

TEACHER'S GUIDE TO CREATING A CLASSROOM
MUSEUM IN THE PHILIPPINES

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To my Mom and Dad.

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Abstract of Project in Lieu of Thesis
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*TEACHER'S GUIDE TO CREATING A CLASSROOM
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By

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Museums offer many great opportunities for learning regardless of visitor's age, interests, or background. Museums make ideas more accessible, help facilitate intellectual connections, arouse visitors' curiosity and interests, encourage self-confidence, and motivate visitors to pursue future learning. The museum experience results in a more holistic learning because it impacts all three learning domains: cognitive, affective, and psychomotor domains.

Numerous studies show that school field trips to museums have long-term positive impact on students and are salient experiences especially to elementary school children. One study in the United States found that nearly 100% of participating students can still recall one or more content-related detail from a trip that happened several years ago. Another study in the United Kingdom found that both teachers and children viewed their museum visit in an extremely positive way and students benefited academically by gaining new knowledge, skills, and inspiration as a result of their visit. If visiting museums is highly beneficial to school children, then it is logical that all students

go to museums. Unfortunately, in the Philippines, both financial and geographic obstacles make it difficult for school children to visit museums. Major museums are concentrated in the National Capital Region and not all provinces have a local museum. Since the Philippines is an archipelago, traveling to a museum is a time-consuming and expensive endeavor, especially for schools in remote provinces. Museums in the Philippines also do not have enough outreach programs and teacher resource materials to provide even a limited kind of museum experience to millions of students who lack physical access to museums.

To help with this problem, I developed a *Teacher's Guide to Creating a Classroom Museum in the Philippines*. If school children cannot go to museums, and museums do not have the means to reach them, then schools should create classroom museums to give students a museum experience. Aside from the benefits of having access to a museum, students' participation in creating the classroom museum is both academically and personally enriching. Using principles of the Constructivist Theory of Learning, I designed learning modules that will equip students with analytical tools, content mastery, critical thinking, problem-solving, and communication and collaboration skills.

By participating in the creation of a classroom museum, students learn important skills they can apply inside and outside the classroom and also engender a positive attitude toward museums. These students, who will fondly remember their classroom museum experience, could become future museum visitors, patrons, and advocates.

CHAPTER 1 INTRODUCTION

Museums offer many great opportunities for learning, and are uniquely capable of providing a diverse range of learning experiences to a wide variety of visitors regardless of their age, interests, or background (Hirzy, 1992). Knowledge is a commodity that museums readily offer to visitors (Hooper-Greenhill, 1992). According to Meredith, Fortner, and Mullins (as cited in McComas, 2006) learning in museums is capable of impacting all three learning domains (cognitive, affective, and psychomotor), and therefore leads to a more holistic learning experience. However, Lord (2007) believes learning in museums is more affective and transformative and the value of the museum experience lies in its ability to change visitors' attitudes, interests, appreciation and beliefs.

For school children, “museums can offer a counterbalancing curriculum, stressing the development of critical judgment, awe, piety, sensitivity, empathy, affection...provide an alternative set of experiences that seek to transform and improve learners, not merely to improve their statistical performance” (Hirzy, 1996, p. 64). Howard Gardner, a developmental psychologist best known for his multiple intelligences theory, said museums can engage students, stimulate their understanding, and encourage them to take control of their future learning (McCommas, 2006). Studies have shown that school field trips to museums have long-term impact on students (Falk, & Dierking, 1997) and that these are salient experiences especially to elementary school children (Falk, & Dierking, 1995). A study by Falk and Dierking (1997) found that nearly 100% of participating students are still able to recall one or more things learned during the trip that they went to many years ago. The majority of what students recalled

was content or subject matter-related. Another study involving 26,000 school children and 1,600 teachers who visited 69 museums across the United Kingdom found that both teachers and children viewed the visit in an extremely positive way. Teachers felt that students benefited educationally by gaining new knowledge, skills, and inspiration as a result of their museum visit (Hooper-Greenhill et al., 2006).

The Institute for Museums and Library Services report on 21st century skills stated that school-aged children spend a vast majority of their waking hours in non-school settings like museums and libraries. In these settings, they learn 21st century skills such as problem-solving, collaboration, global awareness, and self-direction that they take back with them and use in their classrooms (IMLS, 2009). A report published by the National Research Council added that informal settings, which include museums, help students develop awareness, interest, motivation, and social competencies and practices. Their museum experience can help students in gaining incremental knowledge, habits of mind, and identities that make them want to learn more (National Research Council, and Bell, 2009). In fact John Dewey's vision of a model school included a museum (Alexander and Alexander, 2008). Dewey is an American developmental psychologist and education reformer who is acknowledged as the father of experiential learning.

All these research and reports validate the value of the museum experience for school children. However, even with all these evidences on the positive impact of museum visits, a number of factors still prevent students from going on field trips to museums. In the United States, the *No Child Left Behind* (NCLB) policy implemented in 2002 has been pointed out as one of the major reasons for the decline of museum field

trips. With increased emphasis on achieving high scores on standardized tests, teachers became reluctant to take students away from the classroom (Popescu, 2008). For schools, “the decision to make a museum visit has increasingly become curriculum focused” (Black, 2005, p. 159). This means schools only allow their students to visit museums with exhibits and activities that address specific topics under their states’ curriculum standards. Activities that do not directly contribute to high test scores, such as field trips to museums, are no longer considered a priority. The NCLB policy, plus the economic downturn that prompted wide-scale budget cuts in schools, definitely contributed to a substantial decline in school field trips to museums (Latshaw, 2009).

