

CHAPTER 1

INTRODUCTION

MUSEUM AS A RESOURCE CENTRE FOR ARCHAEOLOGICAL LEARNING

Museums in India are catering to myriad audiences through its dynamic multifaceted approach. India as a developing nation in terms of economy has numerous museums and learning centres. These museums as custodians of our heritage take the rightful initiative to make the present generation aware of their rich past and its unique culture. One can visualise the potential value of museums as a carrier for dissemination of knowledge of past societies & civilizations. The self-directed process of learning by visitor in a museum space is a voluntary phenomenon to gather knowledge and get educated about the material culture. Collections remain as the heart of museums, but their value can be realized only when they are effectively interpreted to museum users (King & Lord 2016). Just walking in a museum complex or exhibition area doesn't guarantee that the visitor is going to learn or get educated. Thus, interpretation is seen as the basic concept that can support the educational role of a museum. Knowledge is accessible to everyone in the museum but how much to deduce and learn or digest, is a voluntary task. The exhibition itself is a learning source, as a visual narrative that may aid in developing a defined learning module. Developing a well thought program or event enables in achieving the aim of knowledge development and awareness among the audience. Museum spaces must be multifunctional for entertainment, preservation, aesthetic enjoyment, learning/ exploration/ play/ expression/ communication; exchange/ collaboration/ interaction/ analysis/ representation/ recording and recollection (King & Lord 2016).

Museums are houses of curiosity, entertainment and knowledge. Thus museum becomes significant place where the real objects are interpreted, can be seen, shared and understood simultaneously. Although museum learning is always partially cognitive, it is primarily affective learning, concerned with changes

in the interests, attitudes, or evaluations of the learner as much as with the cognitive content (King & Lord 2016). Education is an unpredictable phenomenon and one cannot decide a single method of dissemination of knowledge, so one has to be open to every little bit of information or idea that can be collected to apply as effective method. Edutainment is the better term that is used in the context of museums and the programs offered.

In the past two decades, museums have become actively engaged as organizations of promoting heritage and cultural diversity in India. In this regard the museums like IGRMS, Bhopal has been active in conducting photo exhibitions, interactive programs, heritage corners in schools, running program like Friends of museum, to attract audiences of various cultural backgrounds. Similarly museums in Tripura like State Tribal Museum, has innovative interactive kiosks and programs that portrays and promote rich and diverse aspects of communities of the area. There are studies being conducted globally on the educational benefits and effectiveness of programs conducted in museums in relation to visits of school children and young visitors. Experience is not compartmented but continuous; there must be continuity therefore between the school and the home and its neighbourhood (Dewey 1966). The informal teaching learning experience that happens inside the museum act as an instrument for long term cognitive development for youth who are ultimately the future custodians of our heritage and it demands active participation.

School is a formal institution of education that revolves around the textbooks and its contents. Children go through lecture series, work book activities, project submissions, and smart class activity to fulfil their urge. They feel that the textbook and internet is the ultimate source of knowledge beyond which the education cannot be explored. Our students need more opportunities for inquiry-based learning that inspires curiosity and fuels their passion (Centre for the Future of Museums 2014). Active participation excites children and they use mind and body that create a cognitive change in their thinking

patterns. Pedagogy used in museums are object-oriented, thus a wide range of information can be used while working with an object.

Amanda Clarke (2002) through the following illustration very well explained how an object can be used to demonstrate its making, function, value, relevance etc. and thus even a single object can be used for explaining/disseminating multiple functions and associations which make it culturally fit into the context (Fig.1.1.1).

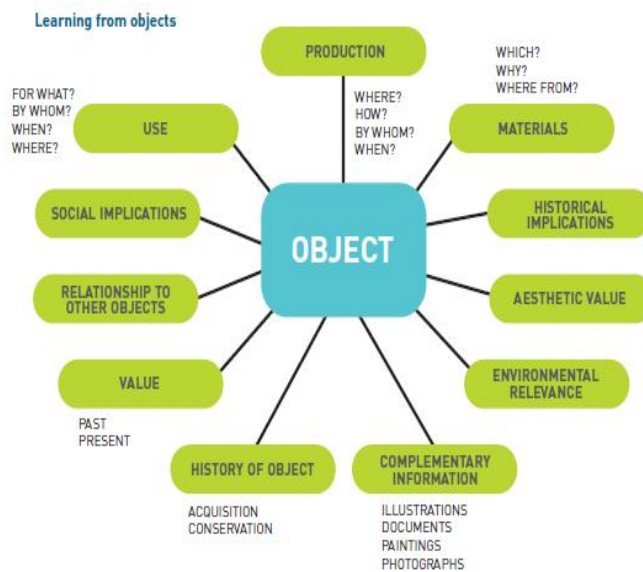


Fig.1.1.1 Illustration describing Learning from object (after Clarke et al. 2002)

