

CHAPTER III

METHODOLOGY

Introduction

One of the objectives of art education is to provide opportunities for self-expression and to release emotions, feelings, etc. The involvement in creative activities not only helps one to use art as a visual language for self-expression, but also enables him to develop his own power of imagination, observation, and creativity. Such aspects, as mentioned above, play an important role in contributing to the all round development of a person and need to be considered as a valuable input in every walk of life of an individual.

There are different stages of development in the growth of children. At different stages, children have particular psychological needs in relation to their creative activities. The emotional expressions of children are highly influenced by their psychological needs. So, when children grow up, the nature of problem in his creative works is also bound to change. A gradual change of interest from working process to the concept of the final product takes place. When a student of adolescence tries for a particular effect in his creative works he becomes increasingly conscious about the final product. The students of secondary level try to give a naturalistic look to the figures in their creative works. At this stage they search for some appropriate methods or guidance to materialize their desire. The traditional methods and teaching techniques being used directly, may not work here properly. This is because, in such cases the interest of work shifts to mere

learning techniques and the work becomes mechanical. So, an appropriate methodology of teaching art at the secondary school level becomes more and more relevant.

The present study was an attempt to develop an art education curriculum for secondary school students. The developed curriculum should provide not only the opportunities for self-expression, but it should also be able to meet the needs and requirements of the secondary students, in relation to art education. Before developing the curriculum, it would be beneficial to have an understanding of the present system of secondary art education. Hence, an analysis of the present day art education curriculum for secondary school would be essential to the present study. Considering the fact that each State had its own State Boards, it has been decided to confine the study only to one state i.e. the Rajasthan state. So, as part of the study of the present system, the art education guidelines of the Central Board of Secondary Education (C.B.S.E) and the Rajasthan State Board of Secondary Education (R.S.B.S.E) was properly analysed. Such a study will give a clear picture of the syllabus and methods to be followed for secondary art education of the schools affiliated to C.B.S.E and the R.S.B.S.E. Each school is expected to follow a definite art education syllabus of a particular Board to which the school is affiliated. It is possible that, due to some particular problems of the school, the prescribed syllabus may not have been followed as such. So, an attempt will be made to study the present methods being practiced in secondary schools and also the problems being faced by the art teachers with reference to the Rajasthan state. Apart from that, a first hand information regarding the needs and requirements of the secondary school students in relation to art is also very important for the development of an art education

curriculum for them. The above-mentioned information can be collected only through a systematic survey. However, the purpose of the survey does not try to make any generalization, but to collect a base line data to understand the present day practice of secondary art education which will help in developing the renewed curriculum. For any renewed programme to be successful, it has to be tried out and tested for its feasibility and effectiveness. This requires experimentation with the renewed programme over an adequate period of time. Thus, the present study is survey cum experimental in nature. The methodological details with respect to sample, tools, data collection and data analysis are discussed here.

3.1 The Sample

The objective number one is to study the present system of secondary school art education. It includes the content and the instructional procedures. The syllabus/content of secondary school art education in Rajasthan is based on the guidelines of the C.B.S.E and the R.S.B.S.E. In order to examine the contents, in relation to art education objectives, a purposive sample of two art teachers was selected. In addition to the two teachers, investigator himself was involved in the critical examination of the relationship between the content and objectives of art education. The second aspect of the objective was to study the instructional methods being followed by the art teachers and drawbacks of the art education system. For this purpose a sample of 68 art teachers was selected through stratified random sampling technique. Considering the vastness of the geographical area of the state of Rajasthan and regional variations, the entire state was divided into four regions (strata). The details are given in Appendix no.1. From each

region a total of 17 schools were selected randomly, from the lists of schools. The art teachers working in these schools formed the sample.

In order to achieve the second objective i.e. to study the needs and requirements of secondary school students with respect to art education, a sample of 204 students was selected. These students were selected from the same schools that were selected for the first objective. From each school three students were selected randomly.

The third objective of the research was to develop an art education curriculum for secondary schools. A purposive sampling technique was employed here. After the study of the present system of secondary art education, a tentative secondary art education curriculum was made by using the available knowledge in the discipline of art education. The tentative curriculum was shown to a total of 8 experts in the field of art and art education. The experts were selected through a purposive sampling. Apart from their knowledge in the field of art and art education, the immediate availability of the experts at their respective places was also a major factor taken into consideration while they were selected. The experts were requested to study the curriculum and make their valuable suggestions. The suggestions of the experts were incorporated, the practicability of the curriculum was considered and on that basis the curriculum was modified. The list of experts is given in Appendix No. 6.