In the Philippines, funding of school field trips for public school students is almost non-existent. Aside from the financial challenges, the geographic structure of the Philippines poses as an additional deterrent that limits school children’s access to museums. The Philippines is an archipelago composed of over seven thousand islands. It has three major islands: Luzon, where the country’s capital, Manila, and the National Capital Region (NCR) are located; Visayas; and Mindanao. The NCR is the economic, political, cultural and educational center of the country. The National Museum, along with most other major public and private Philippine museums, is located in the NCR. I recently learned that museums in Mindanao are steadily flourishing in numbers. There are currently 85 museums in Mindanao, more than the number of museums in Manila (Montalvan, 2010). Unfortunately, other parts of the country are not as progressive in establishing museums, which means that a large number of school children still have limited access to museums.

While it is definitely possible for schools to arrange for field trips, travelling to museums from distant provinces remains inconvenient, time consuming, and very expensive. Furthermore, most museums in the Philippines are not able to provide outreach programs and resources to school children that do not have access to museums. Last year, I conducted a research study among Philippine museums to find out what types of resources and programs are being offered to school teachers. A more detailed discussion of this research study is in chapter three. Through the research study, I found out that only three museums, out of the 29 I surveyed offered lesson plans/curriculum connections to school teachers. With 598,812 elementary and high school teachers and 20,450,501 elementary and high school students (Department of Education, 2009), clearly these three museums are not capable of providing outreach service to all of them. Imagine the number of school children that are deprived of the benefits of a museum experience!

As a possible solution to this problem, I developed a *Teacher's Guide to Creating a Classroom Museum in the Philippines* ([Appendix A](#)). If school children cannot go to museums, and museums do not have the means to reach them, then schools can create classroom museums so that students are provided a museum experience. Aside from the benefits of having access to a museum, students' participation in creating the classroom museum will be both academically and personally enriching.

In chapter two, I will elaborate on how the process of creating and using a classroom museum can help teachers achieve important goals of education such as content mastery, critical thinking capacity, problem-solving ability, and collaboration skills. Since I developed the *Teacher's Guide* with the Constructivist Theory of Learning

in mind, I briefly discuss this theory and how specific Constructivist principles apply to the activities in creating a classroom museum. To emphasize the difference between a constructivist and a traditional classroom setting, I provide a comparative analysis. Finally, I expound on how learning occurs in the classroom museum using Falk and Dierking's (2000) Contextual Model of Learning.

CHAPTER 2 WHY SHOULD TEACHERS CREATE A CLASSROOM MUSEUM?

To understand the benefit of creating classroom museums it is important to examine first how learning happens and how individuals construct knowledge. I used the Constructivist Theory of Learning as a guiding principle in structuring lessons and activities in the *Teacher's Guide to Creating a Classroom Museum in the Philippines* ([Appendix A](#)).

Overview of the Constructivist Theory of Learning

The Constructivist theory defines knowledge as temporary, developmental, and both socially and culturally mediated (Grennon Brooks, & Brooks, 1993). This theory postulates that knowledge is constructed in the minds of individuals, through methods the learner has chosen. In other words, learners are responsible for their own learning, which requires that they actively participate in the process using not only their minds but their hands as well.

In constructivism, learning occurs when individuals reconcile their pre-existing knowledge and experience with new information they encounter. When confronted with an idea, object, or phenomenon that does not make sense to them, individuals either interpret this to conform to their present set of rules for explaining and ordering the world, or they create a new set of rules that would accommodate what they think is happening (Grennon Brooks, & Brooks, 1993).

Constructivism, which takes its roots from works of developmental psychologists such as John Dewey, Jean Piaget, and Lev Vygotsky, is a theory about learning and knowledge. While all three supported the Constructivist view that knowledge is self-constructed, each of them has a slightly different approach on the theory. Dewey

believed in experiential learning, which means that individuals learn better if they are given the opportunity to engage in activities that require them to apply whatever concept they are trying to learn (Hein and Alexander, 1998). Jean Piaget, major proponent of cognitive constructivism, theorized that an individual's capacity to construct knowledge increases as the individual graduates to higher stages of cognitive development. Vygotsky, a social constructivist, emphasized the importance of language and social interaction in learning (Atherton, 2010).

Hein (1998) explains that the opposite of Constructivism, represented by the absorption-transmission theory of learning, considers individuals as passive learners. Knowledge exists independent of the learners: it is "out there" to be discovered and learned. Learners are viewed as empty vessels waiting to be filled with knowledge by an authority.

Traditional versus Constructivist Classroom

For the purpose of this paper, I will refer to school environments where teachers do not base their practice on constructivism as a traditional classroom. In a traditional classroom, the teacher is considered an authority figure: the person who "transmits" knowledge that students "absorb", as in the absorption-transmission theory of learning.

In contrast, the teacher in the constructivist classroom acts more as a guide or facilitator for students' learning. But more importantly, the teacher takes on the role of a "co-explorer who encourages learners to question, challenge, and formulate their own ideas, opinions, and conclusions" (Abdal-Haqq, 1998). Teachers still follow structured academic goals. However, they are no longer compelled to teach lessons based on the strict cover-to-cover order of the textbooks used in class. The Constructivist teaching

approach works better because studies have shown that children learn better when they are given a greater sense of control over their own learning (Falk, & Dierking, 2000).

