

CHAPTER V

CRITICAL EVALUATION OF THE AUDIO-VISUAL EDUCATION TRAINING PROGRAMMES

This chapter exclusively deals with the critical evaluation of the organisation of the audio-visual education training programmes in the teachers' training colleges in the country as it is the major objective of this study. With this view in mind the data were analysed, interpreted and are presented in the previous chapter. The evaluation procedure was planned on the basis of the analysis of the data and the standard pattern of the organization of the audio-visual education training programmes in the teachers' training colleges reviewed from the current literature in the field. According to the evaluation rationale developed for this study as illustrated in Figure 3, objectives, organisation and evaluation together make a complete circuit of the operation of a training programme. The three arms of this triangle are interrelated with each other in the clock-wise direction as shown in Figure 3. For the fulfilment of the objectives, appropriate organisation and evaluation of the programme are

the essential requirements.

In order to evaluate the performance in audio-visual training programme, colleges are grouped together according to the objectives they kept for their training programmes. All the eighteen objectives in the questionnaire are classified into five major categories together. Then the colleges are also classified on the basis of five major groups. The grouping of the colleges on these basis is given in Table 37.

Table 37. Identification of Colleges into Five Groups on the Basis of the Objectives of Training Determined by Them

Groups	Categories of Objectives	Sponsorships of Colleges:			Total Number of Colleges (N=79)
		Govern- ment (N=31)	Univer- sity (N=6)	Priva- te (N=42)	
I.	To offer special training in the field.	7 (22.58)	3 (50.00)	10 (23.80)	20 (25.32)
II.	To offer general training in the field.	19 (61.29)	3 (50.00)	28 (66.66)	50 (63.29)
III.	To produce audio-visual aids and give extension services.	2 (6.45)	-	1 (2.39)	3 (3.79)
IV.	Research and publication in the field.	1 (3.23)	-	1 (2.39)	2 (2.53)
V.	Follow-up the training programme	2 (6.45)	-	2 (4.76)	4 (5.07)
Total		31 (100.00)	6 (100.00)	42 (100.00)	79 (100.00)

Development of the Measurement Criteria

It was aimed at ascertaining the degree of the achievement of the objectives by the colleges. There are specific requirements for the achievement of each objective. Hence, the objective-wise list of the requirements was evolved on the basis of the review of literature. The list was shown to the group of experts and they were requested to suggest the criteria for classifying the colleges into three categories: Very Satisfactory, Satisfactory and Unsatisfactory on the basis of fulfilment of the requirements. The designation of the experts who evolved the criteria are presented in Table 38.

Table 38. Categories of the Experts for Consensus on the Classifying Criteria

Designation :	Level	: Number
Principal	Training College, University	1
Principal	Training College, Private	1
Principal	Training College, Government	1
Professor	University Department	1
Director	Central Government Department	1
Total		5

Table 39. Ideal Requirements for a Teacher Training College for the Fulfilment of the Objective of General Training in Audio-Visual Education

(Note: This model is based on the current literature on Modern Audio-Visual Education Programme).

Syllabus		Staff	Equipments and Facilities	Budget	Marks & Examination
Topics for Theory Teaching	Topics for Practical Training	Teaching	Operational		The Practical
1. The role of audio-visual instruction in modern education.	1. Simple flat display materials	1. Professor	1. P.A. Equipment	Rs. 3,000 and beyond	35
2. Classification and selection of audio-visual aids.	2. 3 Dimensional materials	2. Reader	2. 16 m.m. film projector		15
3. General principles of preparation and use of simple flat visual materials.	3. Projectable materials	3. Lecturer	3. Epidiascope		
4. Working principles and operational mechanical knowledge of P.A. Equipment, Epidiascope, Filmstrip projector, 16 m.m. film projector.	4. Operation and handling of 16 m.m. film projector, epidiascope and film strip projector	3. Artist	4. Epidiascope		
5. Sources of information regarding materials, equipments and supplies.	5. Sociodrama		5. Radio		
6. Principles of using sociodrama and exhibition in teaching.	6. Exhibitions		6. Phonograph		
			7. Bulletin Board		
			8. Audio-Visual materials		
			9. Audio-Visual room.		