The fourth objective was to study the feasibility and effectiveness of the developed secondary art education curriculum. For this purpose a purposive sampling

technique was used. The study required experimentation for one academic year. Keeping in mind this long period, the Birla Senior Secondary School, Pilani was selected, as the investigator had been working there. A total of 45 students who had offered art education as a subject in VIII, IX and X classes formed the sample for this study. Out of the 45 students, a total of 15 students each belonged to VIII, IX and X classes.

The fifth objective of the study was to know the attitude of the students towards the renewed art education curriculum. For developing the attitude scale 100 students studying art education was selected through simple random sampling.

3.2 Tools

In order to attain objectivity, a systematic selection process of sample has been carried out. In order to elicit information from the selected sample, appropriate tools were required. The type of tools was decided, taking into account the particular nature of study and the kind of information to be collected from a particular field/area. Here, the present study attempts to develop an art education curriculum for secondary school level. To satisfy the demands of objectivity, the necessary tools were systematically prepared. The appropriate tools used for the present study are given below.

3.2.1 Questionnaire to the Art Teachers

In order to study the present system of secondary school art education, it was necessary to conduct a survey among art teachers. A questionnaire was used to collect relevant information from the art teachers. The preparation of the questionnaire is as

follows. A preliminary questionnaire was made by the researcher by keeping in mind the particular type of information to be collected for the present study, and the same was discussed with some experts of the field, including the research supervisor. On the basis of the discussions necessary changes were made in the questionnaire and it was administered among a total of 3 art teachers in Pilani. The teachers were requested not only to fill up the questionnaire, but also to give their necessary suggestions to improve the same. The information collected through questionnaire was analysed qualitatively, the valuable suggestions were considered and on that basis the preliminary questionnaire was modified. The modified questionnaire for art teachers intended to find out the qualification of the teacher, the board to which the school was affiliated, whether any in-service training was attended, the objectives of secondary school art education, the particular syllabus being followed in the school, whether any theoretical instruction was given to the students, the methods used to teach art in the class, whether any examination was being conducted at the secondary level. Whether the students are awarded marks or grades are given, the essential components/aspects of works of art for evaluation, the present problems being faced by the secondary school art teachers, etc. The questionnaire to art teachers has been given in the Appendix No.2.

3.2.2 Questionnaire to the Secondary School Students

The second objective of the investigation was to study the needs and requirements of the secondary school students in relation to art education. It was necessary to prepare a questionnaire and collect information from the students for the same purpose. A preliminary questionnaire for the secondary school students was prepared and the same

was-discussed with experts. The questionnaire was then modified on the basis of the discussions and was administered to a total of 30 students in Pilani. A qualitative analysis of the questionnaire was carried out to know whether all the relevant information for the present study was collected. The questionnaire was modified again on the basis of the above analysis. The developed questionnaire aimed to find out if the student thought that art was necessary at the secondary school stage, if art has an important role in the life of the student, why did the student learn art, in what way art education helped student in life, what were the expectations of the student from an art teacher in relation to art education, if the student was interested to know the history of art, what difficulties did the student face in art class, etc. The questionnaire to the secondary school students has been given in the Appendix No.3.

3.2.3 Attitude Scale

One of the important objectives of the present study was to develop an art education curriculum at the secondary school. Any theory becomes valuable when it is tested positively in practice. So, in the present study also, it was expected that the renewed curriculum might develop positive attitudes in the students when it was tried on them for one academic year. The favourable attitude developed in the students towards the renewed curriculum would certainly be an indication of the curriculum's effectiveness. To measure the attitude of the students towards new programme, an attitude scale was developed by the investigator. To develop attitude scale generally two methods were followed. One, was the Thurstone method and the other is 'Likert's method'. In social sciences, in order to study attitudes, Likert's method is used widely.

The present study also follows the same in order to develop the attitude scale. Initially the investigator developed a total of 36 statements. The statements were examined by two experts for their language and adequacy and modified by the investigator according to their suggestions. These statements were administered to a total of 100 students from art education. Each statement was to be rated on a five point scale which expressed five different attitudes; strongly agree, agree, neutral, disagree and strongly disagree. A student could choose any one of the five to express his attitude. After finding out the total score as suggested by Likert, in case of summated ratings the t-values were calculated by the investigator. On the basis of t-values, a total of 20 statements representing positive and negative sides were selected. The initial scale with 36 statements and the final scale are given in Appendix Nos. 9 and 11.

