

**DEVELOPMENT OF A CULTURAL HERITAGE  
EDUCATION PROGRAMME FOR  
SECONDARY SCHOOL STUDENTS**

**ABSTRACT OF  
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# ABSTRACT

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## • INTRODUCTION

Education and culture are intimately and integrally related. Education has great influence on culture. In the same way, culture influences education. The educational system of any society has a clear impact on its culture. Education and culture are closely related to each other. In fact, true education is incomplete without transmission of cultural heritage. For example, if the cultural pattern of a society is materialistic, then its educational pattern will be shaped for the attainment of material values which promote material comforts. It is clear that a society devoid of any culture will have no definite educational organization. Hence, the culture of any country has its powerful impact on educational pattern. In short, the destiny of any educational system is shaped by the cultural patterns in which the system lives. According to Chaube and Chaube (2018), culture is closely related to education. The bases of the educational system of a society are its needs and impact on its culture and they are fulfilled by education.

Education and culture are closely related to each other. In other words, to be cultured means to be educated and to be educated means to be cultured, balanced and enlightened. Thus, culture and education go hand-in-hand. Culture refers to a social heritage that is all knowledge, beliefs, customs, and skills that are available to the members of any society.

Since the term 'Cultural Heritage' covers a variety of domains, it is necessary to incorporate all the domains under the strategies and practices related to the Cultural Heritage Education (CHE). On the basis of the reviewed literature and research studies, it has been observed that no study has entirely focused on CHE with respect to its major domains. Considering this as a major lacuna in the field of educational research, the investigator selected the present study with a view to obtain the answers of the following research questions.

- a. Are the domains of Culture and Heritage merged in the existing school curriculum?
- b. What sort of intervention programs is needed at school level to achieve the objectives of Cultural Heritage Education?
- c. Which specific inputs are to be included in the activities related to the CHEP?
- d. Is there any impact of promotion of Cultural Heritage Education on students' knowledge regarding Cultural Heritage Education and its domains?

Looking to the above questions, the purpose of the present study is to examine the potential of the CHEP in helping students in secondary school to learn different domains of Culture and Heritage. The study is intended using the CHEP as a tool to integrate teaching-learning materials through the use of the CHEP to encourage students to take interest in activities of Cultural Heritage Education programme. Further, it also focuses on how to incorporate all the domains of Culture and Heritage in the day-to-day class room teaching learning processes.

## • **RATIONALE OF THE STUDY**

Understanding one's own country becomes more complicated if you are an Indian. A recent survey has indicated that 4.653 communities live in India in a predominantly Hindu society with a sizeable Muslim population. They include people professing all the major faiths of the world, entertaining different notions about the migration of the soul, speaking several languages and dialects. Each group has its own district folklore, industry and handicrafts. But India is more than a sum of these. Jawaharlal Nehru said, "India is a cultural unity amongst diversity, a bundle of contradictions held together by strong but invisible threads". These have given successive generations of Indians a mindset, a value system, and a way of life, which has been retained with remarkable continuity.

Ancient India had been an inexhaustible store of knowledge in every science and art known in those times. To enumerate some of these we may mention Astronomy, Astrology, Mathematics, Medicine, Etymology, Literature, Philosophy, Grammar, Iconography, Architecture, Chemistry, Logic and Engineering. Ample evidence which proves conclusively that most of these arts moved from India to Europe via Arabia. During historical times also, there was going on a continuous movement of Hindu experts from India, through force or consent, towards nations situated in the north-west of India like Arabia, Egypt, Greece etc. In the east also, the culture and the civilization of the Hindus had conquered numerous countries like Java, Sumatra, Bali, Cambodia, Sayam, Burma, Borneo, Philippines etc. The wide range of Hindu educational achievements and the long period of their successful working in every science and art so striking that one instinctively attracted to study the phenomenon in extenso. In terms of history, it is not very clear when the Indian mind started delving into fine arts, poetry, philosophy and science. The myths and legends, cults and rituals as well as agricultural

