# Chapter V

# SUMMARY, SUGGESTIONS AND CONCLUSION

- 5.1.0 INTRODUCTION
- 5. 2.0 RATIONALE OF THE STUDY
- 5.3.0 RESEARCH QUESTIONS
- 5.4.0 STATEMENT OF THE PROBLEM
- 5.5.0 OBJECTIVES OF THE STUDY
- 5.6.0 HYPOTHESES OF THE STUDY
- 5.7.0 EXPLANATION OF THE TERMS USED
- 5.8.0 OPERATIONAL DEFINITION OF THE TERMS USED
- 5.9.0 DELIMITATION OF THE STUDY
- 5.9.0 METHODOLOGY
- 5.9.1 Design of the Study
- 5.9.2 Population
- **5.9.3** Sample
- 5.9.4 Development of Computer Based Art Education (CBAE) Package
- 5.9.5 Implementation of CBAE Package
- 5.9.6 Tools and Techniques Used
- 5.9.7 Process of Data Collection
- 5.9.8 Data Analysis
- 5.10.0 MAJOR FINDINGS
- 5.11.0 IMPLICATIONS OF THE PRESENT STUDY
- **5.12.0 SUGGESTIONS FOR FURTHER STUDIES**
- 5.13.0 CONCLUSION

# **CHAPTER V**

# **SUMMARY**

#### 5.1.0 INTRODUCTION

The arts are one of humanity's social wealth. They connect new generation to those who have gone before, equipping the newcomers in their own pursuit. Arts are often an impetus for change, challenging old perspectives from fresh angles of vision, or offering original interpretations of familiar ideas. The disciplines in arts provide their own ways of thinking habits of mind as rich and different from each other. At another level, the "arts" are society's gift to itself, linking hope to memory, inspiring courage, enriching our lives and its celebrations, and making our tragedies bearable. The arts are also a unique source of enjoyment and delight. The arts have been a preoccupation of every generation precisely because they bring us face to face with ourselves and with what we sense lies beyond ourselves.

The arts have been an inseparable part of the human journey and indeed, we depend on the arts to carry us towards the fullness of our humanity. We value them for what it is, and because we do, we believe knowing and practicing them is fundamental to the healthy development of our children's minds and spirit. That is why; in any civilization, the arts are inseparable from the very meaning of the term "education." We know from man's long journey and experience that no one can lay claim to be truly educated who lacks basic knowledge and skill in the arts.

If our civilization is to continue to be both dynamic and nurturing, its success will ultimately depend on how well we develop the capacities of our children, not only to earn a living in a vastly complex and ever changing world, but also to live a rewarding life rich in meaning and substance. This vision affirms that a future worth having depends on being able to construct a vital and complex relationship with the arts, and that in doing so, as with any other subject, is a matter of discipline and study.

The arts also make a deep contribution to education that has a reach beyond their intrinsic value. Because each arts discipline appeals to different senses and expresses it through different media,

each adds a special richness and depth to the learning environment. An education in the arts helps students learn to identify, appreciate and participate in traditional art forms of their own communities and societies. As students imagine, create and reflect, they are developing both verbal and nonverbal abilities so essential and necessary for school progress. At the same time, the intellectual demands that the arts place in students help them develop problem-solving abilities and such powerful thinking abilities as analyzing, synthesizing and evaluating. A comprehensive, articulated and thorough arts education program also engages students in a process that helps them develop the self-esteem, self-discipline, cooperation and self-motivation necessary for success and growth in life.

A comprehensive approach to the study of art is related to personal interest, experience and abilities of learners as well as to other subjects in the curriculum. An in-depth art education helps students understanding in the historical and cultural context for work of art, enhances their understanding of the nature of art and develops their ability to analyze critique and make informed judgments about art. In this way, the idea that the students educated in art understand that people create art and reflect upon what they have made to seek and construct meanings through their encounters with art thereby creating narratives. They also question and prove the significance and value of art in their individual and collective lives. The studies of arts have significant importance in the school education. The present study is an attempt to impart art education to school students with the help of advanced technology like, computer and internet that may help them to conceive and understand arts education in a more comprehensive way than the traditional method of learning art education.