In a constructivist classroom, questions are used as powerful tools for teaching and learning (Yaeger, 1991). Not only are questions from students encouraged but they are considered valuable. Questions are viewed as expression of students' interest in the subject matter, not of their ignorance. It is important, therefore, for the teacher to create a learning environment where students feel comfortable asking questions. Student questions are also used by teachers to guide the direction of the classroom discussion. Instead of just providing answers to students' questions, teachers could ask the rest of the students to suggest answers, or provide guidance in the student's quest to discover the answer to his/her own question. When posing questions to their students, teachers use open-ended questions that allow students the opportunity to expound on their answers. There is not one right answer to a question, or one right solution to a problem. When students give inaccurate responses, instead of immediately judging these as wrong or incorrect, teachers ask them to elaborate in order for him/her to understand how and why the student arrived at these conclusions. As students reflect on and articulate their reasons, teachers also gain insights into their students' thinking processes. Provocative questions are used to probe students' preconceived notions, challenge traditional views and encourage self reflection, which usually result in students generating innovative ideas about themselves and the world around them.

Activities in a constructivist classroom are chosen based on their potential for developing student's critical thinking skills. These activities are characterized by active engagement, inquiry, and problem solving. Students are given time to reflect on new

concepts presented to them; to make sense of this new concept; and then an opportunity to apply these to practical use.

One teaching approach frequently mentioned in constructivist literature is the use of group collaboration. “Constructivist teachers of science promote group learning, where two or three students discuss approaches to a given problem with little or no interference from the teacher” (Yaeger, 1991). Students learn from each other and each member contributes his/her prior knowledge to the collective knowledge of the group. By working in groups, students have the opportunity to see different perspectives about one concept, various solutions to a problem, or varying points of view about issues. This exposure and sharing of knowledge can help them reconcile issues they are facing and thereby result in better understanding. If each member of a group contributes one approach to solving a problem, then a group of six students is automatically provided with six possible solutions to one single problem. Even if none of the proposed solutions work, at the very least, the opportunity to test all of them would result in the students learning six ways of how not to solve this particular problem.

Constructivists generally maintain that when information is acquired through the transmission model of learning, it is not always well integrated with prior knowledge and is often accessed and articulated only for formal academic occasions such as exams (Abdal-Haqq, 1998). In a traditional classroom, learning is measured by the students’ ability to repeat what has been taught by the teacher. To assess learning, teachers use multiple-choice or short-answer test questions. As a result of this practice, students with good memorization skills do well in standardized tests. However, the same students often lack the ability to integrate new information into their prior knowledge or apply it to

practical use in their life. Therefore, after taking the exam (generally deemed by most students as the reason they need to learn this information) students no longer remember what they “learned” (Grennon Brooks, & Brooks, 1993). Teachers who subscribe to the Constructivist theory of learning allow their students to express their acquired knowledge in a variety of ways. These assessments can be in the form of a presentation, play, musical, poems, journals, artwork, researches, invention, or exhibition. Table 2-1 shows features of traditional and constructivist classrooms.

Table 2-1. Traditional versus Constructivist classrooms

Traditional classrooms	Constructivist classrooms
Curriculum is presented part to whole, with emphasis on basic skills.	Curriculum is presented whole to part with emphasis on big concepts.
Strict adherence to fixed curriculum is highly valued.	Pursuit of student questions is highly valued.
Curricular activities rely heavily on textbooks and workbooks.	Curricular activities rely heavily on primary sources of data and manipulative materials.
Students are viewed as “blank slates” onto which information is etched by the teacher.	Students are viewed as thinkers with emerging theories about the world.
Teachers generally behave in a didactic manner, disseminating information to students.	Teachers generally behave in an interactive manner, mediating the environment for students.
Teachers seek the correct answer to validate student learning.	Teachers seek the students’ points of view in order to understand students’ present conceptions for use in subsequent lessons.
Assessment of student learning is viewed as separate from teaching and occurs almost entirely through testing.	Assessment of student learning is interwoven with teaching and occurs through teacher observations of students at work and through student exhibitions and portfolios.
Students primarily work alone.	Students primarily work in groups.

Source: Grenon Brooks, J., & Brooks, M. (1993). *In search of understanding: The case for the constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.

Principles of Constructivism that Support the Creation and Use of a Classroom Museum

Drawing upon works of Constructivist theorists Dewey and Piaget, Hein (1992) identified several principles of learning. From these principles, I selected four that are most relevant to my project: 1) learning is an active process; 2) construction of meaning is mental; 3) learning is a social activity; and 4) motivation is crucial to learning. In this section, I discuss how each principle is applied in the process of creating and using a classroom museum.

First, learning is an active process in which the learner uses sensory input and constructs meaning out of it. In setting up a classroom museum, students are expected to actively participate in all phases of the creation process: from conceptualization, research, collecting or creating of exhibit objects, installing the exhibition, advertising the exhibition, and welcoming visitors to the exhibition's public opening. Activities included in the modules leading up to the exhibition set-up not only involve discussions and lectures but also opportunities for students to interact with physical objects. Students will learn skills, such as writing catalog entries, labels, and laying-out the exhibition, and then put these new skills immediately to practical use. If the teacher decides that students will actually create objects that will be included in the exhibition (i.e. science experiments, artworks, replicas of artifacts, dioramas), opportunities for learning increase as this process involves multiple sensory experiences, more time, and layered opportunities for learning.

