

## Museum visit as an academic engagement activity: teachers' perspective

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### ABSTRACT

The educational value of museums are immense as they are the storehouse of artifacts depicting history, culture, and science. Teachers must tap this resource to provide students the experiential learning. Bangalore is one of the metropolitan cities of India, hosting variety of museums where artifacts related to various school subjects such as history, geography, science, art, culture, technology, and music are found. Therefore, the present study aims to find out the teachers' perspective on museum visits as an academic engagement activity and a resource for experiential learning. The study employed a descriptive survey design to understand school teachers' perspectives on museum visits in Bangalore. A convenient sampling method yielded 200 complete responses from school teachers. The study revealed that despite knowing about the field trip to museum as a source of learning, teachers revealed several constraints in organization and implementation of such visits. Having understood teachers' perspective, study suggests future research may delve into students' learning engagement on a field trip.

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## 1. INTRODUCTION

The museum is the storehouse of artifacts. Instead of confining learning inside the classroom, teachers can plan museum visits to help the students learn by observing the artifacts. Students can excel academically if museum visits are incorporated into various school subjects' curricula. It is evident from a study that students' math and science scores have improved through museum visits [1]. Studies shows that field trips promote inquiry-based learning and a better understanding of the subjects [2]. A similar study shows that museum field trips also improved students' history learning scores [3], [4]. Similarly, field trips help architecture students gain knowledge through direct experience [5]. In addition, art specialists' perception and understanding of art also become more concrete with the visit to museum art exhibit [6]. Studies say teaching science through museum visits immensely impacts students' knowledge and attitude towards science [7]–[9].

Critical thinking skills are also developed through museum field trips [10]. Field trips to museums improve students' observation skills [11]. Museums also act as a venue of value transmission [12], [13]. Eventually, teachers' knowledge about the museums and planning the field trip are essential components to make the visit meaningful. It is evident from a recent Turkish study that teachers conduct field trips in the subject of geography, but the integration of curriculum with the field trip is lacking [14]. Similarly, one Moroccan study finds that one of the significant areas for improvement in conducting environmental education programs through extracurricular activities is the need for specific goals that far-flung the scope

of a school year [15]. However, it is evident from a study based in the United States, Canada, and Germany that teachers face issues conducting field trips to museums effectively [16]. School-museum cooperation could be a possible solution to address the issues faced by the teachers [17]. Another study on museum education revealed that collaborative culture is essential between schools and museums to extend resources for student activities that make teaching and learning more successful [18]. This will enable the students to access the museum's various resources. From the Indian context, museums are seen as both a cultural entity and the storyteller of western expansion in the Indian subcontinent [19], [20]. Museum as a heritage resources is one of the tourist attraction in India [21], [22]. However, lack of proper collection management and the accessibility of museum collection for the teaching and learning purpose needs more attention in India [23].

As India is a vast country, Bangalore is one of the metropolitan cities in India, which contains a considerable number of museums of both state and privately owned. A piece of recent news in 'The Hindu' reported that Bangalore is gaining importance as a city of museums, as there are many museums in Bangalore [24]. These museums contain artifacts related to science, astronomy, history, civics, art, culture, transport, and communication. Teachers need proper information about these museums to use for educational purposes. Teachers can map the content according to the museum artifacts.

Rich cultural heritage is one of the features of the Indian subcontinent. Therefore, appropriate utilization of these heritage resources for teaching and learning will add value to these resources. Moreover, Indian educational policies emphasize learning outside the classroom, including various social places such as markets, parks, and heritage buildings, promoting an experiential learning environment [25]. The museum is one of the heritage resources that can be explored by the teachers. Effective utilization of museums and historic places as a source of teaching and learning creates awareness and consciousness among youth for protecting and preserving cultural heritage [26]. As a non-formal learning agency, the museum creates the perfect environment where teachers and educators can adopt constructivist and experiential learning approaches to instruct students [27], [28]. Earlier studies have explored that how museum visit is beneficial to learn various school subjects and all the research is from outside India. Minimum studies from India led to the assumption that Indian teachers might face challenges conducting museum field trips. Therefore, the study aims to find out the teachers' perspective of museum visits as an academic engagement in Bangalore. The study addresses the following research question: what is the school teachers' perspective in Bangalore towards museum visits as an academic engagement?