practices and handicrafts indicate that civilization attainments in India commenced some 5000 years ago or even earlier. The Indus Valley civilization provides the reservoir at *Dholavira*, *Irish* Valley beginnings of Indian actualization. There is enough evidence to indicate that from ancient times Indian had developed a system of conferences and free discussions to which specialties came from all over country. The summaries of these conferences were known as *samhit* as, the compilers being editors, not authors. History encompasses the development of human consciousness, a handing over or easy passage of ideas and beliefs from one generation to the other. As a remarkable feat of the conservation of memory, the Hindus, through the tradition of *Shruti* and *Smriti* have passed on the *Vedas*, the *Ramayana*, the *Mahabharata*, the *Bhagavad Gita* and other sacred texts to the present day. The *Vedas* and *Upanishads* and our great epics came to guide and determine the way of living and thinking of the elite as well as the common people. Besides, there were notable advances in music and medicine mathematics and astronomy. The *Ramayana*, the *Mahabharata*, the *Upanishads* and the *Bhagavad Gita*, the finest works of art and sculpture of *Ajanta* and *Ellora* and various Buddhist shrines, the best universities of the world of their times at *Nalanda* and *Vikramshila* are achievements that should give us pride in our heritage. Looking at this great Indian culture and heritage, the national policy on education has also given importance to culture and heritage in education. The National Policy on Education (NPE, 1986) recognized the need of education to be culture - based. The role of education in developing democratic citizenship was recognized. Knowledge of culture plays a prominent role in democratic thinking of a citizen who is known for his ability to shift truth from false and is more receptive to new ideas. True education also brings clarity of thought, compassion concern for mankind and is a basis for human rights.

NPE (1986) further emphasized fostering among students an understanding of the diverse cultural and social system of the people living in different parts of the country as an important objective of school education. As a follow up of the NPE (1986), Programme of Action (POA, 1992) suggests an illustrated view on the cultural perspective interlinking education and culture in order to promote the process of child's personality development particularly in terms of discovering the inherent potentialities of a child. Right from the pre-primary stage to the highest level of formal education, a programme of action was formulated. Mutual participation, use of inexpensive and

relevant material for cultural exposure, promotion of the concept of cultural neighborhood involving active participation of the community, reformation of the curriculum, motivation of teachers and efforts to encourage the young generation to participate in cultural and allied activities were some of the important features of this document.

According to NCF (2005), the period from infancy to adolescence is one of the rapid growths and change in behavior of a child. The curriculum must have an approach to learning and development that is able to see the interconnections and transcend between physical and mental development and interaction with the others.

The Central Board of Secondary Education (CBSE) suggests that heritage education is important in education. CBSE has mentioned in one of its circulars dated 5<sup>th</sup> November 2011, to promote culture and heritage in education for the students with a view to focusing on following major objectives.

- (a) To bring History and Social Science curriculum alive for the students through active learning and doing.
- (b) To promote awareness of and involvement in heritage to inculcate a respect for diversity, tolerance, mutual understanding, patience and promote peaceful co-existence in school students.
- (c) To inspire young students and encourage them to build a future through an understanding of the past and the present.
- (d) To equip students to understand and explore their local heritage and gain a sense of confidence for the self.
- (e) To encourage students to learn about national heritage as well as gain exposure to different heritages around the country.

Thus, proves the importance of CHE at school level. At National level the Centre for Cultural Resources and Training (CCRT) has been established by the Government of India to promote culture and heritage in education. The CCRT's endeavor has been to produce informative and attractive educational material on Indian culture and to distribute the same in the schools of country from where the teachers are being trained. They are used in a variety of teaching situations to create an understanding of the inter-disciplinary approach in Indian artistic manifestations. They aim at sensitizing the youth to the philosophy and aesthetics inherent in Indian art and

culture. Students do not always get a chance to visit museums and historical monuments to get a first-hand learning experience about cultural heritage; hence, the materials of CCRT bring to the students, in the confinement of the four walls of the class room, the splendor and beauty of Indian thoughts and arts.

