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Abstract School teachers often visit museums with school students for educational and enjoyment purposes. However, very little is known about the influence of teachers in students' learning that takes place in museums. This study investigates how and the extent to which school teachers facilitate student learning from museums. This study employed qualitative and quantitative research approaches, utilizing interviews, observations, and questionnaires as research instruments. A total of 1,000 school teachers participated in this study that was conducted from August 2013 to December 2016. Study results established that they are three types of teachers who accompany students to museums: enthusiastic, passive, and opportunist, and these teacher types influence student learning both positively and negatively. The majority of the teachers who participated in this study can be categorized as passive or opportunist. These teachers did not positively contribute to student learning during museum trips. This study therefore provides discussion on how school teachers can facilitate effective learning among their students in Zimbabwe's museums.

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Keywords Zimbabwe museums; National Museums in Zimbabwe; effective learning; facilitated learning

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Introduction

Museums afford opportunities for learning that do not occur in other settings, and are an important resource that can be used for the socio-economic development of communities, empowering children and enhancing national education standards (Milovanov *et al*, 2017; Crowley and Jacobs, 2011; Hooper-Greenhill, 2007). Most importantly, effective learning in museums happens when school students can link and find relevance of what they are learning in museums with their school work (Meiers, 2010:27). There is much literature about the reasons why teachers and students conduct field trips to museums. Primary school teachers and students are motivated to visit museums to find information that links and reinforces the curriculum (Bhatia, 2014:151; Melber, 2008). Bhatia (2014:151) studied teacher and student perceptions of the Fort Collins Museum in the United States, and gathered that the primary reason teachers and students want to visit museums is to reinforce the social studies curriculum. The Fort Collins Museum had exhibitions related to the war history of the people who live near the museum, and the museum assisted through relevant content to teach curriculum related content (Bhatia, 2014:152). Bhatia (2014:191) indicated that the Fort Collins Museum allowed Grade 2 students to link the social studies curriculum through exhibitions and hands-on activities provided by the museum.

Students and teachers are also motivated to visit museums given they will interact and learn from real objects. Typically in formal education, teachers make use of text books, but visiting museums helps students to learn meaningfully using real phenomena. Original objects provide a sense of awe, wonder, and stimulating starting points for learning in museums (Hooper-Greenhill, 2007). A good example is given by Hooper-Greenhill (1994) who indicates that the museum environment is different from the formal education setting. A museum that provides an opportunity to students to prepare a 16th century meal in a reconstructed kitchen learns more than those who read the recipe in books (Hooper-Greenhill, 2007, 1994). Hooper-Greenhill (2007, 1994) posits that students' vocabularies develop when they come face to face with the real artefacts. Museum artefacts provide visual and tactile stimuli, which are particularly useful for learning (Chitima and Mupira, 2017).

Another benefit of learning in a museum is closely linked to utilizing original objects for educational purposes: students like to learn in an unrestricted environment (Parker, 2004; Kisiel, 2005). The formal classroom has been observed as a restrictive environment bound by a dress code and a timetable (Hooper-Greenhill, 2007; Kisiel, 2005; Falk and Dierking, 2000). It is known that formal schools work with a timetable, operate with varied codes, and learning is structured, following a curriculum. There are opportunities for experiential learning in museums as well as direct contact with objects, rather than symbolic exposure to textbooks as in formal school classroom situations (Meiers, 2010). This study adds to existing knowledge about students' learning in museum environments, particularly their perceptions towards learning in museums as compared to in formal classrooms. It will also assert the level of freedom and choice students experience when learning from museums as compared to the classroom.