## 2. METHOD

The research question was addressed through a descriptive survey research design. The study employed a convenient sampling method. To survey the teachers' perspective on museum visits as an academic engagement, researchers adapted the instruments to the teachers' perspective developed by Anderson *et al.* [16]. Researchers then subjected the adapted instrument to content and face validation with the help of a panel of subject experts from the discipline. Adapted instruments were administered to 200 school teachers in both rural and urban areas of Bangalore. Responses were collected in the Google form. The final form of the adapted survey questionnaire contained two sections. Section one had participants' demographic details, and section two had items about teachers' perceptions about museum field trips.

For the present study, researchers employed a convenient sampling technique and administered the adapted instruments to 200 school teachers in Bangalore. The study employed a descriptive survey research design to address the research objectives. The study collected demographic details, such as age, gender, locality, qualification, and experience. In the present study, respondents were aged between 25 and 45. Of the 200 selected, 13 were male, and 187 were female. In most Indian schools, female teachers outnumber the males [29]. Furthermore, selected teachers teaching in pre-primary, primary, secondary, and higher secondary levels were from different school boards such as Central Board of Secondary Education (CBSE), Indian Certificate of Secondary Education (ICSE), and State Board.

Researchers adapted the instruments to the teachers' perspective developed by Anderson *et al.* [16]. Researchers then subjected the adapted instrument to content and face validation with the help of a panel of subject experts from the discipline. Data was collected from 200 school teachers in Bangalore in rural and urban areas. The study sought ethical clearance from the institutional review board. It obtained an informed consent form signed by each teacher participant before collecting the data. Participants were free to withdraw at any point in time. Researchers ensured the anonymity of the data collected and maintained confidentiality by storing it in an encrypted file. The data is accessible only to the researchers. The information obtained was imported to SPSS licensed version 29 for data analysis. The data was analyzed through percentage analysis of each item, and an independent sample T-test was conducted regarding gender.

### 3. RESULTS AND DISCUSSION

The researchers presented the results in two sections. The first section contains the percentage analysis of each item. Table 1 showing the percentage analysis of school teachers' perception on field-trip to museum. Table 2 represent the open-ended items on teachers' perception on fieldtrip to museums. The second section contains the result of the independent sample T-test regarding gender.

#### 3.1. Section 1

Table 1 reveals that most teachers (68%) (N=136) know about field trips to museums. Moreover, most teachers (94%) (N=188) see field trips to museums as entertainment. However, despite knowing about the field trips to museums and understanding the educational value of museums [30], many teachers (59%) (N=118) do not conduct field trips to museums. Hence, (78%) teachers (N=156) strongly believe that field trips to museums should become a regular pedagogical practice in school. Table 2 presents the percentage analysis of two open ended questions of school teachers' perception on field-trip to museum, as revealed by the survey items.

Table 2 shows the teachers' responses to two open-ended questions. A checklist was provided in the item related to the possible constraints faced by the teachers while planning a field trip to museums. It reveals that a maximum number of teachers (44 %) (N=88) viewed inadequate time as the main problem in conducting museum field trips. Lack of information related to the museums is another constraint viewed by 23.5% (N=47) teachers to conduct field trips to museums. 10% (N=20) of teachers responded that lack of information and inadequate time are the main constraints. Teachers (9%) (N=18) opined that funding, lack of information, and inadequate time are the main constraints. Teachers (6%) (N=12) viewed funding as the only issue for not conducting museum field trips. At the same time, funding and inadequate time are the main hindrances faced by 5% (N=10) teachers. At last, only 2.5% (N=5) of teachers viewed funding and lack of information as possible constraints in conducting the field trip to museums. The last item about the frequency of conducting a field trip to the museum revealed that in the 2023-2024 academic year, 77% (N=154) of teachers in Bangalore have not conducted a field trip to the museum, and only 23% (N=46) teachers conducted a field trip to the museum only one time.