Apart from other audio-visual materials prepared by the CCRT and included in its 'Cultural kit' have received wide acclaim and are very popular among teachers in all parts of the country, who are using them to create among students a sense of responsibility for conservation of all that is beautiful in our natural and cultural heritage.

Content analysis of the text books of Std-9 [Gujarat Secondary and Higher Secondary Education Board] signify that all the major domains and sub domains like Built space & heritage sites, Language, Material art, Films, Museums and Institutions, Sports and Yoga, Cultural Practices, History, Performing Art, Natural Heritage are included in the prescribed text books. It can also be observed that the major sub domains like Ideas, Norms and Materials in terms of their various components are merged in the text books. Recently Gujarat Secondary and Higher Secondary Education Board introduced Continuous and Comprehensive Evaluation (CCE). One of the main aims of CCE is to focus on the non-scholastic's aspects such as life skills, attitudes, values, creative skills, aesthetic skills, performing skills, sports and yoga etc. through cultural aspects. But on the basis of investigator's long experience as a teacher, it is observed that CCE has not been correlated with any kind of cultural practices. It just focuses on cognitive domain. Hence, there is utmost need to incorporate various cultural aspects under CCE to achieve educational goals. It seems that the implementation of Cultural Heritage Education Programme at school level will be proved a better supplement to achieve the objectives of CCE.

Shankar (1995) explained the role of yogic practices in health fitness and sports promotion. Yoga has gained worldwide popularity, as is evident from recent trends. Yoga can serve as an applied science in a number of fields such as education, physical education, sports, health and family welfare. Yogic practices not only help to strengthen each organ and develop every muscle of the body but also regulate the circulation of blood, purify the lungs, inspire the mind and help to achieve a harmonious development of human personality. Yogic science thus needs to be given proper place in education. Looking to the broad coverage of various domains and sub domains under Cultural Heritage Education, it would be a challenging task to incorporate all the aspects of Culture and Heritage in Education. In pursuance of one of the major objectives of CHE,

Tokyo Metropolitan University (1978) has outlined the broad components of the curriculum in environmental studies for high school students. The curriculum included group activities, outdoor exercises and problem-solving assignments as required by the concept of lifelong education. The major content areas covered under the curriculum were as follows,

- Mankind within the biosphere
- Consumption of materials and energy by man mineral resources, Agriculture resources, wildlife and utilization of Nuclear energy
- Human activities and destruction of environment
- Increase in food production and control of human population
- Rational use and conservation of nature

The state government has also introduced the separate subject named “*Environmental studies*” at elementary school level to achieve some of the major objectives of Cultural Heritage Education. Apart from this, the other subjects such as, languages, Physical Education and Yoga, Social Science, Drawing and Music etc. are also contributing a lot in achieving the objectives of CHE.

As per the recent news, the CBSE governing body has decided to introduce Artificial Intelligence (AI), Early Childhood Care and Education (ECCE) and Yoga as new subjects in school curriculum from the upcoming academic session. The CBSE is introducing Artificial Intelligence as an optional 6<sup>th</sup> subject at Class IX from the academic session 2019-2020 onwards. To enhance the multidisciplinary approach in teaching learning and also to sensitize the new generation, it has been decided that schools may start AI: "inspire module" of 12 hours at Class VIII itself.

It has also been decided to introduce Yoga and Early Childhood Care and Education as the elective subjects at senior secondary level. The decision was taken considering the demand of schools supplemented by various reports that projected the huge requirement of yoga professionals and early childhood care educators. As per the norms, a skill subject, at the secondary level, may be offered as additional sixth subject along with the existing five compulsory subjects. And if a student fails in any one of the three elective subjects (Science, Mathematics and Social Science), then it will be replaced by the skill subject (offered as a 6<sup>th</sup> subject) and the result of Class X will be computed based on the best five subjects. This can be viewed as an effort of interlinking of education and culture. [News18, March, 2019]

The Draft National Education Policy (2019) envisions an India-centered education system that contributes directly to transforming our nation sustainably into an equitable and vibrant knowledge society, by providing high quality education to all. The Draft Policy emphasizes the criticality of the early years and aims to ensure quality Early Childhood Care and Education for all children between 3-6 years by 2025 with significantly increased investment and new initiatives. A new developmentally-appropriate curriculum and pedagogical structure for school education based on principles of brain development and learning has to be developed based on a 5 + 3 + 3 + 4 design, as suggested under the policy document. Further it is mentioned that, there will be equal emphasis on all subjects - Science, Social sciences, Art, Languages, Sports, Mathematics - with integration of vocational and academic streams in school. It can be revealed that the overall views mentioned under the Draft Policy Document related to 'School Education' suggest the amalgamation of culture and education to make the system of education India-centered.