Students and teachers also visit museums to physically interact with museum curators and other staff members who are viewed as subject experts. School teachers from the Harlem Charter Kindergarten in New York, for example, took a field trip to a farm on the basis that familiarity with farm animals may provide students with knowledge of livestock and to meet experts in livestock management (Meiers, 2010:3). Museum staff members are viewed as having in-depth knowledge on cultural heritage. Many students and teachers have been observed to visit museums to interact with these knowledge experts to enhance their educational requirements (Meiers, 2010; Kisiel, 2005). Meiers (2010) indicates that students are also motivated to visit museums to view a favorite exhibit, to purchase something in the gift shop, to have fun on the bus, or to enjoy the break from a normal school routine. The majority of school teachers believe that field trips provide students with opportunities for enjoyment, leisure, and learning (Kisiel, 2005). However, not all museum trips made with the intention to learn or to reinforce the curriculum end up with the desired results. This is because students and teachers may approach museums with fact based objectives, while museum educational programs aim to impart general knowledge of certain subjects (Meiers, 2010:6).

There are very few sources that document how and the extent to which teachers influence student learning in museums. Griffin (1998) conducted a study in Australia, discovering that teachers are involved to some degree when school-museum visits occur. However, this involvement varied considerably: some teachers actively worked with small groups of students as they looked at exhibitions and answered questions on worksheets; other teachers worked

exclusively with one or two small groups and largely ignored the rest of the student groups; other teachers superficially watched the students, mainly for behavior; and others teachers stood back, not participating in the learning activities at all. In most instances, students were actively involved in the gallery visits and used their worksheets for roughly the first half hour of the visit. After this, student behaviors varied considerably, from finding the coffee shop, to sitting (or lying) on gallery benches, sitting on the floor copying each other's worksheets, or moving very quickly from gallery to gallery if they were allowed to move without teacher or adult supervision. A few of the student groups continued purposefully looking at and discussing the exhibits throughout the excursion.

Constantino (2008) explored the role of the teacher as a mediator for student learning on museum field trips. The study involved 28 Grade 6 students with their teacher visiting an art museum. The teacher had prepared a worksheet for the students to draw and to answer questions. When these students were interviewed they were able to articulate the main themes the Munoz sculptural installations that they had visited were about. They answered indicating that they had learned about the artists at school two days prior to the visit. At school, their teacher had taught them and discussed a topic related to understanding the art, and therefore it was easy for the students to identify the answers. A teacher who did not teach the students on art-related topics prior to the museum visit found that this disadvantaged and affected student learning. For example, a study by Blackford (2009) demonstrates that students learned and understood more about science when their teachers taught them prior to their museum visit. These students recalled and connected what they had learned in a unit at school with what they saw in the museum. Students who did not receive any teaching on certain topics later discussed at the museum demonstrated weak cognitive and affective outcomes. (Blackford, 2009:27).

The literature from Griffin (1998), Constantino (2008), and Blackford (2009) indicates that school teachers have influence over the learning that occurs among school students in museums. This study therefore concentrated on the process that school teachers go through when planning museum trips, the level at which teachers participated in museums education programs, and the extent to which they influenced students' learning at all five national museums in Zimbabwe.

Study methodology

This study was conducted at Zimbabwe's five national museums: the National Museum of Transport and Antiquities (NMTA), The Zimbabwe Military Museum (ZMM), the Natural History Museum (NHM), the Zimbabwe Museum of Human Sciences (ZMHS) and the Great Zimbabwe World Heritage Site (GZWHS). Qualitative and quantitative research approaches were employed as well as phenomenology research design. Interviews, observations, questionnaires, focus group discussions, and photographs were employed as research instruments. The study was undertaken from August 2013 to December 2016, and data was solicited from 1,000 teachers who were readily accessible as they accompanied their students to museums. The study employed purposive sampling because they share the same characteristics. This study also involved 1,500 students aged 6 - 9 years old who participated in the Structured Class Visits and the School-Museum Visits education programs.