It is also recommended that hands-on or interactive component (such as objects that can be played with, solved, touched, or activities people can participate in) be included in the exhibition. Other students not involved in creating the exhibit, and

visitors from outside the school community, also benefit and learn from the exhibition through their interaction with the objects on exhibit, the interactive components, and activities provided (Hein and Alexander, 1998).

Second, the crucial action of constructing meaning is mental. Although physical action, or hands-on experience, is deemed necessary for learning, it is not sufficient by itself. For children to learn, their minds must also be engaged: “minds on” as well as “hands on”. Modules in the *Teacher’s Guide to Creating a Classroom Museum* always involve classroom discussions. In these discussions, teachers use questions that will encourage students to think about what they already know, and then guide them in integrating their prior knowledge with newly introduced concepts. One crucial step in creating a classroom museum involves students doing research on their chosen topics. Conducting research and making sense of the information are activities that require higher-order thinking skills such as analysis, synthesis and evaluation. These skills form the top three levels of the cognitive domain in Benjamin Bloom’s taxonomy of learning. Bloom identified three learning domains: cognitive, affective, and psycho-motor. Each domain consists of several levels of learning objectives that require more skills as the level increases (Atherton, 2010). Since students are mentally involved in finding information, instead of it passively being transmitted to them by their teacher, students are more likely to learn this information.

Questions During Classroom Discussion

Classroom discussion and questioning are an integral part of the activities in the *Teacher’s Guide*. Using provocative and open-ended questions, teachers can encourage students to express their understanding of concepts, or issues they are

grappling with (Fairbairn, 1987). This approach also provides an opportunity for students to share their individual knowledge with the rest of the class. After a classroom discussion, students are divided into groups for further discussion and to work together in accomplishing their assigned tasks. In module three, the class is divided into smaller groups, and each group is given an exhibition topic. Groups are asked to conceptualize an exhibition based on their assigned topic and later present this to the whole class. Part of their task is to think of an exhibition title, big idea, objective, sub-topics, objects, interactive/multimedia components, and education programs for their exhibit.

Third, learning is a social activity. Hein posits that communicating and interacting with other individuals is crucial in the learning process. This interaction between individuals through discussions and conversation helps them articulate their impressions, navigate through difficult concepts, explore ideas and share their understanding with each other. Activities in the *Teacher's Guide's* modules always involve interaction among students through class or group discussions and activities. For example, in module one, students are given the chance to create their own museum. After making a collage of their museum, students are asked to share in class the name of their museum, what can be seen inside it, and why they decided to create that museum. Through this activity, students can learn about other possible museum concepts that they may not have personally thought of, or considered. Students are also given an opportunity to share their ideas in class especially during the brainstorming sessions. Although students may be assigned individual research assignments within a group, they are expected to share results of their research with their group and then

later with the whole class. Students must work and learn together to successfully create their classroom museum.

Fourth, motivation is a key component in learning. According to Hein (1992), motivation not only helps in learning, but essential for learning to occur. He adds that unless individuals know why they should learn something, then they will not be compelled to apply new-found knowledge to practical use. The classroom museum can be a great source of motivation and pride for students as this is an opportunity for them to showcase their mastery of concepts and creativity.

In creating the classroom museum, students are learning skills and acquiring knowledge that are not tested on paper. Instead, they are required to apply these newly acquired skills and knowledge in creating their classroom museum. These skills include analysis, creativity, innovation, critical thinking, problem solving, interpersonal communication, and collaboration. Students will also need to process knowledge acquired through their research into a cohesive narrative that can effectively convey the story or concept of their classroom exhibit. The time, energy, and passion they put into the activities will yield tangible outcomes.

Motivation can also stem from students playing the role of knowledgeable museum staff to engage visitors, answer questions, conduct demonstrations, and lead activities. Since they are expected to be knowledgeable about the whole exhibition, they could be motivated to learn the full content of the exhibition (D'Acquisto, 2006). Therefore, they will learn about specific topics they personally researched and also topics the other students researched.

But D'Acquisto (2006) contends that perhaps the most compelling reason to consider creating a classroom museum is that students like them. Below are comments from two students involved in creating their classroom museum:

I think it was brilliant... It was really fun because we got to (use) different ideas and come up with what we wanted to do... We put it all together (to) actually see what we knew... to put our minds to the test... to see if we accomplish(ed) what we need(ed) to learn. – Brownwyn, 6th grader

“It was hard work at the end. I think it was really fun and creative. One of my best days was (writing) the book because it was really hard work, but it was fun showing it off”. - Kianna, 2nd grader

These comments from students clearly show that the students not only enjoyed participating in the project and also expressed a sense of accomplishment from completing their task.

Shifting from the traditional to the constructivist approach to teaching is not easy. A constructivist approach will require that teachers invest more time and energy in preparing lessons, resources, and materials. The Constructivist approach requires flexible and sometimes more spontaneous negotiations of classroom management strategies. And most importantly, the Constructivist approach requires the patience to draw out student understanding, facilitate paths to learning, and pace teaching rhythm to accommodate students' abilities and interests. Creating a classroom museum makes more work for teachers who must secure permission from the school to embark on a project that is not traditionally part of the curriculum. Teachers also need to find a venue for the exhibition, help students borrow or create objects to include in the exhibition, and acquire supplies to be used in installing the exhibition. However, creating a classroom

museum promises immense learning opportunities for students, and that alone should be worth considering.