An interlinking of education and culture is emphasized in order to promote the process of child's personality development particularly in terms of discovering the inherent potentialities of the child. Right from the pre-primary stage to the highest level of formal education, a programme of action has to be formulated. Mutual participation, use of inexpensive and relevant material for cultural exposure, promotion of the concept of cultural neighborhood involving active participation of the community, reformation of curriculum, motivation of the teachers and efforts to encourage the younger generation to participate in cultural and allied activities are to be some of the outstanding features of our cultural perspectives.

The education department of Manipur recently decided to enforce a 'No School Bag day' on all working Saturdays for students of Classes 1 to 8, including the government, government-aided and private schools in a submission to promote other skills apart from textbooks. The Manipur government's 'No School Bag Day' initiative has been receiving a good response from students, some schools authorities and parents. The decision was taken after considering the long term physical and mental effects of carrying heavy school bags every day by young students, who can go through lots of inconveniences, health problems and discomforts and to make schools more conducive and a joyful place for learning. The students of the primary and mid-level schools are



often found engaged in routine work related to the school curriculum, additional homework and assignments. This leaves young boys and girls with little time for other activities, including games, sports, extra co-curricular and cultural activities that help students in personality development, the release said. The government has also directed the schools to ensure that students take part in cultural and extra co-curricular activities, games and sports, recreation and make the school a more joyful place for learning on all working Saturdays. (NDTV, Education, ANI, September 09, 2019) This can be a good initiative to promote cultural and heritage education at school level.

It seems that no educational system has put up its efforts systematically to emphasize CHE at school level. CBSE has suggested promoting CHE through different activities under its one of the initiatives, but it is a matter of investigation that to what extent the CBSE schools have been successful in achieving the objectives of promoting Cultural Heritage Education. Further it necessitates the well-planned Cultural Heritage Education Programme for the schools. Also, the review of research studies revealed that there is a dearth of studies focusing on especially promotion of Cultural Heritage Education with the help of deliberate or systematic CHE programme. This has really inspired the investigator to carry out the present study.

## • **STATEMENT OF THE PROBLEM**

“Development of A Cultural Heritage Education Programme for Secondary School Students”

## • **OBJECTIVES OF THE STUDY**

The present study was designed with a view to achieving the following objectives:

- i) To develop a Cultural Heritage Education Programme (CHEP) for secondary school students.
- ii) To implement CHEP on secondary school students.
- iii) To study the effectiveness of CHEP with respect to;
  - Achievement of the students related to Cultural Heritage Education.
  - Reactions of the students.

- **HYPOTHESES OF THE STUDY**

The following hypotheses were tested to achieve the objectives of the study.

- i) There will be no significant difference in the mean achievement scores of the experimental group in pre-test and post-test (i.e. Cultural Heritage Education based Knowledge Test).
- ii) There will be no significant difference in the mean achievement scores of the control group in pre-test and post-test.
- iii) There will be no significant difference in the mean achievement scores of the experimental group and the control group in post-test.
- iv) There will be no significant difference between the favourable and unfavourable reactions of the students of experimental group regarding the implemented CHEP.

- **EXPLANATION OF THE TERM**

- **Cultural Heritage Education Programme (CHEP)**

The Cultural Heritage Education Programme under the study was a composite form of various activities based on six (06) different domains of Culture and Heritage like; (i) Built space and Heritage sites, (ii) Languages, (iii) Films, (iv) Sports and yoga, (v) Cultural practices and (vi) Performing arts. The CHEP was developed by the investigator with the support of resource persons in the related areas, keeping in mind the following criteria:

- a) The CHEP should be covered the major 06 (Six) domains of Culture and Heritage.
- b) The activities of CHEP should be related to the existing curriculum of secondary school.
- c) The implementation of CHEP should be done through activity-based approach.
- d) The CHEP should be implemented with the support of resource persons in the related areas.