The study measured the learning outcomes realized in school students. Learning outcomes are products or results of a learning experience. This study subscribes to the definitions of learning as defined by UNESCO (2017: 1996) and the United Kingdom Campaign for learning (2016, 2002). Effective learning is defined as when students actively construct meaning from experience and acquire different learning outcomes such as cognitive, social and affective. These learning outcomes or competencies should assist the students to solve problems affecting the society. The learning process is characterized by the student being an active agent in meaning making, acquiring competencies through social mediation with others that help to comprehend the world and its complexities. Effective learning should be relevant or address the learning needs of the learner and aim to develop the learner become a productive member of society. Effective learning is not an individual but collective process where a community of learners share ideas and collaborate with each other in achieving tasks. In order to measure the type of learning outcomes that occurred amongst primary school students in museums this study employed the Generic Learning Outcomes). This framework provided a common conceptual framework and a systematic approach to researching museum-based learning and its outcomes.

Study results

Planning museum trips

When school teachers plan and organize field trips for their students in Zimbabwe they first seek authorization from the Ministry of Primary and Secondary Education (MoPSE). A total of 564 school teachers indicated that arranging museum field trips, cultural tours, or the quiz program was a very involving process. The Ministry of Primary and Secondary Education MoPSE) instructed provincial education structures that no trips were to be made without the permission of provincial education offices. This meant that in order for a school in Gweru to visit the GZWHS they were required to seek permission from both the Midlands and Masvingo Provincial Education offices. Schools were also required to satisfy the requirements of MoPSE and these included hiring or using buses that had road permits from the vehicle inspectorate department.

The MoPSE mainly approve field trips at the end of the school terms. Interviews with 2 education officials from MoPSE based in Gweru and Harare indicated that the primary school timetable was congested, and it was reasonable for them to authorize field trips at the end of school terms. However, museum trips that were approved at the end of the terms did not effectively contribute to students' learning. Students may have forgotten what they learned earlier in the school year, making it impossible to link it with museum content. It took those students with vivid memories to remember what they did at school in order to relate it to museum content if field trips were made at the end of the second or third school terms. When field trips are made at the end of the term, students fail to effectively link what they learn from museums with what they learned in school.

Another challenge teachers face in organizing museum trips are financial barriers. Museum trips are financed by students who pay at least $3 for local trips and $45 to $120 for trips in other regions in Zimbabwe. For example, a school in Gweru with its own bus charged each student $3 to visit the ZMM, covering fuel costs and entrance fees. For schools that hire transportation the costs could go up, and all costs are paid for by the students and their families. Regional trips are more expensive because the costs include paying for

accommodation, food, museum entrance fees, and transportation. This financial barrier affected schools that planned field trips in two ways. The first is that students who failed to pay were left behind at school or told not to come to the school on the day of the trip. These students have lost a learning opportunity and may face social stigma. The second implication is that trips that are more expensive are purposely undertaken once at the end of the school year, providing students the time to raise the fees required. This meant that students will not have the optimal opportunities to effectively learn from the museum trip as compared to a students who visits the museum immediately after a classroom learning unit.

Reasons for conducting museum trips

Selecting which museum to visit rests in the hands of school teachers and the school head. There are several factors cited as contributing to the choice of destination:

1. An excursion or trip that was generally affordable by students;
2. An excursion that allowed students and teachers to visit other leisure destinations;
3. Destinations that provided students with learning opportunities;
4. Availability of field trip time slots on a museum's calendar, especially at the ZMM;
5. If the museum or site had material and content that helped teachers prepare for quiz competitions and for school examinations.

When planning museum visits, 356 teachers (35.6 %) considered whether the trip was affordable for student families. Interviews of 4 teachers from Mtshingwe primary school indicated that when planning field trips teachers considered the economic situation prevailing in the country, and assessed if the majority of parents or families were able to pay for their children to attend the field trip. Another factor to consider, as indicated by 287 teachers, was whether the field trip included going to other resort destinations. Seven teachers interviewed at the NMTA from a school in Harare indicated that they had first come to the museum, and would proceed to the Claremont Estate apple plantation, Mutarazi Falls, Montclair and Troutbeck hotels, and historical sites in Nyanga. The NMTA receives many visits from schools located in Mutare and from other cities where schools prefer to proceed to other popular resort destinations in Zimbabwe such as Nyanga and Vumba, among other areas. Nyanga and Vumba are popular for the scenic views, hotels, and the chilly rainy weather. Schools prefer coming to the ZMHS because they will also access the National Heroes Acre, the famous Chinese Mall in Belvedere, will view the high rise buildings in the Central Business District, and the Parliament house. Teachers indicated that they wanted their students to have knowledge of popular buildings or malls, government buildings like the parliament, and the natural and cultural heritage in Zimbabwe.