Table 40. Criteria Developed with the Expert Consensus for Classifying the Colleges in Three Categories on the Basis of the Fulfilment of the Requirements for the Objective of General Training in Audio-Visual Education

Category :	Syllabus	Staff	Equipment and	Budget	Marks in the
:	: Topics for	: Teaching	: Operational: Facilities	: Budget	: Examination
:	: Theory Teaching	:	:	:	: Theory : Practical
:	:	:	:	:	:
Very Satisfactory	Colleges including five or more than five topics from the ideal list of the list of ideal topics. requirements.	One of the Any one of the posts from posts from the ideal list. list.	Eight and more than eight equipments and facilities are available from the ideal list.	Between Rs.2000/- to Rs.3000/-	25 to 35 10 to 15
Satisfactory	Colleges including three to five topics from the ideal list. ideal list.	One of the part time posts from the ideal list or lecturer in Physical Science teaching this subject.	Five to eight equipments and facilities are available from the ideal list.	Between Rs.1000/- to Rs.2000/-	10 to 25 5 to 10
Unsatisfactory	Colleges including less than three topics from the ideal list.	Part time or occasion- al guest speakers invited to give talks on the topics	Less than five equipments and facilities are available from the ideal list.	Below Rs.1000/-	Below 10 or 5 or no marks

Table 41. Ideal Requirements for a Teacher Training College for the Fulfilment of Objective of Special Training in Audio-Visual Education

(Note: This model is based on the current literature on Modern Audio-Visual Education Programme)

Syllabus					
Topics for Theory Teaching	Topics for Practical Training	Staff	Equipment and Facilities	Budget	Marks in the examination
		Operational			Thuo-Practi-ly:Gal
1. The role of Audio-Visual Institution in modern education.	(a) Simple flannel graphs, photographs, Flip books, Charts, Posters, Diagrams, Sketches, Cartoons, Maps and Graphs, Pictures etc.).	Artist, Projectionist/ Electrician/ Mechanic, Librarian, Clerk, Attendant.	(a) 16m.m. movie projector and beyond (b) Filmstrip and slide Projector (35 m.m.) (c) Overhead projector. (d) Epidiascope. (e) Projection screen (f) Radio (g) Tape-Recorder (h) Phonograph (i) Public Addressing (j) Electricity generator (Portable) (k) Tracing table (l) Camera (m) Silk-screen printing equipment. (n) Flannel board. (o) Bulletin board. (p) Study kit. (q) Audio-Visual room (Laboratory). (r) Exhibition hall/ Museum.	Rs.3500/-	70 30
2. Communication, its role in present day education.	(b) 3 Dimensional materials (Models, Puppets, Objects, Specimens, Dioramas, etc.)				
3. Psychological basis of Audio-Visual Aids.	(c) Projectable materials (Filmstrips, 16 m.m. Films, slides etc.)				
4. The relation of Audio-Visual Aids to methods of teaching.	(d) Press materials (Circular letters, News paper, pamphlet, Folders etc.)				
5. Classification and selection of Audio-Visual Aids.	(e) The scripe for school broadcast, Tape, P.A. Equipment programme and Phonograph				
6. General Principles of preparation and use of the following Audio-Visual Aids.	(f) Practical Training in the operation and handling of the following equipment. (i) 16m.m. Film Projector (ii) Filmstrip projector (iii) Epidiascope (iv) Overhead projector (v) Public Addressing Equipment (vi) Tape Recorder (vii) Camera (viii) Recording and playback (ix) Tracing table (x) Duplicating equipment (Silk Screen Printing, Duplicating machine etc.)				
7. Simple flat Display materials (e.g. Flannel Graphs, Charts, Posters, Photographs, Flash cards, Flip books, Sketches, Cartoons, Diagrams, B.B. Writing, Maps, Graphs etc.).					
8. 3 Dimensional materials (e.g. Models, Puppets Object, Specimen, Dioramas etc.)					
9. Projectable materials (e.g. Filmstrips, 16m.m. Films, Slides etc.)					
10. Press materials (e.g. Circular Filmstrips, 16m.m. Films, Slides letters, Newspaper, Pamphlet, Folders etc.)					
11. How to write the script for school broadcast, tape, P.A. Equipment programme and phonograph.	(g) Presenting lesson plans for practice teaching by the methods.				