How Do People Learn in Museums?

When the classroom museum is opened up to the rest of the school, and even the outside community, then the learning potential extends beyond the students involved in its creation. For this reason, I deemed it necessary to discuss how the museum experience results in learning.

Regardless of where the museum is housed (in a building, classroom, park, or even a bus for some mobile museums), certain factors necessary for learning remain the same. From reading various literature related to my research (learning theories, teaching strategies, adult and children learning, and educational role of museums), I observed increased interest by researchers in studying how individuals learn in museums (Falk, & Dierking, 2000; Hein, 1998; Hein and Alexander, 1998; Hooper-Greenhill, 1992; Lord, 2007). Although great strides have been made in understanding the role and nature of learning in museums, much work is needed before we can begin to understand completely, if that is even possible, how learning occurs in museums. One theoretical framework that aims to map out learning in museums is the *Contextual Model of Learning* proposed by Falk and Dierking (2000). Their framework suggests that learning is influenced by the interplay of the following three distinct contexts:

- *personal context*
- *socio-cultural context*
- *physical context*

The *personal context* (Falk, & Dierking, 2000) characterizes learning as a very personal experience dependent on several factors including motivation and

expectations; prior knowledge, interest, and beliefs; and choice and control. Falk and Dierking recognize that learning is prompted by personal motivation and emotional cues but facilitated by personal interests. While the decision for students to visit a classroom museum may not be intrinsically motivated, the paths they follow in viewing the exhibition, as well as specific objects they choose to examine are dictated by their personal interests. As in Constructivism, the *personal context* of the *Contextual Model of Learning* also puts value on student's prior knowledge as crucial to learning. Since the exhibition's theme is connected to the academic curriculum, it is highly probable that concepts introduced in the exhibition are the same concepts the students are learning in class. The potential for learning is increased because students' prior knowledge about the concept is reinforced by additional information present in the exhibition.

A museum visit is a social event. The *socio-cultural context* (Falk, & Dierking, 2000) positions learning as both an individual and group experience. Both Constructivism and the *Contextual Model of Learning* (Falk, & Dierking, 2000) view learning as socially mediated. Individuals do not learn in isolation. Learning is a shared process between a community of learners where each learner contributes individual knowledge and prior experiences. This also holds true for a classroom museum. Visiting a classroom museum provides students an opportunity to engage in conversations with other students about their experience, especially if the topic of the exhibition is something they are learning together in class. Students can also learn from each other by sharing what they already know about the topic. Communication of ideas is also viewed as socio-cultural in nature, which explains why individuals have better chances

of remembering information when it is delivered in a story or narrative form (Dierking, 2002), such as a classroom museum exhibition.

The *physical context* (Falk, & Dierking, 2000) explains that learning occurs through an individual's interaction with the physical world. Sights, sounds, smell, and sensations all contribute to the learning experience. Research suggests that when asked to recall their museum experience, most individuals even after 20 or 30 years, easily remember what they saw, did, and felt during their museum visit (Dierking, 2002). Included in the physical context are the objects an individual encounters in a museum. As Paris (2002, xvi) states, "authentic, unique, and first-hand experience with objects stimulate curiosity, exploration, and emotions." Creating and visiting a classroom museum is a good way for students to encounter a tangible representation of abstract concepts they are learning in class. In addition, students visiting a classroom museum are given the opportunity to interact with objects, reflect on them and construct personal meanings through them. In Constructivism, emphasis is placed on use of primary sources of data, such as actual objects, and manipulatives to test concepts and ideas. Interacting with actual physical objects, such as those in the classroom museum, provides opportunities for students to conduct their own observation and test their own theories.

Summary

The value of creating a classroom museum not only lies in providing students access to a museum but also in developing critical skills that students gain from participating in the creation process. Students' involvement in creating the classroom museum can help increase analytical skill, creativity, innovation, critical thinking,

problem solving, interpersonal communication, and collaboration skills that they could definitely use in and out of the classroom.

One characteristic of a Constructivist teaching approach is the use of questions (Yaeger, 1991). In the class discussion sections throughout the modules, I provided questions teachers can use to direct the discussion and encourage students to share their thoughts and ideas. The activities were also designed to encourage teachers to engage their students and allow them to make decisions in every step of the classroom museum development process, instead teachers making all the decisions themselves and giving students orders. Involving students in decision making gives students a greater sense of control over their learning, another characteristic of the constructivist teaching approach, which leads to more successful learning (Falk, & Dierking, 2000). Finally, since Constructivism views learning as a social activity (Hein, 1992), a number of activities in the *Teacher's Guide* require students to work together in small groups. While each student has individual responsibilities, the success of creating the classroom museum depends on all students' ability to learn and work together.

In chapter three, I discuss details of how I developed the *Teacher's Guide to Creating a Classroom Museum in the Philippines* and elaborate on each of the four modules.