#### 5. 2.0 RATIONALE OF THE STUDY

Art education constitutes an important area of curriculum activity for development of the personality of the learners. The aim of art education is perceived as development of aesthetic sensibility among learners so as to enable them to respond to the beauty in line, colour, form, movement and sound. The study of art and understanding of cultural heritage through art education reinforce appreciation and understanding for one another. Art education can provide the most satisfying medium of creative expression which has to be given due importance in the

best interest of the society (NCF, 2000). Considering this statement of NCF, 2000, it can be emphasized that arts both visual and performing need to become an important component of learning in the school curriculum. Children need to develop skills and abilities in these areas. The policy documents like, the Education Commission (1952-53), the Kothari Commission (1964-66), Shri K.G. Saiyidain Committee report (1966), the National Policy on Education (1986), the Programme of Action (1992), the National Curriculum Frameworks (1975,1988 and 2000) stated the importance of art education for the development of holistic personality of learners and suggested for the proper and systematic implementation of art education in the school curriculum at all stages.

For decades now, the importance of arts in the education system has been repeatedly debated, discussed and recommended, without much progress in this direction. Till date art education is a neglected area of school education may be due to lack of awareness among parents, students and authorities, untrained art teachers, resource crunch etc. It is not been taken in all schools. Few schools in urban areas opt for the art education. General awareness of the arts is also ebbing gradually among not just students, but their guardians, teachers and even among policy-makers and educationalists. Throughout the years of school, in all stages, the medium and forms of art allow children to develop both a playful as well as a disciplined exploration of themselves and allows them with many ways of expression to the development of self, both cognitive and social. Over the years teachers help children to move towards independently formulating and executing their own art projects with dedication and persistence, a sense of aesthetic quality and of excellence. In the secondary and higher secondary school stages, the art curriculum may also allow children to specialize in some areas of their interest. Along with learning the skills and practicing them, children could also at this stage learn some of the theory related to art and aesthetic experience, which could deepen their appreciation and also help them understand the significance of this area of knowledge.

Through art education students will be introduced to the rich and varied artistic traditions and heritage of our country. Arts education need to be used as a tool for this purpose and the subject need to be taught in every school as a compulsory subject at least up to standard X. All four main streams covered by the term arts, i.e. music, dance, visual arts and theatre, need to be included in

the school with different degrees. Awareness also needs to be built among parents and guardians, school authorities and administrators regarding the importance of arts. Emphasis need to be given on learning rather than teaching, and the approach should be participatory, interactive, and experimental rather than instructive. It needs a comprehensive and holistic curriculum of art education for all stages of school education equipped with latest information and communication technologies.

Computer being an incredible medium of communication and learning can help a lot in the area of art education to develop the creativity, aesthetic beauty, analytical understanding and a positive affiliation towards life, mankind and society among students. It can be used as a flexible, virtual medium of teaching and learning for the purpose of referring, sharing, designing, coloring, adopting, visualizing, realizing and managing information about art with the help of computer based tools like, paint brush, photo shop, coral draw, flash, power point, photography, scanner, electronic slate, Internet etc. working along with the art teacher. The present study is an attempt in this direction to develop and implement a computer based art education package for standard IX CBSE students.

It is the brain child of the researcher based on his experience of working as a teacher of art and aesthetic for last five years and teaching to secondary and higher secondary students following a CBSE art education curriculum. In CBSE curriculum from Standard I to X art is taken as an activity to enhance a child's creativity, expression and visual ability. In higher secondary classes of Standard XI and XII, fine arts is taken as an optional subject that students can select as per their choice. The syllabus is well defined at this stage with marks assigned for the subject with a proper art examination at the terminal tests.

Navrachana School, Baroda following a CBSE syllabus, from the beginning has given the facility and the freedom to explore the creativity forms of visual and performing arts among students. Students at the school are given an opportunity to express their talent and skill at various platforms like, festivals, fairs, cultural events, contests, competitions organized at regional, national and international levels. This provides them a chance to see, observe and learn from works of other students, interact with people, know and understand different cultures,

values, ethos and views and at the same time visualizes the concepts, ideas and creativity in the form of art. The school is also equipped with all the new age technologies in the education with enough computers, multimedia projectors, TV., OHP, and other electronic and electrical gadgets helping teachers to use them in regular classes. It has resulted in better understanding, involvement and participation from the students' side thereby increasing overall results. In the year 2003 the school received the National award "2<sup>nd</sup> Computer Literacy Excellence Award for Schools" from the ministry of information and technology. It is one of the reason for the researcher to choose this school as the sample of the proposed study.