Table 1. Showing participants response to items on teachers' perception on fieldtrip to museum

SN	Items	Yes (%)	No (%)
1	Do you know about field trip to museum?	68	32
2	Do you conduct fieldtrip to museum?	42	59
3	Do you see field trip to museum are for entertainment?	94	7
4	Do you see field trip to museum should become regular pedagogical practice in school?	78	22

Table 2. Showing the open-ended items on teachers' perception on fieldtrip to museum

SN	Items
1	What are the constrains faced by you while planning a fieldtrip to museum?
2	How many times you have conducted field-trip to museum in 2023-2024 academic year?

#### 3.2. Section 2

Table 3 represents independent sample t-tests results to determine whether there are any significant differences in school teachers' perspectives on museum visits as pedagogy concerning gender [31]. The study found a significant difference in teachers' knowledge about museum visits ( $t=2.588$ ,  $p=0.001$ ) between male and female school teachers. Surprisingly, the mean value of male teachers' knowledge about museum visits is higher than that of female teachers ( $M$  male=2.00> $M$  female=1.66). Similarly, the study found significant differences between male and female teachers' perspectives of field trips to museums for entertainment ( $t=.981$ ,  $p=0.035$ ). Interestingly, the mean value of male teachers' view of museum visits for entertainment purposes is higher than that of female teachers' view about museum visits for entertainment purposes ( $M$  male 2.00> $M$  female=1.93). The study found no significant difference between male and female teachers' perspectives towards conducting field trips to museums ( $t=2.111$ ,  $p=0.097$ ). Similarly, a significant difference has been noticed between male and female teachers' perspectives toward including field trips to museums in regular pedagogical practices in school ( $t=2.913$ ,  $p=0.008$ ).

The earlier studies have explored the impact of museum visit on students' academic achievement and most of the studies are conducted from outside India. Minimum studies from Indian context motivated the researcher to find out teachers' perspective of museum visits as an academic engagement activity in the Bangalore [32], [33]. Bangalore is one of the metropolitan cities in India, which is rich in heritage resources. The descriptive survey revealed that teachers in Bangalore have a positive knowledge of field trips to

museums. The finding is supported by a recent study showing that teachers positively perceive museum visits [34]. However, it is found that teachers see the museum visit for entertainment purposes. Based on the response regarding teachers' perspectives on field trips to museums, it is evident that only some teachers in Bangalore, India are able to conduct museum visits due to several issues they face, despite knowing the value of such field trips. Most importantly, most teachers viewed field trips to museums as entertainment. Thus, the present study reveals the need for curriculum integration of museum visit programs and creating opportunities for the pre-service and in-service teachers to learn more about museum visit pedagogy through training programs [35], [36]. The result is supported by earlier studies that says that schools organize museum visit programs, but the primary purpose of the visit becomes recreational [37]–[39]. However, the finding is not associated with the recent study, which revealed that school teachers viewed that field trips should not be merely recreational [40]. Teachers feel that there is a requirement to include museum visit programs in regular pedagogical practices in schools in India. The result is consistent with the recent studies that revealed that museum learning resources need to be included in pedagogical practices in school education [14], [41].

Table 3. Showing independent sample t test result in terms of gender

SN	Items	F	Sig.	t
1	Do you know about field trip to museum?	116.418	<0.001	2.588
2	Do you conduct fieldtrip to museum?	2.787	0.097	2.111
3	Do you see field trip to museum are for entertainment?	4.492	0.035	.981
4	Do you see field trip to museum should become regular pedagogical practice in school?	7.152	0.008	-2.913

Despite having so many museums, the study revealed that in the academic year of 2023-24, most of the teachers of Bangalore did not conduct museum visits. The possible constraint they face is inadequate time. Lack of information related to the museums is another primary reason behind not conducting museum visit programs. Funding is another reason teacher cannot conduct museum field trips. The result gets its agreement with two earlier studies and one recent study [16], [42], [43].