Amanda Clarke summarized in her book *Learning through Culture* that objects can:

- Inspire creative work
- Sharpen visual awareness
- Help to develop skills
- Increase knowledge and understanding through direct contact
- Provide alternative ways of working
- Provide personal relevance
- Motivate learning, including children for whom traditional methods have little appeal
- Increase levels of involvement and engagement

Thus it becomes very clear that how, the museum objects could be vehicles for disseminating information and they could be effectively used for making museum as an informal learning space.

King (2016) opines; “It was shown that touching objects leads to a more engaged and active learning experience and long-lasting effect on memory as compared to text-based learning. Object-based learning increases skills, such as communication, organization, time management, and independent thinking. These are core skills encouraged in twenty-first-century learning initiatives. Objects can stand as mediator to provide links between the past and present and thereby enhance subject knowledge, especially in material based disciplines. Inspirations are not limited to higher education but also extend to learning in schools and lifelong learning”.

Every country has formal institutions of learning, but learning in a museum is altogether a different experience. Museum’s role in the present scenario is to educate the mass but not to duplicate school or university teaching thereby maintaining their sanctity as a non formal institution of learning. Learning needs to better connect students to their communities, culture and history (Centre for the Future of Museums 2014). Education provided in schools being formal mode of teaching-learning, has classroom pattern and syllabus criteria to dwell upon, and makes heritage and culture a 2-D experience. The formal education literature has suggested for decades that students would learn more if they were able to be involved in meaningful physical activity (Hein 1998). The main difference between the school and museum is that museums are wide open to individual exploration. One cannot deny the fact that school education initiates the process of making children aware of archaeology as a discipline of learning human past. During school hours it is not possible for the teacher in charge to take students very often for museum visit that has archaeological collection, or to a place that has archaeological significance. They promote heritage in various forms using practical hands on activities (project making) and other technology based programs such as slide shows. Although the actual connection between all forms of heritage is generated

through stories, practical sessions and programs mixed in appropriate proportions. However, the essential museum learning experience is the change in visitors' feelings, interests, attitudes, or appreciation of the subject matter due to the museum display (King & Lord 2016).

Museums are excellent centres of informal education and provide a visual aid as well as pool of information that cannot be filled in books (Olofsson 1979). These unique aspects are the added advantages of any museum display or program, and involvement of the visitor in a participatory exhibit or program enhances the experience further. Exhibits relate to the child's world of experience, and interpretation is more of provocation than instruction (Burcaw 1983). Even if pupils are unable to handle objects or explore a ruin, they can actually share a space with these things (Talboys 1996). Informal learning does not just "happen" but needs thought and planning. In fact, giving people options, letting them choose, and educating them on their choices demands intention and commitment that far surpasses the effort one has to exert to provide formal learning experiences (King & Lord 2016). The resources and tools that are available in museums or on their digital portals are assets to enhance the learning experience happening in schools. They broaden the horizons for the teachers and parents, and assist them to utilize this information to elucidate textbook information in a different perspective. One can witness the change in process of spreading knowledge if the active participation is adopted as a process in learning arena. Learning in school with textual sources cannot fulfil that curiosity of handling an object and getting feel of its distinctiveness. Schools must integrate the learning within their walls and outside the settings, in order to connect with the dynamic knowledge systems. The visual education in museums, when is presented in discovery learning format through active participation of the audience with the display, aids in making the didactic learning much more effective. Object handling is minds-on and hands-on through seeing and direct observation from the object (King & Lord 2016).

Museums can be rightly said as adjuncts to educational institutions, which cover every possible field of knowledge through its myriad collections, and archaeology being no exception to it. Visitors may or may not delve into deep critical viewing and learning. We have a collective desire to remember, to muse upon and to make sense of our personal and cultural past and pass that understanding on to future generations (Talboys 1996). The blend of primary sources of information i.e. objects, with contextual and correlated knowledge, gives museum a boost to motivate visits. Attracting people to the same object is a complex task. Museums contain, or are, the real thing and although the written word may feature during any visit it is the artefact that dominates (Talboys 1996). Learning these unique aspects of material evidences do involve getting acquainted with the actual collection. All artefacts have many facets that touch most, if not all, areas of the curriculum (Talboys 1996).