Being a trainee of INTEL "Teach to the future" and WIPRO "In school", the researcher is able to acquire the fine practical elements of computer and ICT that can be used for teaching purpose. The researcher is involved in different exercises, which helped to bring students closer to art in a more meaningful and interactive way using computer and technology. The researcher kept experimenting the various thoughts and ideas and implementing them as per suitability, thereby benefiting art students. The students too enjoy and actively participate in these newer forms of involvement with art. The researcher have keenly observed, understood and implemented these tools and ideas of computers and felt that this medium is one of the best tools for the child to enhance their creativity and art skills. This reinforced the belief of the researchers that computers definitely as a medium could enhance the art experience of the young minds. However a machine no matter how advanced in technology or technique can never replace the human ability to explore manual skills, learn, pick up and imbibe thoughts and ideas. But realized that it should be used as a tool, to aid this very learning process. It can be aptly described as a right hand in the field of art education. Hence the researcher had taken an opportunity to develop a computer based art education package where the optimum use of both machine (computer) and human being (teacher) could be possible.

Due to the board exams of Standard X and IX 'art' take a backseat in the syllabus and even school authorities, parents and students give less weightage to it. Students also show less interest towards arts at these stages. Experimentation is also not desired at these stages. Hence the researcher had selected standard IX, the senior most class next to standard X, students for the purpose of experimentation.

The review of related literature revealed that most of the studies in the area or art education are of foreign origin and related to mostly survey about the process of art education. Study conducted by NCERT (2005) revealed the problems of art education in India and the study by Parmeswaran (2001) made an attempt to develop a comprehensive art education curriculum for secondary school. The experimental studies of Mc Allister (1990) and Reeve (1988) on art education showed the importance of computers in the teaching learning process of art education. In many other studies the researcher used computer either in the form of CAI or CAL were found it significant in terms of students' achievement in different subjects. All the studies used experimental research design. Realizing importance of computer in education and the problems in the process of art education, the present study is an attempt in this direction to use computer as a medium in the area of art education in secondary schools.

# 5.3.0 RESEARCH QUESTIONS

In the process of formulating the present study and reviewing the related literature the following research questions have been formulated and an attempt has been made to answer of these questions through the present investigation.

- Whether E-media would be useful in Art education?
- Whether students studying Art education through e-media do better in compression to the students studying the same through traditional method?
- Whether students studying Art education through e-media score better in Analytical understanding in compression to the students studying the same through traditional method?
- Whether students studying Art education through e-media show better in skills and craftsmanship in compression to the students studying the same through traditional method?
- Whether theoretical exercise will be more effective and the learning will be easier for the students studying Art education through e-media?
- Whether presentation style of Artwork of students studying through e-media would be better in compression to the same of students studying through traditional method?

#### 5.4.0 STATEMENT OF THE PROBLEM

Design, Development and Implementation of Computer Based Art Education Package for Standard IX CBSE Students

#### 5.5.0 OBJECTIVES OF THE STUDY

- 1. To develop a computer based Art education package for Std. IX CBSE Board students.
- 2. To implement the developed computer base Art education package on Std. IX CBSE students.
- To study the effectiveness of computer based Art education package on Std. IX CBSE students in terms of students' overall achievement in comparison to traditional approach of teaching Art education.
- 4. To study the effectiveness of computer based Art education package on Std. IX students in terms of students' reaction towards it.

# 5.6.0 HYPOTHESES OF THE STUDY

The researcher has formulated the following null hypothesis those will be tested at 0.01 level of significance.

- 1. There will be no significant difference between the mean post-test achievement scores of standard IX students studying Drawing through computer based art education package and those studying through traditional method.
- 2. There will be no significant difference between the mean post-test achievement scores of standard IX students studying Still-life through computer based art education package and those studying through traditional method.
- 3. There will be no significant difference between the mean post-test achievement scores of standard IX students studying Painting through computer based art education package and those studying through traditional method

- 4. There will be no significant difference between the mean post-test achievement scores of standard IX students studying Poster through computer based art education package and those studying through traditional method
- 5. There will be no significant difference between the mean post-test achievement scores of standard IX students studying Composition through computer based art education package and those studying through traditional method
- 6. There will be no significant difference between the overall mean post-test achievement scores of standard IX students studying Art Education through computer based art education package and those studying through traditional method

#### 5.7.0 EXPLANATION OF THE TERMS USED

**Art education:** In the present study Art education is considered as a discipline includes only visual arts dealing with painting, sculpture, commercial art and graphics.

**Traditional methods of teaching art education:** In the present study, Traditional methods of teaching art education is the method of teaching art using standard real versions like, copying, coloring, adopting and visualizing with the help of traditional hand used tools like, brush, pencil, charcoal, clay, different chemical colours etc. following the teacher's direction.