3.2.4 Slide / Plate Identifying Test

Students need to be exposed to the works of great artists that enable them to develop an aesthetic sense and develop observation skills. For the above mentioned purpose, a programme has been made by the researcher i.e. displaying plates of some of the selected art works of great artist, architecture etc. in the class room, with some details like the time/period of the art works, name of the artist and name of the work. A brief explanation is given to students. The purpose of this display of plates is to provide opportunities for students to see the work again and again, and make them familiar with the same. In order to know the effectiveness of the method of displaying plates in the class room, an attempt was made at the end of the experiment to check, whether the students are able to identify the plates with its above mentioned details. In order to

evaluate the student's abilities developed through display, a plate/slide identification test has been developed. It is a simple procedure that any teacher may adopt. In this test each student is shown 5 plates from the works that were displayed. Students were asked to identify the name of the artist, name of the work and the period/time in which the work was made. In case a student identifies all the 3 aspects, a total of 3 marks were awarded to the student. In case he identified 2 aspects, then 2 marks or 1 aspect then 1 mark. Thus, for 5 plates a student's score ranged from 0 to 15. The list of plates used for Identification Test has been presented in Appendix No. 7.

3.2.5 The Method of Evaluation of the Creative Art Works

The art education curriculum has been developed with an intention to meet the important psychological needs of the secondary school students and to enable them for better participation in the creative art activities. The developed curriculum was experimented in a secondary school for one academic year. The effectiveness of the curriculum was studied in terms of the progress achieved by the students.

Art education provides opportunities for self-expression. Since the expressions of two students differ from each other, a comparison between the works of two students is not desirable. Therefore, the progress achieved by each student in his creative art works done during experimentation was studied. For the same purpose a method of summated assessment has been carried out in the works of each individual student separately.

A qualitative assessment of the creative art works of students has been carried out in the present study. In order to bring validity and objectivity to the system of assessment, certain criteria had been used. Actually, what is to be assessed in the creative art works of students was that, how far each student had achieved the objectives of artistic cognition, appreciation and skill in the medium in which one has been working.

The C.B.S.E. art education guidelines have given specific aspects of evaluation to assess the works of secondary school students. The same has been found relevant and quite convenient to the present context and the same has been adopted for the present study. As per the C.B.S.E. art education guidelines, the child's efforts to give personal expression are to be considered as measurable evidences. The evidences worth considering are the child's personal idea, his ability to grasp the idea, his analysis of details of the idea, his efforts at choosing the media for expression of the idea, and the overall success in communicating the idea. On that basis, the C.B.S.E. has given a total of 9 important aspects of evaluation, which are as follows:

1. Drawing
2. Scheme or idea
3. Originality
4. Creativity
5. Colour organization
6. Composition
7. Attention to the details
8. Chosen media and its correct use
9. Appreciation or criticism.

The above-mentioned aspects of evaluation were used in different combinations to assess the creative art works of students completed during the period of experimentation. There were different subjects included in the developed curriculum, which are studies of portrait, full figure, nature, composition, three-dimensional activities etc. All the 9 aspects of evaluation were applied for the first four subjects. The first and fifth aspects i.e. drawing and colour organization were not considered for the assessment of the three dimensional activities. This is because both the aspects are not necessarily being seen in all three-dimensional activities. The assessment of portrait study, life study, full figure and nature study were carried out separately; the activities related to the rest of the two dimensional activities like composition, collage, greeting cards, decorative design, posters, etc. were put in one bracket and assessed together. Apart from composition, the number of works produced by each student in other subjects like collage, greeting card, poster, etc were varied each other. The selection of such subjects was decided based on the interest and nature of the students. Similarly, clay modeling, works in plaster of Paris and different other constructive activities were put under one title i.e. in three-dimensional activities and the assessment was carried out.

An attempt was also made to categorise the achievements in terms of the degree or level of progress, such as very good, good, average, below average and poor and recorded by giving marks 5,4,3,2 and 1 respectively. It meant, if the performance of a student in one aspect of evaluation e.g. drawing, in any of the subjects was very good then a total of 5 marks were awarded to the student and one mark was awarded for poor performance. Through the same procedure, the marks achieved by each student in each

subject in terms of each aspects of evaluation were being calculated. Based upon the performance of the students of class VIII, IX and X, their percentages were calculated. The performance of students – both class wise and total – was interpreted in the five-point scale, which has already been mentioned.