As the story of India's past reveals a life of about thousands of years of habitation, the collection of objects is equally vast. The quantity and quality are par excellence and reveals breathtaking realities of India's past. Museums in India have variety of collections according to their scope, nature and jurisdiction. Archaeological collection whether in national, state, local, regional, private or site museums, have good volume of representative materials. In addition the museums which are part of higher education institutions and universities have different role to play. Preserving, documenting, and researching their collections, these museums usually aim to aid teaching and research among students and faculty, although many are open to the public as well (King & Lord 2016). A comprehensive range of media is being used to communicate archaeological heritage and culture throughout the country.

The first museum collection in India dates back to 1796, when the Asiatic Society felt the need to house the many "curiosities" that had accumulated as a result of the collection of archaeological, ethnological, geological and zoological specimens by its members. The first important museum to be established was the Indian Museum in Calcutta, which was ready for

occupation in 1875. The earliest Indian museums are now more than 100 years old and have separate sections for art and archaeology, as well as galleries for geology, zoology, anthropology, etc. Markham and Hargreaves (1936) are right in stating: “The discoveries of the Archaeological Survey, by adding substantially to the history of India by awakening world-wide interest in its art and antiquities, have stimulated in no small measure feelings of nationalism and directed the attention of Indians to the need for preserving their archaeological treasures, which generally have added virtue of being more persistent than most material.”

Majority of the collection in Indian museums are of archaeological importance. The main reason for pursuing archaeology is to find out as much as possible about how recent and remote societies lived and operated (Adkins & Adkins 1989). The approach to disseminate this archaeological heritage is a way of linking past with present. The objective is to sensitize audience towards its irreplaceable myriad sites, monuments, artefacts, and all sorts of tangible and intangible heritage. Archaeology helps us to understand the past, and this understanding helps a great deal in the understanding of society today and the development of society in the future (Adkins & Adkins 1989). This sole purpose is achieved when one visits a museum housing archaeological collection. Museums in India have vast collection of artefacts ranging from sculptures, paintings, textiles, jewellery, pottery, coins, manuscripts, and even objects of metal, shell, stone, glass etc. Objects are loci which can lead you to many different directions and in the process, develop skills of close observation, questioning, discussion, description, documentation, comparison, making links and connections (Talboys 1996). Many Indian museums have collections of artefacts from the Harappan culture, the best among them being at the National Museum, New Delhi, which has excellent specimens of painted pottery, jewellery of gold and semiprecious stones, of seals, and the tiny animal figurines in clay, stone and metal, which display a sensitivity to nature, a humour and style which are the hallmark of the Harappan civilization.

Archaeological collection widespread in museums of India can be utilized for providing children an out of textbook experience. Museums can prepare children and youth for the future which involves informing them about the landmarks of our past civilizations that continued or were discarded, and why was it so in each case.

Museum learning starts at the point where museums connect with people and continues long after. Recognizing all the opportunities for teaching and learning inside and outside the museum can help the museums to strengthen their role in the communities around and in their visitors (King & Lord 2016).

Observant children have been known to spot things that archaeologists and others have missed (Talboys 1996). The rapid transformation and constant addition in information, about the excavated sites, collected objects or new processes in trend, makes the task of museums as well as schools, tedious to keep the record and updating the knowledge. Over the years, museums have shown in a variety of ways that they are very good in making students to have deep learning (Centre for the Future of Museums 2014). Speaking globally, many museums have created exhibitions focusing on the needs and interests of children, but in India, it occurs rarely.

As observed during the present research study, few museums in India are creating tailored programs to meet the needs of curriculum in schools. Sensitizing children about a particular subject may require lot of team work and resources, and planning a well designed program could suffice the need. If an exhibition cannot be created, at least a teaching learning resource worksheet, activity, storytelling and other activities could be conceptualised and produced. Story telling is an excellent way for museums to situate the objects and artefacts in a narrative sequence and convey it to the audience (King & Lord 2016). Information that is rich in association and presented in a meaningful context will be more accurately recognised, recalled and understood by pupils (Talboys 1996). Where objects are the primary vehicles of interpretation, children respond well if they are able to touch and interact with the object, and when they can talk about it (King & Lord 2016). When

artefacts are displayed there has to be some degree of interpretation so that visitors can make sense of what they see (Talboys 1996).