Computer Based Art Education: In the present study, computer based art education is the method of teaching art using a flexible virtual medium for referring, sharing, designing, coloring, adopting, visualizing, realizing and managing information about art with the help of computer based tools like, paint brush, photo shop, coral draw, flash, power point, photography, scanner, electronic slate, Internet etc. working along with teacher.

# 5.8.0 OPERATIONAL DEFINITION OF THE TERMS USED

**Achievement in Painting:** Marks secured by the students in the art education test prepared by the researcher in the components of painting.

**Achievement in Drawing:** Marks secured by the students in the art education test prepared by the researcher in the components of drawing.

**Achievement in Still Life:** Marks secured by the students in the art education test prepared by the researcher in the components of Still Life.

**Achievement in Poster:** Marks secured by the students in the art education test prepared by the researcher in the components of poster.

**Achievement in Composition:** Marks secured by the students in the art education test prepared by the researcher in the components of Composition.

**Achievement in Art Education:** Marks secured by the students in the art education test prepared by the researcher including painting, drawing, still life, poster and composition.

**Reaction of students:** The scale value of the preferred belief of the students regarding the component of the developed computer based art education package on a five point-scale will be considered as the reaction of the students towards the component of the developed programme. The aggregate quantitative scale value will be considered as the overall reaction towards the developed computer based art education package.

#### 5.9.0 DELIMITATION OF THE STUDY

Following were the delimitations of the present study:

- In the present study Art Education was delimited to the visual art only.
- In the present study Art Education was delimited to the five concepts of visual art viz.

  Drawing, Still Life, Painting, Poster and Composition.

#### 5.9.0 METHODOLOGY

The present study is an experimental study. The experimental research design was followed in the proposed study. Details of the methodology of the study including the design, sample, tools and statistical analysis are given as follow.

# 5.9.1 Design of the Study

Quasi experimental design was followed in the proposed study. As the process of randomization was used for both the experimental and control group, the pretest-posttest nonequivalent- groups design was followed in the present study.

# 5.9.2 Population

All English medium standard IX students following CBSE syllabus and taken art education as a subject in the Baroda city were considered as the population of the present study.

#### **5.9.3** Sample

Sample for the present study was taken from the Navrachana School, Baroda purposively where Art Education is a subject for secondary standard students following CBSE syllabus. 30 students of standard IX were taken for each experimental and control groups. Care was taken to see that both the groups are equivalent in terms of their pre-test achievement score in art education.

# 5.9.4 Development of Computer Based Art Education (CBAE) Package

The researcher developed a computer based art education package using the computer tools like, multimedia, paint brush, photo shop, coral draw, flash, power point, photography, scanner, electronic slate, Internet etc. taking five chapters of the art education syllabus of standard IX viz. Doodle to Drawing, Sketching to Still-Life, Painting to Pop-Art, Poster to Publicity, and Creation to Composition. The package was used by the teacher to help the students to learn art

education in an interactive learning environment. While developing the package the researcher had taken the opinion of experts in the area of art education and computer education.

# 5.9.5 Implementation of CBAE Package

The developed computer based art education package was implemented on the experimental group taken students from the standard IX of Navrachana School, Baroda opting for art education, for a period of one academic year (April to February) by the researcher. During the same period also, the researcher had taught the art education to the control group from the same school using traditional approach.

# 5.9.6 Tools and Techniques Used

The following tools and techniques were employed by the researcher to collect data from the sample and to achieve the objectives of the proposed study.

**Achievement test:** An achievement test including both theory and practical was prepared by the researcher to study the overall art education achievement of the students in art education including all the five chapters. The achievement test was of 200 marks, 100 marks for theory and 100 marks for practical.

**Reaction Scale:** A five point reaction scale was constructed by the researcher to study the reaction of students towards the computer based art education package.

**Observation:** Participatory observation technique was used to study the skills and craftsmanship and presentation style of students in art education.

#### 5.9.7 Process of Data Collection

The required data were collected with the help of pre-test, post-test and reaction scale which were constructed by the researcher. In between pre-test and post-test the researcher implemented the intervention programme in the form of developed CBAE package.

# 5.9.8 Data Analysis

To realize the objectives of the proposed study both quantitative as well as qualitative methods of data analysis were used. Pre-test achievement data related to art education was used to make control and experimental group equivalent. Mean, Standard Deviation, Standard Error of Mean and Mann-Whitney U-test were used to analyze the quantitative data collected through post-test. Data collected through reaction scale was analysed quantitatively with the help of percentage calculated for the frequency of responses and Intensity Index

#### 5.10.0 MAJOR FINDINGS

Following Major findings were drawn for the present study on the basis of analysis and interpretation of the data.