Trips that included visiting a museum and other destinations provide variety to what students learn in relation to the primary school curriculum. For example, the GZWHS is also popular because it is a World Heritage Site. The GZWHS is also seen as a political symbol of national identity both by the government and the public, and therefore is an important heritage resource that can be used by teachers for educational purposes. A total of 189 (18, 9%) of teachers surveyed indicated that they prefer to make visits to museums and cultural sites if it provided the necessary content for the education level of the students attending the trip. 8 teachers interviewed at the GZWHS from a school in Shurugwi indicated that they preferred destinations where their Grade 6 and 7 students learn something related to their school work.

The GZWHS provides relevant learning material for Grade 6 and 7 students whose social studies curriculum included topics on shelter, identity, and the study of Shona culture of pre-colonial societies.

Another factor teachers considered when planning museum field trips was if the trip helped them plan for museum quiz competitions. One hundred and twelve (11.2%) teachers indicated that they planned museum trips with the idea of getting an opportunity to learn and prepare for museum quiz competitions. Teachers indicated that they preferred a museum trip that provided an opportunity to get coaching from museum education officers or tour guides in order to prepare. This study observed that schools that received coaching from museum staff performed better than those that did not. Tour guides, for example, provided content relevant to quiz competitions. This study established that museums receive students during the first school term who will prepare for museum quiz competitions. These small quiz groups came as part of SCV and SMV. The study gathered that the Grade 6 and 7 students visit museums mainly during the first school term because during the second and third terms, Grade 7 students are preparing for the Zimbabwe School Examinations Council (ZIMSEC) final examinations. The other grade levels visit throughout the second and third school terms. The calendar at the ZMM accommodates the Grade 5 during the second term, and Grade 4 and 3 in the third school term.

Role and influence of the teacher in student learning

This study established that three types of teachers exist who accompany museum field trips: enthusiastic, passive, and opportunist teachers.

The enthusiastic teacher

The enthusiastic teacher is that teacher with a personal interest in heritage issues, and therefore prepares and conducts research in advance of museum field trips in order to best support student learning outcomes. This category of teachers has zeal for heritage studies, investing time, effort, and monetary resources to visit museums in advance of field trips to discover what their students could learn prior to the field trip. Interviews and questionnaires determined that from a population of 1,000 teachers, only 234 teachers visited museums in advance of field trips to prepare for the field trip with students. One female teacher interviewed at the ZMM indicated that she grew up with a passion to be an historian, and therefore valued museums as significant educational institutions. The teacher had visited the ZMM before her class field trip seeking to find the best possible ways in which her students could benefit from the museum. This teacher sought out exhibitions that connected to the school curriculum. The teacher further requested books and publications that could assist her students from the museum education department.

"Enthusiastic" teachers also visited museums after a learning unit with subject matter related to a museum exhibition, better enabling students to connect it with their in-class curriculum. When the teacher brought students to the Zimbabwe Military History the following week, her students were observed to pay closer attention and to concentrate more on objects on display in galleries, writing down notes. The same students were observed posing questions to tour guides seeking clarification on issues about the first and second liberation struggles in Zimbabwe. Interviews with 14 students clarified that the teacher had explained the nature of

the museum exhibitions to the students, and had specifically told them which displays they were supposed to focus on as they related to their school work.

Second, enthusiastic teachers articulated field trip objectives and expectations to their students. This study established that the majority of students that visit museums in Zimbabwe were not adequately prepared for the trips. Preparation of students for a trip involves articulating the objectives of the trip, helping to focus students, making them better able to meet expectations and achieve what is required of them. Preparing students also involves providing an orientation, which helps to provide the museum map, highlighting which galleries and exhibitions to focus on most closely.