Table 41. (Continued)

Syllabus		Staff	Equipment and Facilities	Budget	Marks in the Examination
Topics for Theory Teaching	Topics for Practical Training	Teaching:Operational			Theory:Practical
12. Working principles and operational mechanical knowledge of the following equipments.	(i) Radio (ii) Tape-Recorder (iii) P.A. Equipment (iv) Recording and playback equipment (v) Epidiascope (vi) Filmstrip projector (vii) 16m.m. Film Projector (viii) Overhead projector (ix) Camera (x) Silk-screen Equipment (xi) Microscope		(s) Dark Room (t) Episcopes (u) Vehicle for transport		
13. The administration of Audio-Visual Instruction programme.					
14. Maintenance of Audio-Visual library.					
15. Sources of information regarding materials, equipment and supplies.					
16. Testing the results of Audio-Visual Instruction in the classroom.					
17. Research Methodology in Audio-Visual Education.					
18. Organisation of Audio-Visual programme in the school.					
19. Principles of utilizing the following methods.	(i) Plays (ii) Sociodrama (iii) Role-playing (iv) Demonstration (v) Field trips (vi) Exhibitions (vii) Mock-ups (viii) Recorded tapes.				

Table 42. Criteria Developed with the Expert Consensus for Classifying the Colleges in Three Categories on the Basis of the Fulfilment of the Requirements for the Objective of Special Training in Audio-Visual Education

Category	Syllabus		Staff		Equipment and Facilities		Budget
	Topics for Theory Teaching	Topics for Practical Training	Teaching	Operational			
Very Satisfactory	Thirty and above topics from the ideal list.	Included twenty two and above topics from the ideal list.	Professor and/or Reader, Lecturer and Tutor	Artist, and Projectionist, Librarian or Clerk.	Seventeen and above equipments and facilities from the ideal list.		Rs.3000/- and above
Satisfactory	Between 20 to 30 topics from the ideal list.	Included between 14 to 22 topics from the ideal list.	Reader and/or Artist or Lecturer and Tutor.	Projectionist, Librarian or Clerk.	Between eleven to seventeen equipments and facilities from the ideal list.		Between Rs.1500/- to Rs.3000/-
Unsatisfactory	Below 20 topics from the ideal list.	Included below 14 topics from the ideal list.	Lecturer in Physical Science taking this subject or part time persons with experience.	No such staff but some experienced person doing the work.	Below eleven equipments and facilities from the ideal list.		Below Rs.1500/-

Table 43. Ideal Requirements for a Teacher Training Colleges for the Fulfilment of the Objective of Production and Extension Services

(Note: This model is based on the current literature on Modern A.V. Education Programme).

Staff		:		:
Teaching	:		Equipments and Facilities	:
	Operational	:		Budget
Professor or Reader or Lecturer	Artist, Technician, Photographer, Driver-cum-Laboratory Assistant.	:	Duplicating and Silk-screen equipments, equipped audio-visual laboratory, audio-visual work-shop, vehicle, P.A. Equipments.	Rs.3,000/- and above

Table 44. Criteria Developed with the Expert Consensus for Classifying the Colleges in Three Categories on the Basis of the Fulfilment of the Requirements for the Objective of Production and Extension Services in the Field

Category	Staff			Equipment and facilities	Budget
	Teaching	Operational			
Very Satisfactory	Professor or Reader or Lecturer	Artist or Photographer, Driver/Attendant	Duplicating or silk screen printing equipments, P.A. Equipment, vehicle, equipped audio-visual laboratory/museum.	Between Rs.2000/- to Rs.3000/-	
Satisfactory	Lecturer and Tutor	Artist-cum-Photographer and Driver-cum-Technician.	Duplicating equipment, P.A. Equipments, Vehicle, (desirable audio-visual workshop).	Between Rs.1000/- to Rs.2000/-	
Unsatisfactory	Lecturer or Tutor or no such staff but other persons in charge of Audio-Visual Education.	No such staff but persons with workable experience doing the job.	Less than 50 per cent of the above equipments and facilities.	Below Rs.1000/-	

Table 45. Ideal Requirements for a Teacher Training College for the Fulfilment of the
Objective of Research and Publication

(Note: This model is based on the current literature on Modern A.V. Education Programme)

Staff		:	:
Teaching	Operational	:	Budget
Professor or Reader or Lecturer	Artist, Projectio- nist, Technician, Audio-Visual Libra- rian	:	Rs.3000/- and above
Equipped audio-visual laboratory and library. Duplicating machine.		:	:

