators were complete.

6) Very few remarks which were related on speech of student teachers were not enough.

7) Teacher educators did not write specific remarks on learning experiences.

8) Many remarks which were written on the subject knowledge of student teachers were very clear, effective and suggestive.

IV.07 OBSERVATION OF STUDENT TEACHERS' OBSERVATION NOTE-BOOKS

It was very difficult for the researcher to go through all the observation note-books. So, the researcher had gone through some observation note-books of student teachers of eight colleges of education. The researcher concluded general conclusions from the observation note-books.

1) All student teachers observed the lessons which were prescribed by Shivaji University, Kolhapur.

2) Observation note-book remarks which were written on practice lessons of student teachers were not sufficient.

3) Remarks of observation note-books which were written on 'Introduction' of student teachers were enough.

4) Remarks of observation note-books which were written on 'Statement of aim' of student teachers in practice lessons were very clear and proper.

5) Many student teachers didnot write suggestive remarks on 'learning experiences' in observation note-books.

6) The remarks which were written on questioning were not satisfactory. Those remarks of student teachers didnot give proper meaning.

7) Remarks which were written on 'Explanation' by student teachers were very brief.

8) Remarks of observation note-books which were written by student teachers on teaching aids were enough and sufficient. Those remarks were used to develop the ability of student teachers.

9) Remarks of obsefvation note-books which were written on 'Recapitulation'; Application; and Assignment' by student teachers were very detail.

10) Remarks of observation note-books which were written on the B.B.work by student teachers were clear, effective and suggestive.

11) Student teachers did not write suggestive remarks to improve the student teachers' teaching.

12) Student teachess were true followers' of teacher educators' remarks while observing the lesson of student teachers.

13) Many student teachers were making real true-copies of their friends' remarks.

14) Student teachers observed the lessons of some student teachers and their close friends.