Implementation of this programme was based on different activities like Field visit, Workshop, Demonstration and Discussion, Observation, Yoga, Exhibition and Orientation. The broad outline of the CHEP includes variety of activities viz.; A visit to historical place, Walk to the side of natural heritage, Language enrichment Programme, Creative writing, Watching Films, Sports and Yoga, Performance based activities and using CCRT cultural kit.

- **OPERATIONALIZATION OF THE TERMS**

- **Achievement**

Achievement means the marks obtained by the students of standard IX in the Achievement test (i.e. Cultural Heritage Education based Knowledge Test), based on selected domains of Cultural Heritage Education.

- **Effectiveness**

Effectiveness of the CHEP was judged on the basis of the significance of difference in mean achievement scores of the students of experimental group, in the pre-test and post-test.

- **DELIMITATIONS OF THE STUDY**

- The present study was delimited to the students of Standard IX of Gujarati medium grant-in-aid secondary schools, following the prescribed syllabus of Gujarat Secondary and Higher Secondary Education Board (GSHSEB).
- The implemented CHEP under the present study was prepared only in Gujarati language and also instructed in Gujarati language for the same. Also, the tools for data collection (i.e. Cultural Heritage Education based Knowledge Test and a Reaction Scale) were developed in Gujarati language.

- **POPULATION OF THE STUDY**

Total 30,114 students studying in the secondary schools of Vadodara district of Gujarat state, during the academic year 2015 - 16 constituted the population for the present study.

- **SAMPLE OF THE STUDY**

Sample for the present study was selected purposively considering the nature of the study and bearing in mind the feasibility aspect for the experimentation, data collection along with an intention of getting all the necessary facilities in the schools. First of all, the list of grant-in-aid Gujarati Medium Secondary Schools of Vadodara district was collected from the District Education Officer (DEO) Office, Vadodara. Then, considering the availability of necessary facilities for organizing different activities of CHEP in the schools, two schools (*VakalVidhyalay, Bajwa and Mahirewa Adarsh Vidhyalay, Bajwa*) were selected with the prior permission of the school

management. An intact class of Standard IX from each school was considered as the sample for the present study. The group of students (i.e. total 51 students) from *VakalVidhyalay, Bajwa* was treated as experimental group whereas the group of students (i.e. total 51 students) from *Mahirewa Adarsh Vidhyalay, Bajwa* was treated as the control group.

- **DESIGN OF THE STUDY**

The design of the present study was Quasi-Experimental Design under the Experimental research study. Under this the 'Pre-test - Post-test Non-equivalent Group Design' was adopted.

- **PLAN AND PROCEDURE OF THE STUDY**

The study was conducted in five different phases, described as under.

**Phase I - Development of CHEP**

Under this phase, a composite programme based on six (06) domains of Cultural Heritage Education was developed by the investigator with the support of resource persons, who are contributing for the promotion of Cultural Heritage Education at school level. The programme consisted of variety of activities correlated with school subjects of Standard IX. The relevant supporting materials were also identified and provided to the students during facilitation of the programme.

**Phase II - Administration of Pre-test**

Under this phase, a Pre-test (Cultural Heritage Education based Knowledge Test) was administrated to the students of experimental and control groups with a view to measure their achievement in terms of knowledge related to Culture and Heritage.

**Phase III - Implementation of CHEP**

The developed CHEP was implemented on a selected experimental group of students during two semesters of the academic year 2015-16. Under this implementation, some activities were merged in the co-curricular activities with some necessary additional inputs, while rest of the activities of CHEP were organized on every Saturday as well as on last working day of each month. Hence, looking to the available months during the two semesters, total 36 hours devoted for the

implementation of activities under CHEP, apart from the activities which were merged under CCA. A brief report was also prepared by the investigator during the implementation of the CHEP to judge students' sensitization towards different domains of CHEP with respect to their interest, aptitude and active participation in the various activities.