3.3 Procedure of Data Collection

The first objective of the investigation was to study the present system of secondary art education. The data required for the first objective of the study was collected mainly from two sources, one from the official records of the C.B.S.E and the R.S.B.S.E and the second from the art teachers teaching at the secondary level. The present secondary art education guidelines of the central schools was obtained from office of the Central Board of Secondary Education, New Delhi. The art education guidelines of state schools were obtained from the Rajasthan State Board of Secondary Education, Ajmer. The data related to the present secondary art education system, its methods and drawbacks were collected by administering questionnaires to the art teachers in the selected schools. It may be mentioned here that from some of the schools data was collected by administering the questionnaire to the teachers personally where as in some of the schools it was obtained by mailing the questionnaires to the teachers. Some of the teachers who did not respond were approached personally and through friends. Still, many teachers did not respond. Those teachers were replaced by selecting other teachers from the respective regions and data was obtained by administering the questionnaires to the teachers personally. A total of 68 schools were approached. But one school did not have art education. Thus, data could be obtained from 67 art teachers.

Data pertaining to the needs and requirements of secondary students with respect to art education was collected by administering questionnaires to a total of 201 students of the Rajasthan state. The questionnaire to students was administered with the help of art teachers in the schools selected for the study.

Data pertaining to the development of a renewed art education curriculum at the secondary level was collected through various means. At first, an attempt was made to understand the present problems of secondary art teachers and the needs and requirements of secondary students in relation to art education, through the data collected from the questionnaires. The present secondary art education guide lines of the C.B.S.E and the R.S.B.S.E were shown to a total of two secondary school art teachers, discussed and analysed. In the light of the above-mentioned discussion and use of the available knowledge in the discipline of art education, a tentative secondary art education curriculum was made. The tentative curriculum was shown to a total of 8 experts in the field of art and art education and they were requested to study the tentative curriculum and make their valuable suggestions. The tentative art education curriculum was modified after incorporating the suggestions of the experts and giving due consideration to the practicability of the curriculum.

Data pertaining to study the effectiveness of the renewed secondary art education curriculum was collected as follows. The developed curriculum was tried out in a secondary school for one academic year on a total of 45 students. 15 students each from

VIII, IX and X classes. All the creative works done by the 45 students in the experimentation period were collected as data for the above mentioned purpose. Apart from that a slide/plate identification test was also carried out on the experimental group at the end, to know whether the students are able to identify the same. Each student was shown 5 plates each and was asked to identify the same with its details. The individual marks of each student were collected as data in the slide/plate identification test.

Data pertaining to the objective number five i.e. the attitude of the students towards the renewed secondary art education curriculum was collected through an attitude scale developed by the investigator.

3.4 Procedure of Data Analysis

(A) The first objective of the research was to study the present system of secondary art education. For this, the data was collected mainly through two sources. (1) The first source was through administering questionnaires to a total of 67 secondary school art teachers in Rajasthan State. Depending upon the nature of data a qualitative and quantitative analysis was carried out. The basic purpose of the questionnaire to the art teachers was to know whether they were able to follow the prescribed syllabus of their concerned boards and also the practical problems that were being faced by the art teachers etc. Therefore, at the time of data analysis an attempt was made to make a comparison between the instructions given by the board and the present practice, with reference to the objectives of art education, syllabus, methods, theoretical instruction, evaluation etc. (2) The second source used for the first objective was the analysis of the

present day secondary art education guide-lines of the C.B.S.E. and the R.S.B.S.E. A qualitative analysis was carried out for the same, which follows. After understanding the present practical problems of art teachers and the needs and requirements of the secondary school students in relation to art education, the present day art education guidelines of the C.B.S.E and R.S.B.S.E were shown and discussed with a total of two secondary art teachers. In the light of above mentioned discussion and available knowledge in the field of art education, the guidelines were critically analysed.

(B) The data analysis for second objective i.e. the study of the needs and requirements of secondary school students, in relation to art education, was done in the following way. The data collected from various students through a survey in Rajasthan State was analysed qualitatively and quantitatively.

(C) The data analysis for third objective i.e. the development of a secondary art education curriculum was carried out in the following manner. After understanding the present art education system and the needs and requirements of the students, a tentative secondary art education curriculum was made by using the available knowledge in the field of art education. The tentative curriculum was shown to a total of 8 experts in the field of art and art education and they were requested to study the same and make their valuable suggestions. The suggestions were incorporated, the practicability of the curriculum was studied and on that basis the tentative art education curriculum was modified.