Table 46. Criteria Developed with the Expert Consensus for Classifying the Colleges in Three Categories on the Basis of the Fulfilment of the Requirements for the Objective of Research and Publication in the Field

Category	Staff		Equipment and Facilities	Budget
	Teaching	Operational		
Very Satisfactory	Professor or Reader or Lecturer	Artist, Projectionist, technician or Librarian	Equipped audio-visual laboratory and library, duplicating machine.	Between Rs.2000/- to Rs.3000/-
Satisfactory	Reader or Lecturer and Tutor	Artist or Projectionist, Technician or Clerk	Equipped audio-visual laboratory, no separate library but separate section in the college library.	Between Rs.1000/- to Rs.2000/-
Unsatisfactory	Lecturer in physical science in charge of this or no such staff	No such staff but persons with some experience to do the job.	No equipped audio-visual laboratory, library and no mass production equipments like duplicating machine.	Below Rs.1000/-

Table 47. Ideal Requirements for a Teacher Training College
For the Fulfilment of the Objectives of Follow-up

(Note: This model is based on the Current literature on
 modern Audio Visual Education Programme)

Staff	:	Follow-up activity	:	No. of candidates trained	:	Budget
Teaching	:	Operation	:		:	
Professor and/or Lecturer, Reader	-	Doing follow-up activity at the regular interval.		Trained more than 100 candidates in the field		Rs.1500/-

Table 48. Criteria developed with the Expert Consensus for
Classifying the Colleges in Three Categories on the
basis of the Fulfilment of the Requirements for the
Objective of Follow-Up

Category	:	Staff	:	Follow-up activity	:	Number of candidates trained	:	Budget
	:		:		:		:	
Very satisfactory		Reader and/or Lecturer		Doing follow-up but not at a regular interval (but at their convenience).		Trained between 70 to 100 candidates in the field.		Between Rs.1000/- to Rs.1500/-
Satisfactory		Lecturer		Doing occasional follow-up		Trained between 50 to 70 candidates in the field.		Between Rs.500 to Rs.1000/-
Unsatisfactory		No such staff		Rarely doing follow-up or by chance once in five years.		Trained below 50 candidates in the field.		Below Rs.500/-

Table 49 Number and Percentage of Teacher Training Colleges in Three Categories by Sponsorship and Objectives

Categories of Objectives	Colleges by									
	Government (N=31)			University (N=6)			Private (N=42)			
	Very Satisfactory	Satisfactory	Unsatisfactory	Very Satisfactory	Satisfactory	Unsatisfactory	Very Satisfactory	Satisfactory	Unsatisfactory	Very Satisfactory
General Training	5 (16.13)	11 (35.50)	3 (9.68)	2 (33.33)	1 (16.67)	0	6 (14.29)	16 (38.09)	6 (14.29)	6 (14.29)
Special Training	1 (3.22)	4 (12.90)	2 (6.47)	1 (6.67)	2 (33.33)	0	2 (4.77)	5 (11.90)	3 (7.13)	3 (7.13)
Production and Extension	0	1 (3.22)	1 (3.22)	0	0	0	0	1 (2.38)	0	0
Research and Publication	0	0	1 (3.22)	0	0	0	0	0	1 (2.38)	1 (2.38)
Follow-up	0	1	1	0	0	0	0	0	2 (4.77)	2 (4.77)
Total	6 (19.35)	17 (54.84)	8 (25.81)	3 (50.00)	3 (50.00)	0	8 (19.06)	22 (52.37)	12 (28.57)	12 (28.57)

Results of the Evaluation of Colleges on the Set Measurement Criteria

The colleges operating this programme were evaluated on the scale thus developed. The detailed results of the evaluation are given in Table 49, and the summary is presented in the Table 50.

Table 50. Summary of Results of Evaluation

Categories of Object- ives	: : Very Satis- : factory	: : Satisfac- : tory	: : Unsatis- : factory	: : Total
1. General Train- ing	13	28	9	50
2. Special Train- ing	4	11	5	20
3. Production and Extension	0	2	1	3
4. Research and Publication	0	0	2	2
5. Follow-up	0	1	3	4
Total	17	42	22	79

Over and above the measurement scales, the data from all the 79 colleges, under each of the item of inquiry in the questionnaire was critically referred for the final evaluation. The results of the evaluation show the degree of performance in the direction of achieving different objectives kept by the colleges under different sponsorships.