A total of 1,348 students (89.87%) surveyed in the study indicated that they were not told about the objectives of museum trips, or how to relate the knowledge gleaned from museum visits to their classroom work. Only 152 students indicated they received a pre-orientation prior to the museum visit. There is a view by some teachers that a pre-orientation should be done at the museum by the tour guides. Forty-three teachers visiting the five National museums believed that tour guides know better what the museum offers, and that the map of the museum is a better guide, hence expecting tour guides to fill that role of teacher. However, this view from some teachers worked to the detriment of student learning as tour guides also expected teachers to pre-orient their students before the field trip. Further it was gathered that the orientation given by tour guides before entry into the museum provides limited educational information, instead serving to inform students of the museum's general rules and regulations.

School students that received pre-orientation prior to the museum field trip displayed strong outcomes related to knowledge gain, understanding, enjoyment, increased sense of value of the museum trip itself, and improved social skills. School students who were observed on their museum field trips and who indicated that they were not told in advance about field trip objectives were observed wandering aimlessly in galleries, engaged in wrestling, and playing tag with one another. These students viewed exhibitions, but did not focus on specific displays or issues, and the majority of these students displayed weak indicators of Knowledge gain and Understanding (KgU).

In regard to levels of knowledge gain and understanding resulting from museum field trips, three categories of students emerged from the 1,500 who participated in this study. The majority of the students 800 (53.33%) showed medium indicators of knowledge gain and experience, 500 (33.33%) displayed weak indicators, and only 200 (13.33%) displayed strong indicators of knowledge gain and understanding. The latter exhibited evidence of deeper understanding and conceptualization of learning, could remember dates, names of people and events, and could describe sequences of events and history. Those students who displayed medium and weak indicators of knowledge gain and understanding were able to state that they had learned something, but were not able to provide detailed stories or reports of what they learned.

The lack of pre-orientation affected first-time student visitors as they spent time trying to map the museum and to understand the exhibitions. The majority of these students did not carry pens or notebooks with them. These students were affected by the novelty factor of the

museum setting, attempting to map what the museum is in and of itself. Students waste time doing so because they will rush from one gallery to the next without scrutinizing displays. Students who were not told of field trip objectives were not optimally prepared for learning. The majority of students were not optimally prepared for museum field trips by their teachers.

Third, enthusiastic teachers actively participated during guided tours, helping explain and link displays to the school curriculum. The enthusiastic teacher assisted to pinpoint the most important aspects of the gallery, and to tell students what they should learn from them. These teachers were also observed to selectively pick artefacts that students were supposed to critically investigate. For example, a teacher with 35 students was observed at the NHM explaining exhibitions in order to link them with in-class work. When the tour guide asked questions some of the students were shy or reserved to answer, but the teacher helped to call on students by name and to ask them to respond. This teacher helped to break the ice in situations where students reticent to participate. The enthusiastic teacher also posed questions to students, started discussions, and reinforced what the tour guide explained about exhibitions. Therefore, enthusiastic teachers played a large role in facilitating learning for students.

The passive teacher

The passive teachers were those observed accompanying students and who took part in the guided tours, but who spent the tour being silent. These are the teachers who either did not have knowledge of artefacts on display or how the objects connected to the curriculum. Passive teachers were primarily concerned in offering their students an opportunity to learn from museums, considering the social context where students would learn in an informal manner. The passive teacher was also motivated to provide a different learning environment for their students. The presence of the passive teachers helped to control student behavior and focus them on learning. When teachers participated in a passive role, even the most active of students behaved themselves as compared to school groups whose teachers were not part of guided tours, self-tours, and SCV.