CHAPTER 3
DEVELOPING THE TEACHER'S GUIDE TO CREATING
A CLASSROOM MUSEUM IN THE PHILIPPINES

Overview

The impetus to develop a *Teacher's Guide to Creating a Classroom Museum in the Philippines* came from my desire to create educational materials that could help bridge the gap between schools and museums in the Philippines. My first job after completing my undergraduate degree in 1998 was as Continuing Education Assistant at Ayala Museum, an art and history museum located at the heart of the business district in the Philippines. I managed the museum's public programs for both children and adults. These programs primarily consisted of visual art workshops and a few exhibition related lectures. From browsing through websites of museums outside the Philippines, I realized that there was more to public programs than just workshops. However, it was not until 2001 when I was awarded a grant by the Asian Cultural Council (ACC), an affiliate of the Rockefeller Brothers Foundation, to visit museums in the United States that I became aware of the breadth of education programs offered to the public by museums in the United States. The grant from ACC enabled me to visit and observe education programs of over seventy museums in various cities in the United States including New York, Boston, Chicago, Los Angeles, Louisville, Salem, San Diego, and Washington DC. There were family events, demonstrations, guided tours for various ages (even as young as toddlers), performances, activity sheets, exploration boxes, travelling suitcases, partnerships with schools, and so much more! I was also able to sit down and discuss a few of these programs with education staff from several of the museums I visited. The experience was both overwhelming and inspiring!

After returning to the Philippines from the five-month ACC grant, I started exploring and developing a few of the programs I saw during my visit to the United States. Programs that helped reinforce the United State's national and state educational standards were among the kinds of museum education programs that strongly resonated in me. As a result, I developed and implemented a new program that focused on Ayala Museum's current exhibits and collections to target specific learning objectives under the prescribed Philippines' Department of Education (DepEd) Revised Basic Education Curriculum (RBEC).¹ The program had three modules, with each module targeting specific grade levels that ranged from pre-school to grade six. Each module consisted of a brief lecture, a gallery tour, an educational game, and an art activity.

I wanted to develop a wider variety of educational programs but I came to realize that what I learned during my observation tour and reading books about museum education and children's learning and development were not enough. This is why I decided to pursue a graduate degree in museum education. I knew I needed to learn and understand the theoretical basis for creating effective education programs in a structured learning environment. Pursuing my master's degree in museum studies, with a specialization in education, at the University of Florida was made possible by a Fulbright Fellowship grant.

I knew early on that for my project, I wanted to create resource material elementary school teachers in the Philippines could use in their classrooms. Since I wanted to make sure my project would help address a need in the Philippines, I

¹The RBEC is the prescribed standard that public school students from grades one to six and first to fourth year high school have to learn in school. Public school are required to follow these standards while private school are given the option to develop their own.

conducted a study to find out what types of resources and programs are already being offered to school teachers by Philippine museums.

Teacher Resources/Programs Offered by Philippine Museums

To get started on my research, I needed a list of museums in the Philippines. I sent a request for information to the National Commission for Culture and the Arts (NCCA), Philippines, through their website. The NCCA is the official government agency mandated to oversee policy making, coordinating, and grants for the preservation, development, and promotion of Philippine arts and culture. One of the national committees of NCCA, the National Committee on Museums, is responsible for the development of Philippine museums as repositories of national cultural heritage committed to the education and enlightenment of the Filipino people. Unfortunately, I did not receive any response. Given that I was doing my research from the United States, I was limited to using the internet to find museums in the Philippines. By using search engines such as Google™ and Yahoo!® I was able to generate a list that consisted of 107 museums. It is important to note that this is most likely not an exhaustive list of museums in the Philippines. However, since I needed a way to contact these museums to ask them to participate in my survey, I deleted from the list any museum without phone numbers or email addresses. This brought down the total to only 29 museums. I then sent messages to museums that had websites and email addresses and solicited assistance from a former colleague based in Manila to call museums that only listed telephone numbers in their contact information.

Twenty out of 29 museums (69%) are located in the NCR. Nine museums (30%) are spread in various regions including regions I, II, III, IV and VII. Since the Philippines

has a total of 17 regions, I can deduce that residents from other regions may not have access to a museum. Results from my data analysis indicated that 14 out of 29 museums (48%) offer resources and programs to teachers. However, only five museums provide this information on their website. These resources and programs include lectures and seminars, teacher trainings, teacher tours, lesson plans/curriculum connections, and other unspecified programs. Based on the types of programs enumerated by the museums, I surmised that there is a scarcity of resources that teachers can use outside of the museum. With only three museums (21%) offering lesson plans/curriculum connections, I came to the conclusion that developing resource materials for school teachers that can be used in their classroom is a worthwhile endeavor for me to pursue.

However, I was still left with two issues to resolve. First, I wanted this resource material to be multi-disciplinary, meaning teachers could use it regardless of whether they teach science, history, language, art, or mathematics. I needed to find topics that could be applied to lessons across multiple disciplines to attract more teachers to use the resource material in their classroom. Second, I wanted to offer my project as a model that different types of museums (science, history, and art) in the Philippines can easily adapt and replicate using their own collections. While I thought of developing different sets of materials that are discipline-specific (one each for science, history, and art), in the end, I decided against it since I knew that I did not have enough time to develop three different sets of materials. Then, I considered focusing on only one type of museum for my project and perhaps developing additional sets after I graduate and settle back in the Philippines.

I was still contemplating these questions when I presented results of my research in last year's Research Methods in Art Education class. After hearing these two issues I was grappling with, and the possibility that numerous school children in the Philippines do not have access to museums, Dr. Robin Poynor suggested I create a resource material that focused on teaching Filipino school children about museums. I thought this was a brilliant suggestion as it resolves both issues! Since I wanted to ensure that teachers in the Philippines would be encouraged to use the resource material I will develop, I needed to find out what format teachers would prefer to use. This, therefore, required a second research study.