General Training

It is found from the data in Table 40 that only thirteen colleges impart very satisfactory training in audio-visual education and twenty-eight impart satisfactory training while nine colleges are classified as unsatisfactory on the scales fixed by experts. The sponsor-wise details in the Table 49 show that higher percentage goes to university colleges for very satisfactory performance and to private colleges for satisfactory performance. Out of nine colleges offering unsatisfactory training, six are private and three are government colleges. No university college is rated as unsatisfactory in general training.

Special Training

The results in this case gives different view of the programme. The data in Table 40 indicate that out of 20 colleges four colleges give very satisfactory special training and eleven colleges impart it at satisfactory level. Five colleges are classified as unsatisfactory in special training. The higher percentage in this programme also goes to the university colleges at very satisfactory and satisfactory levels. For unsatisfactory performance, private colleges show higher percentage than the government counterparts. No university College falls in this category.

Production of Audio-Visual Aids and Extension Services in the Field

A very few colleges have responded to the items under this objective as seen in the Table 3 . However, from the available data the evaluation is made. From the data it is seen that only one college under the Government and one college under the private sponsorship produce audio-visual aids and render extension services in the field satisfactory. No university college has come into this classification for the reasons not revealed by this study. It can safely be concluded from the results that this activity is mostly neglected by the colleges.

Research and Publication in the Field

Similarly like production and extension services, a very few colleges have furnished the data about this activity as seen in the Table 3 . However, from the summary data in Table 50 it is found that efforts are made by only two colleges but they are not at the level of satisfaction. No university college is classified for this objective as it is not identified by the university colleges.

Follow-Up

It is found from the data in Table 50 that only four colleges are classified for this objective. Out of four one is evaluated at satisfactory level and three are rated at

unsatisfactory level. No university college is classified for this objective but only two government colleges and two private colleges are rated on this point. One Government college is doing follow-up satisfactorily and one college though doing follow-up activity; it is below the level of satisfaction. Similarly two private colleges are also found doing this activity but do not fulfil the requirements for the satisfactory performance. Further, on the basis of the results of evaluation, it was aimed at grading qualitatively the colleges into five different classes. A list of the requirements for each group or class was developed from the results of evaluation and the consensus of the experts was obtained. Thus, the final tool of classification prepared is shown in Table 51.

Table 51. Qualitative Scale for Evaluation of the Audio-Visual Training Programmes

Grade :	Requirements
A :	All the objectives of the ideal audio-visual training programme are fulfilled very satisfactorily.
B :	Objectives of both the general training and the special training are very satisfactorily fulfilled and any one of the remaining three activities is also conducted at the satisfactorily level.
C :	Objective of general or special training is fulfilled very satisfactorily.
D :	Objective of general or special training is fulfilled just satisfactorily.
E :	Objective of general and/or special training is fulfilled below the level of satisfaction.

Further, the quantitative scale for the classification of the colleges was also developed on the basis of the qualitative criterion in Table 51. The details of the scales are shown in Table 52.

Table 52. Quantitative Scale for Evaluation of Audio-Visual Training Programmes

Groups					Total points	Grade
I	II	III	IV	V		
2	2	2	2	2	10	A
2	2	1 or (1)	or (1)	or (1)	5	B
2	or (2)	-	-	-	2	C
1	or (1)	-	-	-	1	D
0	0	0	0	0	0	E

The colleges fulfilling their respective objectives very satisfactorily, satisfactorily, and unsatisfactorily were given 2, 1 and 0 points respectively. Colleges fulfilling all the five objectives very satisfactorily i.e. operating an ideal audio-visual training programme will earn 10 points. Similarly, colleges fulfilling first and second objectives very satisfactorily and any one of the remaining three (III, IV, V) objectives satisfactorily will earn 5 points. Further, the colleges fulfilling first or second objective very satisfactorily and not keeping any of the remaining three (III, IV, V) objectives will earn 2 points. Similarly, colleges fulfilling first or second objective satisfactorily and not keeping any of the remaining

three (III, IV, V) will earn only 1 point. Lastly, colleges fulfilling either of the first two objectives below satisfaction and not keeping any of the remaining three objectives will earn 0 point.