It is noticed in the present study that the male teachers' knowledge about museum visits is more than female teachers' knowledge about museum visits. However, male teachers view museum visits for entertainment purposes. The result is not consistent with a recent study which reveals that there is no significant difference between male and female teachers views about museum visit [44]. From the present study, it is clear that teachers know about museum visits theoretically, but in the practical aspect, executing this knowledge to conduct museum visits as a regular pedagogical practice is lacking [45]. However, the present study was conducted with the sample collected from only one metropolitan city in India. Research with a larger sample in a country like India, with 28 states with their unique and rich cultural heritage in a consistent interval over a set period of time is open for future research [46]. Researchers have explored the museums in Bangalore. Similarly, countries worldwide have many museums that are worth exploring for academic purposes. In addition, museum authorities can update blog posts and websites, which teachers can use to obtain information about the museum and utilize as an opportunity for academic learning. The study suggests future research on students' learning engagement through field trips to museums in India.

### 3.3. Implication of the findings

The study finds out school teachers' perspective in Bangalore towards museum visits as an academic engagement. The results revealed that despite the theoretical knowledge about the museum visit, teachers face many issues while conducting field trips to museums in Bangalore, India. Lack of information related to the museums and inadequate time are teachers' biggest hurdles when conducting field trips to museums. If they conduct the museum visit, then the primary purpose remains recreational. Researchers have personally visited the museums in Bangalore to observe the artifacts and gather information related to the museums. Teachers can make the class more interesting by adding innovation to the teaching process, and the field trip to the museum is one of the innovative ways to teach various school subjects [47], [48].

Researchers suggest the teachers to make use of museums available in Bangalore. There are a lot of museums in Bangalore that contain artifacts related to history, science, mathematics, astronomy, art, and culture, which need to be utilized for teaching and learning purposes. Researchers strongly recommend teachers' training programs in India for active demonstration of museum visit pedagogy. Teachers can plan the pedagogy accordingly if a museum visit program is included as a complementary part of the curriculum. Museum websites need to be updated to inform people about the daily educational activities happening in the museums. School-museum cooperation is essential to make the museum visit educational, which will be able to extend various resources for student activities that make teaching and learning more successful [18]. Though Indian educational thinkers and Indian educational policies focus attention on out-of-school learning

environments through which constructivist and experiential learning is possible, how far it is applied nationwide is a matter of concern [49]. The study suggests that in a country like India, with 28 states with their unique and rich cultural heritage, instead of looking at museums as recreational places for enjoyment, museum visit program must include a complementary subject course curriculum. In rural areas with fewer museums, virtual museum visit programs can be organized in regular school settings [50]. For schools in remote areas where funding is the main issue in conducting field trips to museums [43], the government can grant funds to the schools. Schools can organize a faculty development program for teachers' awareness about the museum visit program.

#### 4. CONCLUSION

The present study found an apparent response to the research question. The results revealed that teachers face many challenges while conducting museum visit. Despite knowing that field trips to museums, only some teachers can conduct the museum visit program at Bangalore in India due to several issues they faced. Most importantly, most teachers viewed field trips to museums as entertainment. Therefore, strategies must be developed to sort out and solve the teachers' issues. Thus, the present study reveals the need for curriculum integration of museum visit programs and creating opportunities for the pre-service and in-service teachers to learn more about museum visit pedagogy through training programs. Even so, as mentioned in Indian educational policies, it is yet to fulfill the expectations. From an Indian perspective, museums are viewed as both a cultural institution and a narrator of Western expansion in the Indian subcontinent. Despite of having adequate number of museums in India, the accessibility of museum collection for the teaching and learning purpose required more attention. Additionally, museum authorities can take the initiative to conduct school-based seminars and conferences to share information about the artifacts presented in the museums. Universities, colleges, and schools may organize professional development workshops for the teachers to utilize such pedagogies effectively.

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