Among the archaeological remains and artefacts, many written records in the form of inscriptions, land grants, and coins enable archaeologists to interpret the past. A systematically developed database can prove to be useful for future interdisciplinary studies to popularise archaeological discoveries as it will be communicated at a platform for budding archaeologists. By creatively understanding archaeology, through educational activities the Indian museums can be transformed as centres of education at par with the international museums. The present museum scenario in India has encompassed almost everything such as mobile exhibitions, outreach programs, on site visits that may be indispensable pieces of information related to the object discovery and possession as various museums conduct such activities at differential levels.

This research is an initiative to explore the possibilities of how museums can become sources and centers of archaeological learning. Also, how the museums and schools in India collaborate or complement to create new directions of archaeological learning. Museums have the potential in exploring the ways to expand the educational impact of the collection they possess and also forge a future development plan that can generate new learning platforms. Thus museums can act as the agents of change and catalyst in the process of building learning opportunities. Through this research, models of archaeological learning are being discussed that were based on the archaeological collections housed in various museums of India. The current emphasis is that we should modify education for better participation and overall growth of learner.

Extended learning is the need of present and it requires experimentation, research and creativity. Museums allow students to interact on their own with the learning patterns that are outside the school or homes. Although there is a scope to change the mindset and gain a much more concrete foundation and attracting power that may play a significant role of influencing learning patterns in masses especially children. Research focuses on the outcome of the

methods that have been offered in real world scenarios, matching to the needs of museum and audiences.

Learning is a lifelong process. Providing ample opportunities to children, in their growing years, makes them discover the meanings of things that they are learning through various formal organisations around them. Ideally if museums can add to the curriculum patterns and gain a significant foundation to justify their presence, they will be strong catalysts as centres of lifelong learning. With advent of technology and global networking, the processes of knowledge generation as well as dissemination changed at a fast pace. Thus similar renewal is a must in promoting heritage & archaeology as significant aspects of knowledge to be imbibed by the present generation to preserve their past and present for the future. The better we understand the past, therefore, the better chance we have to understand and guide the present, contributing at the same time to the foundation of a stable and viable future (Talboys 1996).

Museums are the future limitless classrooms and the impact they can leave on generations has immense benefit to protect and promote heritage. Museum learning happens through many platforms and exhibition is arguably the primary one (King & Lord 2016). Museums no doubt can add an extra dimension to archaeological studies and better understanding of the process. They are truly living heritage vehicles and a rich source to promote and disseminate the dimensions of culture and civilization of a nation.

1.1 Major Objectives of the current research

1. To examine the importance of archaeology as a discipline in the field of museum and museum education focusing India. Estimating museums' presentation of archaeological heritage and its current utilization as a source of education was the focal aspect of research.
2. To construct effective learning experiences suiting to the collection of selected museums in India. This will help to involve and make the visitors acquainted with the actual collection through interactive

methods that are employed to attract different segments of visitors towards museums with archaeological collections.

3. The present study aims to highlight the existing programs and tapping potential of archaeological collection in various museums of national and regional stature in India that are open to the concept of educating visitors through their collections. Although, if there are no regular active programs, the best possible use of collection for the learning purpose has been explored and suggested.
4. To highlight that museums offer young learners experience desirable for their development. The methods involved must have the potential to involve multiple senses in a discovery learning-format, as the school children or youth from institutions of formal learning often don't get the opportunity to experience an archaeological excavation, and how a museum acquired its collection or displayed the same. This research work focuses on the presentation of the collections in such a way that relevance of archaeology gets enhanced in minds of children through museum. The research tools and methods comprise of the practical approach using designed activities.
5. To gather primary data for the aforesaid objectives, the methodology adopted was the use of basic tools of research such as survey forms, observation of workshops and questionnaires. Practical sessions for school children were conducted in order to involve children in multisensory learning process. Worksheets and workshops have been specially designed to focus on archaeological collection of different museums. Also conducted heritage site tours and museum visits as a connecting link to generate effective outcomes. This qualitative learning database emphasises on present scenario of museums in India as a component of education and their impact on curriculum supplement to archaeology.