Finally, the colleges getting 10, 5, 2, 1 and 0 points were graded as A, B, C, D and E respectively.

The results of the final classification of the colleges determining the position of their audio-visual education training programmes in the prevailing conditions in the country is presented in Table 53. It is also illustrated in Figure 7.

Table 53. Existing Position of the Audio-Visual Training Programmes on the Given Scale

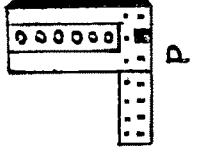
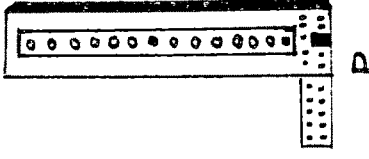
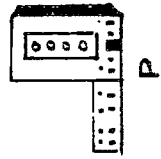
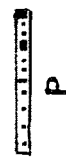
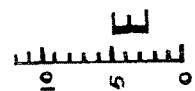
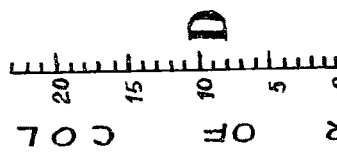
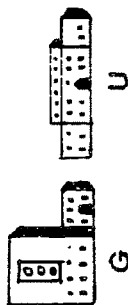
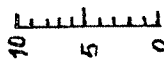
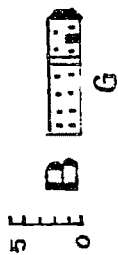
Grade	Number of Colleges			Total (N=79)
	Government (N=31)	University (N=6)	Private (N=42)	
A	0 (0)	0 (0)	0 (0)	0 (0)
B	2 (6.45)	0 (1)	1 (2.58)	3 (3.80)
C	6 (19.35)	3 (50.00)	8 (19.04)	17 (21.60)
D	17 (54.85)	3 (50.00)	23 (54.78)	43 (54.30)
E	6 (19.35)	0 (0)	10 (23.80)	16 (20.30)
Total	31 (100.00)	6 (100.00)	42 (100.00)	79 (100.00)

(Figures in the parenthesis indicate percentage)

NUMBER OF COLLEGES

GRADE

A NO COLLEGE IN THIS GRADE



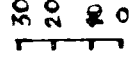
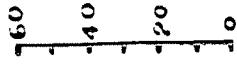
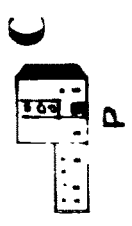
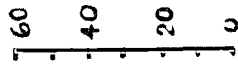
G = GOVERNMENT
U = UNIVERSITY
P = PRIVATE



PERCENTAGE OF COLLEGES

GRADE

A NO COLLEGE IN THIS GRADE



PERCENTAGE OF COLLEGES IN 5 GRADES

FIGURE - 7

NUMBER & PERCENTAGE OF TEACHERS TRAINING COLLEGES UNDER DIFFERENT SPONSORSHIPS INTO FIVE GRADES

Results of the Classification

It is seen from the Table 53 that no college under any sponsorship comes in grade 'A'. It indicates that no college is following all the items of the questionnaire as it was constructed to include the requirements of the most ideal programme in audio-visual education for the sake of investigation. It appeared that it is too early stage for the colleges to operate such an ideal programme in the prevailing conditions because this movement is still in the infant stage of growth and development in the country. Further, only three out of 79 colleges come in 'B' grade. This includes 2 Government colleges and one private college. It clearly indicates that more number of Government colleges are at the higher level than the private colleges. It is surprising to find the absence of university college at this level. Out of 79, seventeen colleges come in 'C' grade. The university colleges score the highest percentage in this class, but the total number of university departments of education is very small. As many as forty three colleges come under 'D' grade. Approximately, the same percentage level of 'D' grade colleges are found under various sponsors. It means that majority of colleges either give general or special training satisfactorily, but no other activities like production of audio-visual aids and extension services in

the field, research and publications and follow-up programme are done.

It is also seen from the data that out of 79, sixteen colleges are in 'E' grade. It means that general and/or special training programmes operated by them are below satisfaction. It is, seen from the data that more than 50% of the colleges operate their programmes at D grade which means they offer rudimentary training in audio-visual education either of special or general nature at satisfactory level only.