The opportunist teacher

The opportunist teacher considers the museum trip an opportunity to do private business, to relax by the reception area, or to engage in other activities divorced from the intended objective of the field trip. The opportunist teacher deposits students in the hands of the museum tour guides. Some of the teachers were observed conducting private business in the Business District, like visiting banks, among other activities. Some of the teachers were observed marking homework or exam scripts by the reception area. Depositing school students in the hands of tour guides meant that school students were rendered subjects of the tour guides.

Analysis

Teachers are critical to the success of student learning in the museum environment. The majority (70%) of school teachers in Zimbabwe plan museum trips. However the degree at which they assisted students to learn from museums varied. What is evident is the fact that more than 45% of teachers did not articulate the objectives of the trip to their students. A teacher can assist students by making a pre-visit to the museums, researching how their students can be helped and what their students will learn. Few teachers had a personal

interest in cultural heritage and they contributed immensely to student learning. These teachers properly researched, articulated the objectives of the trip to students, and provided topics for students to research. Students that are not prepared for the museum visit display weak indicators of learning as compared to those given a pre-orientation. Davidson *et al* (2010) suggests that advanced preparation of students and establishing a link between the curriculum and the field trip are the most influential factors in student learning in museums. Students who receive cognitive and process orientation learn more than those who were not given orientation (Meiers, 2010). The study established that the majority of the students came to the museum without knowing what was expected of them educationally. Students that received pre-orientation were better prepared, better equipped, and motivated to learn.

The majority of school teachers have a pre-conceived perception that a productive pre-orientation will be given by tour guides. However the orientation given by tour guides in museum in Zimbabwe is limited, only serving to stipulate the museum's rules and regulations. Without adequate pre-orientation such as providing orientation cues and link of museum content with school curriculum for example made the majority of students in museums wandered about, unfocused and not sure how they were going to use the information they learned in museums at school. Meiers (2010:10) highlights that pre-orientation assists to reduce the novelty factor. The novelty factor is when students spend much of their time trying to map what the museum is all about hence wasting time and energy. Pre-orientation equips students with knowledge of what they will see in the museum hence reducing the novelty factor and how to link school work with museum content (Meiers, 2010:11). Reiss *et al* (2016) have indicated that museums in the United Kingdom and United States of America provides pre-orientation through websites and train teachers on how to prepare their students in order to maximize learning opportunities through museum trips. Even when school students visit museums in these countries museum personnel provides orientation of the museum, give information about the activities students will do and the movements to be taken so that school students are not affected by the novelty factor. Therefore, school students will learn effectively through the pre-orientation given by the teacher or museum personnel.

Balling et al (1980) suggest different styles of providing pre-orientation to students. The cognitive style emphasize the concepts that students will encounter during their visit to the museum. The process skills type of orientation teaches students how to observe museum artefacts and make meaning. The practical orientation informs students how they will move in the museum. This offers students the necessary mapping of how the museum environment is arranged. Balling *et al* (1980) highlight that students who are given practical orientation display outcomes of knowledge gain because they are better focused on what they will see, do and use the museum rather than wander about the museum.

Orientation sessions are useful for school teachers and students who are likely to be repeat visitors or who will be spending some time in the museum. The museum can provide maps or leaflets with plans of the building's layout. This makes teachers and students comfortable and be at ease without fear of getting lost or missing anything. Museums in Zimbabwe can provide catalogues and maps that serve as a system for students, particularly first time visitors. Museums in Zimbabwe can also employ "backstage" tours in which students are given the opportunity to see those parts of the museum not normally open to the public. These work better with smaller groups and need to be tightly controlled (Talboys, 2011:127).

It has been found out that teacher preparation is important to a successful field trip (Meiers, 2010; DeWitt and Storksdieck, 2008). Training teachers will equip them with knowledge and skills of what is expected on their part to facilitate effective learning from museums. The Botswana National Museum, for example, has developed a series of workshops for teachers to sensitize them on the educational value of museums (Rammapudi, 2010). Museums in Zimbabwe used to provide teacher workshops during the 1990s. The workshop program helped teachers to know how they and their students may learn from museums, prepare themselves, research and gather learning materials that would benefit their students during field trips. Workshops also helped teachers to select convenient dates to visit museums. In Zimbabwe only a few teachers visit the museums and liaise with the education department on how to prepare their trips.