6. To study the activities that may aid in enhancing the experience of archaeological learning. These can be both planned and unplanned activity and may even be conducted by non-government organisation for the participants.
7. Few comparisons with museums and archaeological sites from international context that offer programs on archaeology will also be discussed in order to add an additional support to the Indian context. Archaeological sites in United Kingdom, namely Sutton Hoo and Roman Bath, have been active in conducting programs on *in situ* sites that attract variety of visitors and effectively disseminate the knowledge about people of the past and their lifestyle.

1.2 Outline of thesis

Chapter 1: Introduction – Museum as a Resource Centre for Archaeological Learning

This chapter will focus on describing effectiveness and need of practical participatory approach and applying it for generating wider audiences and also to cater the young learners in order to provide those enhanced learning experiences. The linkages that are then formed or speculated can be discussed by set of valid remarks and authentic approaches. Education phenomenon is as unpredictable as the human nature; one cannot decide a single method of dissemination of knowledge. Therefore, one has to be open to every bit of information and idea that one can collect to apply in practice. This chapter includes the objective of the present study, outline of the chapters of the thesis, scope of the study and its limitations. This chapter also highlights the unique aspect of archaeology as a subject and how it can be learnt through museum collections in India.

Chapter 2: Research tools and Data Collection

First part of this chapter will focus on the types of tools used for the present research by observing the primary and secondary sources from various museums.

- Resources evaluation: How the available resources i.e. museum practices, finance, staff of a particular museum can be effectively used for developing educational programs/ worksheets to communicate/promote archaeology as a subject.

- Pattern of Museum Visits: Brief about types of museum visits by school children such as casual, pre-planned in relation to curriculum requirements and knowledge of teachers assisting the children, active participation of both in programmes offered by museums, was collected and studied.

- Surveys & Questionnaires: Survey and interviews of school children, teachers and museum staff educators was done to generate feedback about the practical reality of the selected museums. Feedback forms were created to gather available information of the museums. Based on the feedback and other collected information, the survey sheets and activity sheets were developed for case studies.

- Review of Museum publications and school curriculum and other printed and digital material records: Annual reports of museums act as significant source of data along with other museum publications and literature provided by museums. Publications, its content value and utility for imparting education related to curriculum of school (basically on guidelines of NCERT or central board in India) were carefully surveyed to develop effective activities to supplement the school curriculum. Publications online and literature available for education through museums to school children related to their curriculum and purpose of study for the senior secondary onwards were carefully surveyed and studied.

Data of diverse collection of museums both, government & private was collected for research through literature surveys and personal observations.

The second part of this chapter briefly discusses about few popular nongovernmental organisations namely, The Sharma Center for Heritage Education (Chennai), Heritage Lab (Chandigarh), Heritage Trust (Vadodara), Sahapedia, ITIHAAS (New Delhi) etc. This chapter will emphasize on need of policy drafting regarding educational role of cultural organisations for nation.

Chapter 3: Empirical Case studies

Based on the data collection, literature survey, the research tools were designed. Accordingly museums operating at various levels of administration (national, regional) were chosen for empirical studies. The present chapter will discuss the practical activities conducted by researcher as a resource person in selected museums. The activities were conducted in museums, on site, in non – government setup and other school or government agencies.

National Level

- ❖ **National Museum, New Delhi** which has a permanent gallery on Harappa and other archaeological galleries, conduct series of programs to engage children with museum exhibits. It has hands on session, gallery walks and activity sessions apart from special lectures and movie shows.
- ❖ **Allahabad Museum** conducts various summer vacation programs, children week programs, regular screening of documentaries, special lectures, and workshops or programs that directly relate to galleries in the museum. They have concept of Heritage corners that is popular in schools.
- ❖ **National Science centre** at Delhi conducts- science drama, popular lectures, quiz shows, debates, science fair etc. at city, state, national level and gives opportunities to make children (especially schools) to participate and visit an informal institution of learning. They have

specially designed galleries that have portions of heritage education. They also have a Museobus as well that was recorded during this study.