Resource Materials Preference of School Teachers in the Philippines

The research study, which collected data specifically from elementary teachers of both public and private schools, had one critical objective: find out the format of resource material school teachers in the Philippines would prefer to use if museums made it available to them. Respondents were given three formats to choose from: 1) online curriculum resource units (lesson plans and materials that can be downloaded from a website); 2) traveling museum suitcases (museum objects, information and activities sent to schools in a suitcase); and 3) multi-media resource loans (video, audio, poster, slides on specific topics). I limited the choices to these because these are the three formats I felt that I had enough skills to competently develop.

Due to limited financial resources, I had to carry out the research while I was in the United States, and therefore, had to utilize resources offered by the internet for my research study. I used Survey Monkey, a simple and free online survey software tool, to gather data. To reach school teachers, I used various strategies that included sending

an e-mail to my personal list of contacts, as well yahoogroups (listserves) of teachers, and art and culture enthusiasts. Since not all the people in my contact list are teachers, my cover letter included a request for them to forward my message and the link to the online survey to teachers they know. I also posted the survey's link on various social networking websites, such as Facebook, Multiply, and Friendster, in an attempt to reach more teachers. A copy of the survey is included in the appendix ([Appendix B](#)).

My goal was to collect at least 50 responses. While responses from 50 teachers may not be an accurate representation of possible responses from over 400,000 public and private elementary school teachers in the Philippines, I felt that asking 50 teachers was better than assuming that I knew what format they would prefer.

Since my study involved human subjects, I submitted a request for approval to conduct the study to the University of Florida's Institutional Review Boards (IRB). However, IRB replied that because of the format of my data collecting method (surveys), a permit was not required. The survey was launched on March 6 and ended on April 15. A week after I sent out the first wave of emails, I noticed that the number of responses I was getting was quite low. I was worried that I would not reach my target number of respondents, so I asked a few friends and family members to print out the survey and physically distribute these to teachers in schools they have access to, and then send me a copy of the completed survey forms.

A total of 65 school teachers responded to the survey but only 53 responses were valid since 12 skipped some of the questions. The number one preference was multi-media resource loans chosen by 22 respondents (41.5%). Materials that could be downloaded from the internet were chosen by 16 respondents (30.2%), and museum

suitcases were chosen by the remaining 15 respondents (28.3%). These results dictated that I develop a physical (meaning not an online version) resource material with accompanying multi-media resources.

From Learning about Museums to Creating a Classroom Museum

The idea of creating lessons to introduce students to the concept of what a museum is, what it does, and its important contributions to society, evolved into a guide teachers could use to help them create a museum in their classroom. The *Teacher's Guide* remained inter-disciplinary, which means that students will be required to use, and as a result develop, skills from various academic subjects including science, math, language, history and art, in completing their project. Exhibitions can be developed from a wide spectrum of topics that support Philippine's DepEd's RBEC. Hence teachers can use the *Teacher's Guide* regardless of the academic subject they are teaching.

While I was looking for resources that could help provide theoretical support for the value of creating classroom museums, I came across a book written by Linda D'Acquisto entitled *Learning on display: Student-created museums that build understanding*. Published in 2006, the book walks the reader through an eight-step process of developing a classroom museum project. These steps include 1) introducing the museum project to students; 2) visiting a professional museum; 3) researching the museum topic; 4) designing the exhibits; 5) writing for a museum audience; 6) constructing the exhibition; 7) learning the full exhibition; and 8) opening the museum to the public. Also included in the book are photographs of classroom museums created by students from different schools in the United States, as well as sample activity worksheets and evaluation rubrics.

While D'Acquisto's book is similar in content to the *Teacher's Guide*, I would like to point out several differences. First, in D'Acquisto's book, one of the steps in developing a classroom museum involved a visit to a museum. I developed the *Teacher's Guide* specifically for students who do not have access to museums and may not have visited a museum before. As a substitute for a physical visit, I provided photographs taken inside museums that teachers can show their students. I also included additional online resources that listed museums offering virtual tours and online exhibitions both students and teachers can explore.

Second, D'Acquisto's book is structured like a textbook, or reference material, providing a wealth of information regarding the process of creating a classroom museum. However, teachers will still need to create their own lesson plans from all the information provided. The *Teacher's Guide* is structured like a traditional lesson plan, which contains background information, learning objectives, duration of module, materials needed, guide questions for class discussion, and activities. While I do not undermine the significance of the book as a valuable resource for teachers, I think a simpler structure would be more attractive to teachers because they can just take the *Teacher's Guide* and start using it in their classrooms. From conversations with museum education colleagues both in the United States and in the Philippines, I learned that teachers prefer to use museum resource materials structured like traditional lesson plans because such materials require less work for them. I have also observed that many big museums around the globe such as The Smithsonian, The Getty, Art Institute of Chicago, Tate Museum, Royal British Columbia Museum, Museum Victoria

(Australia), just to name a few, have lesson plans as part of their teacher resource offerings.

Third, and most importantly, the *Teacher's Guide* was specifically designed for teachers teaching Filipino students. I wanted Filipino students to be able to relate to the lessons by providing activities, discussion questions, and examples that they would be familiar with. For example, in Module one, after providing information about famous museums abroad, I added information about the National Museum of the Philippines. In Module three, the topic of the two examples I provided in fleshing out the exhibition concept were drawn from specific lessons listed in DepEd's RBEC.