When teachers book guided tours they typically do not ask and research how to properly plan for the benefit of students. Teachers anticipate that their students will get adequate assistance from museum personnel, yet this is not the case. Workshops can assist to make teachers aware of what is expected of them in facilitating effective learning on field trips. For example, students learn more and effectively when their museum visit is embedded in a school learning unit (Griffin, 1998). The museum visit should preferably occur towards the end of the first half of the learning unit's program. In so doing, students will be able to link what they had learned at school with museum content because the learning unit will still be vivid in their minds. This study learned that the SCV calendar stipulated dates on which school parties were supposed to visit the museum, but this was cited by some teachers to be restrictive to effective learning. The SCV visit calendar does not relate to specific learning units, and requests that schools visit the museum on specific dates. As a result, students often struggle to recall what they learned at school in detail in order to link it with the new knowledge they gain at the museum. When teachers are empowered with information through workshops, for example, they will know that reviewing or recapping curriculum topics before the museum visit contributes to effective learning outcomes among students. This requires teachers to use an advance organizer approach and to work together with museums in planning field trips for the benefit of students (Meiers, 2010:15).

The best way to ensure that students are having an visit consistent with their previous knowledge and experience is for the classroom teacher to be actively involved with guided programs (Tal and Morag, 2007). Research has found that the presence of the teacher is important in improving students' focus during guided tours (Tal and Steiner, 2006). Teachers who demonstrated willingness to assist students contributed to student learning. A teacher may assist students by accompanying them in galleries when guided tours are being conducted. The presence of the teacher is always valuable because teachers help control the class as well as ask pertinent questions that may be eye-opening for students. Teachers helped break the ice by starting to ask questions when students kept quiet. Some teachers observed at the NHM and ZMM helped to compliment the tour guide's explanations to suit their students' learning styles, facilitating learning.

This was different from teachers who placed their students in the hands of the tour guides. The majority of teachers see school excursions as a day off from the tight school time table. In many instances, museum tour guides would give information from one gallery to the next

without establishing whether students were following the material. Teachers accompanying their students ensured student attention and focus, preventing distracting play that was not indicative of learning. Teachers who left their students in the hands of the tour guides contributed less to students learning. Teachers who did not assist their students in galleries contributed to having students display weak knowledge gain outcomes. This is detrimental to student learning as students also viewed museum field trips as leisure.

Meiers (2010:7-8) suggests that providing support and training for classroom teachers should be a primary objective of museums. In many instances, as this study established, many teachers have no idea of how to prepare their students for museum field trips or how to use the museum effectively to facilitate learning (Phipps, 2010). The attitudes of students towards the field trip, and the amount of learning that takes place, will be a direct reflection of the attitude of the teacher and the purpose for which the field trip was conducted (Griffin and Symington, 1997). It has been established that teachers who are familiar with the museum and who go their own way to research how best their students will learn from field trips contribute to students being better equipped (Meiers, 2010; Falk and Dierking, 2000).

There is great need for teacher training by museums in Zimbabwe. Museums can conduct workshops that educate teachers about how they may help students prepare for field trips, how they may find the museum beneficial, and how to link objects with the school curriculum. Museums in Zimbabwe can design study packs to equip teachers on how to effectively use museums for the benefit of student learning.

Conclusion

Museums in Zimbabwe provide rich learning opportunities for school students. Students have the opportunity to learn from real artefacts and in social contexts where they interact, discuss, and collaborate. Teachers who demonstrate zeal and interest in heritage issues have been observed to provide optimum opportunities for effective student learning as compared to passive and opportunistic teachers who deposit students in the hands of museum tour guides. Depositing students in the hands of tour guides renders students subjects or epistemological slaves predisposed to the biases of tour guides. It is imperative that teachers are empowered with knowledge on how to effectively prepare and facilitate effective learning among their students in museums.

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