- 1. The developed CBAE package was found to be stochastically (significantly) effective in terms of enhancing students' achievement in Art Education (in all the five components like, Drawings, Still-life, Paintings, Posters and Composition separately and over all art education) in comparison to the traditional approach.
- 2. The achievement of the students in Art Education taught through CBAE package was found significantly higher than that of the students taught through traditional method (in all the five components like, Drawings, Still-life, Paintings, Posters and Composition separately and over all art education). Hence it can be said that teaching Art Education through computer is comparatively better than traditional method in terms of the achievement of the students.
- 3. The developed CBAE package to teach Art Education was also found to be effective in terms of the reaction of students towards the package. As most of the students showed

- favorable reaction towards most of the components of CBAE and CBAE package as a whole.
- 4. The developed CBAE package was found to make the students interested in learning Art Education, having cooperative learning among students and considering the package as a self-learning tool.

#### 5.11.0 IMPLICATIONS OF THE PRESENT STUDY

The teacher and teaching should be changed as per the context and with the passage of time. Presently if one notices the use of technology, then one may find the students much more advanced than the teachers in its use. The technology has shown its great effect on the mind of the students, so the present study is an effort to make use of computer in teaching of Art Education and to have an effect of that on the learning of the students. It was just an attempt to find out an innovative way of teaching Art Education and to check the effectiveness. The following are some of the suggested implications of the present study on the basis of the major findings.

- To increase the effectiveness of teaching of Art Education the teachers should make use
  of computer or other technology so that the students get interest in learning. More
  interactive technology like internet could be used more and more for enhancing the
  imagination and thinking of the students by understanding different culture and
  environment.
- Not only the topics which were taught through the developed CBAE package by the researcher but other topics of art education also should be taught with the help of this kind of package.
- The teaching through this kind of CBAE package effects more senses of the students and they make use of the learnt concepts in their real life.
- As CBAE package shows the innovative way and making teaching learning more fruitful
  and interesting, other packages of innovative nature considering the nature of art
  education and the interest of the students could be developed to provide more and more
  exposure to the students.

Using only CBAE package for teaching learning has showed effective result as well as
positive reaction of the students in the past and also in the present study. This type of
packages could be used with teacher's activity and with small group discussion for better
involvement and understanding of the students in art education as CBAE packages could
be helpful to reduce the burden of the student as well as the teachers by increasing the
capacity of both of them.

#### 5.12.0 SUGGESTIONS FOR FURTHER STUDIES

The present study has the scope for changing the scenario or art education in the CBSE schools if implemented properly. Similar type of research work is needed in the area of art education to improve the quality of art education in Indian schools. Following are few suggestions by the researcher for the studies in future by the budding researchers.

- The present study was delimited to the five concepts of visual arts i.e. Drawing, Still-life,
  Painting, Poster and Composition only. In order to get a comprehensive picture regarding
  the effectiveness of computer based art education, all the concepts of art education can be
  covered and experiment could be done.
- The study was conducted on the secondary school students. Such studies can be conducted by taking sample from primary, high school and college students who are studying art education as one of the subject.
- Studies can also be conducted by taking other board schools those are providing art
  education as one of the subject in their syllabus. Comparison also can be done by taking
  samples from different board schools.
- Studies can be conducted on measuring effectiveness of such packages by taking different variables like gender, caste, school board, medium of instruction and interest in art education.

## 5.13.0 CONCLUSION

The developed CBAE package to teach Art Education to standard IX students of CBSE was found to be effective in enhancing achievement of students in Art Education in comparison to the

traditional method of teaching. The developed package was also found effective in terms of the liking of students towards the package that was revealed form of technology for the teaching of Art Education. The computer has huge potential today as the CBSE schools preferring technology enabled teaching-learning process and all the schools are provided with high end technologies like computer hardware and software. Computer based packages are also useful for the students in self-learning as per their convenient time and this minimizes the burdens of teachers as the teachers cannot give individual attention to all students due to time limit and also individual differences among the students. Now there is a need to prepare such type of packages or programmes in different areas of Art Education and also in different subjects to cater the needs of the students studying in different board schools. While preparing this type of packages, there is a need to consider the level of the students, their environment and the likeness. According to the learning style of the learners, different packages could be available to these learners for excelling in Art Education as well as in different subjects. This technology blended learning will see the better future of students by the way of providing technology enabled teaching.