Regional Level

- ❖ **Archaeological Site Museum visits of children at: (a) Lothal and (b) Dholavira.** These museums near the partly reconstructed and preserved sites conduct programs related to past civilizations of India and interpreting the site so as to make children understand their significance in Indian archaeology.
- ❖ **Museum of Archaeology at the Department of Archaeology and Ancient History, Baroda:** The Maharaja Sayajirao University, Baroda, has frequent visits of school children where students can come for a planned visit and have a look at galleries, artefacts and documentaries as per education requirement.
- ❖ **Punjab State War Heroes' Memorial and Museum, Amritsar** has a collection beginning from earliest civilization and history of India then connecting to Sikh heritage. As a part of educational summer program, an activity was conducted of seal replica making, to make children aware of the earliest people and their material culture.
- ❖ **Activity conducted at Navlakhi Vav, Vadodara:** Activity focusing on water conservation connecting heritage like stepwells was conducted as a part of program organized by Heritage Trust, Vadodara.
- ❖ **Activity conducted in non- government set up – Gurugram-** In a non government, fair called Hichki Mela, open to all activities related to prehistory, world civilizations and Indus valley pottery and seals, was organized. This resulted in creating awareness as well as a

kind of observation to gather information of interests of children in informal set up.

Chapter 4: Overview of Archaeological Collection in Museums of India

The chapter focuses on a brief compilation of statistical data on museums of India (that were personally visited by the researcher) to experience, observe and understand the archaeological collections. Description about the Archaeological Site museums in India and their effectiveness observed through attending excavation camps, site visits, seminars and publication etc. will also be discussed.

Archaeological museums which conduct drawing or poster making competitions or music and theatrical performances to encourage youth to join hands in learning about archaeological findings and their importance were recorded. University departmental museums that provide information on regional and national level about archaeological findings/ sources were recorded and will be discussed in this chapter. Museums at national level such as in Mumbai, Kolkata, Hyderabad or Chennai, and museums and sites in states of Andhra Pradesh, Uttar Pradesh (Sarnath), Punjab (Amritsar), Goa, Gujarat such as at Amreli, Watson Museum (Rajkot), Kachchh (Bhuj), Jamnagar, Junagadh etc., that has rich archaeological collection and organizes visits for school children (on demand) were visited for data collection and study.

Chapter 5: Discussion and Conclusion

This chapter will cover the data that is concluded as the outcome/worksheets that were collected from museums and participants of various activities. Practical application of the tools developed and their outcomes is summarised. A sample resource loan kit for archaeological educational activity is produced as an outcome of the work. Similar kind of economically affordable kits can

be produced by any museum with archaeological collection to popularise archaeology.

This chapter will include the -

- findings of the study.
- suggestions to improve the situation of museum education in Indian museums.

It will further include the summary of comments and remarks of the case studies of museums, interviews of educators & staff involved in communicating archaeology as learning discipline. This chapter will discuss the opportunities that evolve in planning an effective knowledge exchange program between museums and formal learning organisations. Chapter will discuss the necessity and significance of incorporating cultural policies so as to include museum educational activities as an essential element in museum function. This study tends to seek exploration of innovative programs and human resource development by the museums focusing the field of archaeology.

1.3 Scope of Study

The National level museums in India have developed strategies to educate children using all available sources in hand. They have delegated different roles to different departments or staff. Some of them offer internships, volunteer programs to prepare university students to cater school groups or aide in summer and winter programs. Also some regional museums offer tours or programs to school groups or young audiences follow this strategy. Some museums are active in conducting educational programs have also developed kits that act as effective modules for observation and learning about collection. Such models can be replicated or suggested to other museums and can be fitted as per their administrative and budgetary constraints. Economically efficient and effective learning tools can be developed using the in-house collections. Collaboration strategies to pool in non government organisations

can be developed and applied accordingly. Thematic programs based on various gallery displays can be created as yearly calendar and schools in vicinity of the museum can be informed to take benefit from it.

This study is an effective effort in suggesting and emphasising the educational strength of museums and archaeological collection. Development of a skill set related to archaeological learning can be proposed for future to make the archaeological collections more applicable.

1.4 Limitations of Study

One aspect of research was based on considering learning patterns and the sources that are available to children about archaeological understanding imparted in formal learning institutions. The National curriculum based on NCERT syllabus was looked into much more details rather than focusing on State wise syllabus. Initially as the study and first program was primarily based and developed in Gujarat, the regional Gujarati history books were referred to get a comparative understanding.

Also due to the regional languages, the regional museums will need more regional specific resource material in regional language. The workshops/ activities were conducted in the museums of various levels of administration and types of collection where children can understand and interact either in english or hindi.

India boasts more than 700 museums at present, thus for the aforesaid study, selected museums were chosen, approached, and after receiving due permissions survey and observational study was done. Although no doubt many museums that had not been covered in this study might give a fresh insight for future modules and programs focusing archaeology as a source of learning from museum collections.