(D) The data analysis regarding the fourth objective i.e. the study of effectiveness of the renewed secondary art education curriculum was carried out in the following manner. All the creative works of a total of 45 students for one year, consisting of 15 students each from class VIII, IX and X was taken for assessment. A summated assessment of the creative works of each student done during one year was conducted separately. The aspects of evaluation of the creative works of secondary students, as given in the secondary art education guideline of the C.B.S.E was used as a criteria to assess the creative works of the experimental group.

(E) The data analysis for fifth of the objective i.e. the study of the attitude of students towards the renewed secondary art education curriculum was done as follows. The researcher constructed an attitude scale for the same purpose. The same was administered to a total of 45 students, consisting of 15 students each from class VIII, IX and X, as a pre and posttest. A 't' test was employed to know the changes in attitude of the experimental group towards the renewed curriculum.

3.5 The Research Design

The present study was an attempt to develop an art education curriculum for secondary school level, which involved survey and experiment. At first an attempt was made to study the present system of secondary art education. It was carried out at two levels. The first level was to study the present day secondary art education guidelines of the C.B.S.E and the R.S.B.S.E. The second level was to study the present art education practice in secondary schools. The purpose of the second aspect was to study the present

art education practice in secondary schools. It was intended to know whether the secondary teachers follow all the directions and methods as suggested by their respective boards fully and also to understand the practical problems being faced by the art teachers in their respective classes. In order to obtain the information from art teachers, a survey was conducted in Rajasthan state by administering questionnaires to the art teachers. A total of 68 schools were randomly selected from the 4 regions of the state.

As has been mentioned earlier, a child goes through different stages of development. The psychological needs of children differ at each stage in relation to their creative art. When the nature of problem changes, the method used to tackle the problem is also bound to change. So, whenever any attempt to develop secondary art education curriculum is carried out, it is also necessary to study the needs and requirements of secondary students, in relation to art education. For the same purpose a questionnaire was administered to 3 students each in 68 schools, which have already been randomly selected for objective number one.

A qualitative analysis was conducted to study both the questionnaires. After understanding the present day practice of secondary art education and the needs and requirements of the secondary students with reference to art education, the secondary art education guidelines of the C.B.S.E and the R.S.B.S.E were critically analysed along with two secondary school art teachers. In the light of the discussion and using the available knowledge in the discipline of art education, a tentative art education curriculum was made. The same was shown to a total of 8 experts into field of art and art

education and they were requested to study the curriculum and make their valuable suggestions, with respect to its adequacy, relevance and feasibility.

The relevance of any developed curriculum lies in the effectiveness of the same in the practical field. So, it is necessary to study the feasibility and effectiveness of the same. For the above-mentioned purpose it was decided to try-out the developed curriculum, in a secondary school level for one academic year. The Birla Senior Secondary School, Pilani, Rajasthan was selected for the experimentation of the renewed curriculum for the year July 1997 to April 1998. The experiment was conducted among a total of 45 students comprising of 15 students each from VIII, IX and X classes. The different components of the developed curriculum were experimented in different combination. Special attention was given to study the curriculum from its feasibility and adequacy. Problems being faced by the students and the method used to tackle the situation were timely recorded.

It is quite natural that self-expression of two students differ from each other. So a comparison between the works of two students was not desirable here. Therefore, a summated assessment of the creative works of students was conducted at the end, to know the progress achieved by students in terms of their creative work. It was felt that a criterion was necessary to assess the works of students. The aspects of evaluation of the creative works of secondary students as suggested by the C.B.S.E art education guidelines were adopted as general criteria for the present study. Apart from that a

slide/plate identification test was also conducted at the end to know, whether the students were able to identify the creative art works done by the great masters.

Whenever a group of students undergo an education programme, it is natural that they form certain opinion or attitude towards the same programme. Depending up on the experience they have, they show favorable, neutral or unfavorable attitude towards the programme. So the attitude of the experimental group plays an important role in deciding the success or failure of the programme. Therefore, an attitude scale was developed by the researcher to know the attitude of the students towards the renewed curriculum. Pre and posttest were carried out to obtain the attitude of the experimental group. A 't' test was employed to know the changes in the attitude of students from pre to post test towards the renewed secondary art education curriculum.