The detailed schematic presentation for the implementation of CHEP was followed systematically. This it to be noted that various activities were not done at a stretch during the allotted hours, but they were done as per the convenience of the regular school time table. Total 36 hours had been allotted during 26 days for the implementation of CHEP apart from some of the activities like; World Environment Day, World Yoga Day, Celebration of Independence Day, National Sports Day, National Science Day, Celebration of *Hindi divas*, National Youth Day, Celebration of Republic Day, *Matru-bhasha Gaurav divas* and World Heritage Day; which were merged in the said CHEP as some co-curricular activities. The implementation time of CHEP was considered in accordance with the strategy evolved under each domain of Cultural Heritage Education Programme and the co-curricular activities stated above which were already suggested in the academic calendar (Named, "*Vasarika*") developed by Gujarat Secondary and Higher Secondary Education Board, Gandhinagar.

#### **Phase IV- Administration of Post-test**

Under this phase, the post-test was administered to the students of experimental group with a view to measure their achievement in terms of knowledge related to Culture and Heritage and also to judge the effectiveness of the implemented CHEP.

#### **Phase V- Administration of Reaction Scale**

A five-point reaction scale was administered to the students of experimental group mainly to study their reactions regarding the implemented CHEP. This was mainly to judge the effectiveness of CHEP on the basis of their reactions.

### **• TOOLS FOR DATA COLLECTION**

The following major tools were constructed by the investigator and used for the collection of data, under the present study.

- a) **Cultural Heritage Education based Knowledge Test:** The Cultural Heritage Education based Knowledge Test was constructed on the basis of the six selected domains of Culture and Heritage with a view to measure students' knowledge related to CHE. This test was of one-hour duration and included 100 multiple choice type questions. All the questions ensured the coverage of selected domains under CHEP. This Cultural Heritage Education based Knowledge Test was used as both pre-test as well as post-test.
- b) **Reaction Scale:** A five-point Likert type reaction scale was constructed and used to study the reactions of the students regarding the implemented CHEP. It was consisted of 23 statements which were categorized into construction, implementation and experiences of the students. The scale was validated on the basis of the suggestion given by the subject experts.

### **Development of the Tools**

A research tool plays a major role in any worthwhile study as it is the significant factor in determining the sound data, which in turn, helps in arriving at database conclusions about the study in hand, which ultimately helps in providing suitable remedial measures to the problem concern. The following tools were developed by the investigator in the present study for the purpose of data collection.

- a) Cultural Heritage Education based Knowledge Test
- b) Reaction Scale

The brief description about the development of tools has been given as under;

#### **a) Cultural Heritage Education based Knowledge Test**

Cultural Heritage Education-based Knowledge Test was developed by the investigator. Six domains of CHE such as; Built Space and Heritage Sites, Languages, Films, Sports and Yoga, Cultural Practices and Performing Arts were taken into consideration for the development of this tool. In the initial stage, total 120 multiple choice type questions were constructed under the initial format of the said test. The test items were discussed with the panel of five experts with regard to their appropriateness, relevance and capacity to describe domains of CHE. Also, this initial format of CHE based knowledge test was administered on a group of ten (10) Standard IX students to judge its validity and standardization of the instructions. Based on the feedback and suggestions of the experts, 120 multiple choice type questions were scrutinized and all those test items requiring modifications were modified by the investigator. Thus, the final form of the test was constructed based on the above stated six domains.

## **b) Reaction Scale**

As the second significant tool for the present study, a Reaction Scale was developed by the investigator under the guidance of experts with respect to its appropriateness, relevance and capacity to draw out the comprehensive ability of the students while giving their reactions. Total 23 statements were framed to know the reactions of the students regarding the implemented CHEP. The students were given five options (Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree) for each statement, out of which they have to select any one most appropriate option as their reaction for the given statement. Out of 23 statements, statement no. 16, 19 and 21 were having negative polarity. All the major domains were taken into consideration while development of this tool.

## **• DATA COLLECTION**

With a view to collect the data in terms of students' achievement regarding Cultural Heritage Education and their reactions about the implemented CHEP; the above stated tools were employed. First of all, Cultural Heritage Education Based Knowledge Test was administered on the experimental and control group as a pre-test. For this, initially the principal of both the schools were consulted to seek their permission for the data collection. After taking the prior permission, the pre-test was administered on 16<sup>th</sup> and 17<sup>th</sup> December, 2015 on the experimental and the control group respectively. The duration of the test was one hour. The students were ensured about the confidentiality of the information collected from them.

The same test was administered as post-test on the experimental and control group on 26<sup>th</sup> February, 2016 and 4<sup>th</sup> March, 2016 respectively, with the prior permission of the school authority.

Thus, the quantitative data in terms of achievement scores were collected. After that to study the effectiveness of implemented CHEP, students' reactions were collected by employing a reaction scale. The reaction scale was administered to judge the effectiveness of CHEP from the perspectives of students of the experimental group. Thus, the quantitative data were collected and analyzed further to draw out the findings.

- **DATA ANALYSIS**

As the students were selected with the help of purposive sampling, non-parametric statistics was used for the data analysis. To test the stated hypotheses, the data analysis was done with the help of Wilcoxon Signed Rank Test, Mann Whitney U-Test and Intensity indices. The Wilcoxon signed rank test was used to test the significance of the difference in the mean achievement scores of pre-test and post-test for the experimental and control groups respectively. The Mann-Whitney U-test was used to test the significance of the difference in the mean achievement scores of the experimental and control group in post-test. And to judge the effectiveness of CHEP in terms of the students' reactions, intensity indices were calculated.

- **MAJOR FINDINGS OF THE STUDY**

On the basis of the data analysis and interpretations made under the present study, the following major findings were derived.

- a) The implemented CHEP made a significant effect on the achievement of the students related to Cultural Heritage Education in case of the experimental group.
- b) Implementation of CHEP was found effective in enhancing the knowledge related to culture and heritage among the students of experimental group.
- c) The students of experimental group found CHEP effective and interesting in learning process mainly related to the education of culture and heritage.
- d) Reactions of the students towards CHEP were found significantly favourable for the learning of Cultural Heritage Education.

- **DISCUSSION AND IMPLICATIONS**

The findings of the present study showed that the implemented CHEP was found significantly effective in enhancing the knowledge related to culture and heritage among the students of experimental group. Also the reactions of the students towards CHEP were found significantly favourable for the learning of Cultural Heritage Education. Thus shows the success of the experimentation and efficacy of the developed CHEP for the students of Standard IX.

But, the practical observation of the calculated means in case of both Experimental and Control groups from the Table 5.1 shows that either the formation of the CHEP or its effectiveness was not much satisfactory.



**Table 5.1**  
**Comparison of the Calculated Means**

<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>
<b>Experimental Pre-test</b>	51	41.57	<b>Control Pre-test</b>	51	43.45
<b>Experimental Post-test</b>	51	46.94	<b>Control Post-test</b>	51	44.51

This logic has been supported by the table showing “Rank table within the group differences” i.e Table 4.3. It describes the comparison of achievement scores of pre-test and post-test for the students of both experimental and control groups. In control group, 26 students showed higher achievement scores and 22 students showed lower achievement scores after the regular / traditional way of teaching. In case of the experimental group, 33 students showed higher achievement scores and 16 students showed lower achievement scores after implementation of CHEP. This number of students in experimental group having higher achievement scores is not remarkably more than that of the number of students in control group.

Further, this logic has also been supported by the students’ reactions in case of the statements of the reaction scale Sr. No. 4, 6 and 16. For the Statement 4: “The duration of the CHEP was insufficient”, it was observed that quite a good number of students’ reactions (i.e. 15.69 % and 21.57 % respectively) showed agreement that the duration of the CHEP was insufficient. For the Statement 6: “Other components need to be included in CHEP to make it more effective.”, it was observed that the higher percentages of students’ reactions (i.e. 29.41% and 25.49 % respectively) were showing their agreement towards the statement. It means according to the students’ reactions, it is better to include more components to make the CHEP more effective. For the Statement 16: “This programme is not found effective to develop values related to Indian Culture and Heritage.”, it was observed that quite a good number of students’ reactions (i.e. 11.76 % and 21.57 % respectively) showed their agreement for the given statement. It means according to the students’ perspectives, CHEP was not found much effective to develop values related to Indian Culture and Heritage.

But, the students' reactions for the statements Sr. No. 15 and 23 have really given a sense of gratification for conducting the present research study. These reactions have proved the efficacy of the present study, as perceived by the students. For the Statement 15: "At school level, workshops related to this programme should be organized.", it was observed that the higher percentages of students' reactions (i.e. 15.69 % and 54.90 % respectively) were showing their agreement towards the statement. It means according to the students' perspectives, CHEP related workshops should be organized at school level to facilitate students learning related to culture and heritage. For the Statement 23: "This programme is found successful to understand the amalgamation of Education and Culture.", it was observed that the higher percentages of students' reactions (i.e. 21.57 % and 60.78 % respectively) were showing their agreement towards the statement. It means according to the students' opinion, CHEP was found successful to understand the amalgamation of Education and Culture.

Besides this, the investigator has also observed students' active, curious and enthusiastic attitude while learning with the help of CHEP during the intervention. They were fascinated by the in-built innovations under the various activities of the CHEP. It seems that students' favorable reactions towards the implemented CHEP were mainly due to the innovative nature of the said CHEP, its implementation along with the regular school time-table and with the help of resource persons. Thus, the entire procedure of experimentation has really justified the internal validity and educational implications of the developed CHEP.

During the course of study, the investigator realized the importance of some moderating variables like students' previous knowledge, their own culture, interest, aptitude and inclination towards learning about Cultural Heritage Education. It was observed that the students were very much curious in learning about different domains of Cultural Heritage Education. Looking to the new trends in education, further extensive research work would be desirable in the same area. Ultimately, the investigator found that the study was suggestive and revealing.

Looking to all above it can be said that the developed CHEP can be useful to the students not only to enjoy the effective and innovative pedagogy, but also to develop knowledge related to Culture and Heritage. The basic idea adopted here that is, 'integration of Cultural in education' to achieve the long-term goal of quality-based education through promoting Cultural and Heritage Education. Further, dissemination of Cultural and Heritage Education with the help of such CHEP can definitely facilitate

secondary education on large scale in the state. Such intended efforts at state level would also strengthen teachers' competencies and efficiency of Centre for Cultural Resources and Training (CCRT).

## • **SUGGESTIONS FOR FURTHER RESEARCH**

Based on the learning experiences gained during the course of research study, the investigator would like to suggest following titles for further research studies.

- To study the effectiveness of CHEP based on variety of domains for different levels of education.
- To study the effectiveness of CHEP employing different teaching strategies at different levels of education.
- To study the impact of mass level in-service training of teachers related to Cultural Heritage Education on students' knowledge related to culture and heritage.
- To study the impact of institutionalization of CHEP as a pedagogical practice in school education system.
- To study the effectiveness of CHEP for the Secondary school students with reference to certain variables.
- To study the effectiveness of CHEP for the Elementary school students with reference to certain variables.
- Development and implementation of Cultural Heritage Education Package / Kit for the Primary / Secondary / Higher secondary school students.

## • **CONCLUSION**

The present study concluded that the CHEP was found effective in terms of students' achievement in Culture and Heritage. It clearly envisages the significance of such innovations mainly to improve the quality of education at school level. It further reveals that CHEP can be used along with the conventional classroom teaching to make teaching learning process effective, interesting and to develop a deeper understanding of the school subjects among the learners. It can facilitate the learners to develop their interest, inclination and self-confidence towards the different domains of Culture and Heritage. Development of such kind of CHE programmes can help not only to the students but also to the teachers to integrate them meaningfully in teaching-learning process, so as to achieve the long term instructional objectives.

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