The value of D'Acquisto's book to the development of my project was in providing proof that students are truly capable of creating classroom museums, that they learned from the creation process, and that they enjoyed participating in the project. I initially wanted to develop the *Teacher's Guide* to cater only to grades four to six. However, after reading examples of classroom museums created by students from lower grade levels, I realized that a classroom museum can be created by students who are younger or older. Therefore, I decided to remove the target audience in hopes that teachers from lower grade levels as well as teachers at the college level might find the *Teacher's Guide* useful.

A complete copy of the *Teacher's Guide* is included in the appendix ([Appendix A](#)). The *Teacher's Guide* is divided into four modules, with module containing the following sections:

- Objectives
- Duration of module
- Materials needed
- Background information

- Class Discussion
- Activity
- Evaluation
- Reference/s

The first three modules will prepare the students in creating their classroom museum by teaching skills such as creating catalog entries, writing labels, and thinking of objects and programs for the exhibition. The fourth module focuses on the process of creating the classroom museum. The number of sessions required to complete the fourth module will depend on how much time the class needs to finish creating their classroom museum. The number of sessions can vary depending on the topic of the exhibit, the number of students, and the age and skill levels of the students. The class discussion and activities have been combined but divided into different steps in creating a classroom museum.

Looking back to what I learned about museums, putting together exhibitions, and creating education programs, there was much information that I wanted to include in the *Teacher's Guide*. But I always had to stop and ask myself "how much information is too much information?" and "which information is relevant?" In the end, I realized that I was developing a guide, not a step-by-step manual, and that I had to leave room for teachers' creativity and allow them to discover a few things for themselves, or with their class.

Summary

The value of creating a classroom museum is not only in providing school children with a museum experience but also in offering learning opportunities that come from their participation in the process of creation. Students' involvement in developing a classroom museum will equip them with critical skills (such as analysis, content

mastery, critical thinking, problem-solving, communication, and collaboration) they can use inside and outside the classroom setting.

CHAPTER 4 CONCLUSION

The *Teacher's Guide to Creating a Classroom Museum in the Philippines* is a culmination of courses throughout my graduate studies, previous professional experience working for museums (and other non-museum institutions), internships in various museums, conferences attended, and conversations with colleagues, mentors, and peers. While it would have been ideal for me to have developed the *Teacher's Guide* in partnership with a specific museum in the Philippines, obstacles such as geographical distance and limited funding have prevented me from doing so. However, I have come to realize that creating teacher materials not associated with a specific type of museum in the Philippines actually increases the material's potential to be useful for a wider audience. Although the *Teacher's Guide* was developed as a multidisciplinary resource, being tied to one specific type of museum (a science, history, or art museum) could potentially limit who might be interested in using it. From my experience, most teachers in the Philippines have yet to embrace an inter-disciplinary approach to teaching. Hence, history teachers would likely consider only history museums as a possible source of resource materials to help enhance their classroom teaching. They would not think of contacting an art museum for lesson plans that address learning competencies in history using art works from the museum's exhibition or collections. A solution I would have explored if I had more time and financial resources, would be to partner with multiple institutions in the Philippines and develop the *Teacher's Guide* as a collaborative project among the various museums involved.

To help students visualize how museums look from the inside, I used existing photographs of museums in the United States that I have taken throughout my travels. I

would have preferred to include photographs and videos from museums in the Philippines. Unfortunately, I did not have any on file, nor were there any available on the internet. It would have been better if I were able to take videos and photographs of Philippine museums. I would have reproduced these photographs as posters or transparencies (for use with an overhead projector).

Before the *Teacher's Guide* is finalized, it should be pilot tested by school teachers. Volunteer teachers could be recruited to try the modules in their classroom to help evaluate its effectiveness, completeness, and ease of use. After using the *Teacher's Guide*, teachers could be interviewed about specific aspects of the different modules they think worked well or did not work. Their opinion on how activities could be improved, if needed, could also be solicited. They could also be asked if information and resources provided are sufficient or if additional resources are needed to successfully create a classroom museum. Results from this evaluation can be used to revise and improve the *Teacher's Guide*. Just like the teachers, participating students could also be interviewed to find out how they felt about the project. What part of the project did they like most? What would they do to make the lessons more enjoyable? Would they be interested in repeating the experience in other subjects? I think the museum community could also benefit from a research study to learn whether the students' involvement in creating a classroom museum resulted in making students want to visit museums on their own. If results are positive, then museums could use information gleaned from the research as leverage in raising funds to support school-museum partnerships.

Since results of the survey indicated that teachers prefer physical resources with accompanying multi-media components, this is the format I followed when I developed

the *Teacher's Guide*. However, I feel that in addition to the printed lesson plans, an electronic version of the *Teacher's Guide* should also be uploaded on the internet to reach a wider audience. While I developed the *Teacher's Guide* particularly for teachers in the Philippines, I know that it can also be used by teachers from other countries whose schools have limited physical access to museums. By making the *Teacher's Guide* available online, teachers from these countries will also be able to download and use it their classrooms. However, the teachers will have to add information about their local museums and revise some of the examples in the class discussion to concepts relevant to their students.

Experiences that generate powerful emotions are believed to be more memorable and easier to retrieve (Reisberg & Heuer, 2004). My hope is that students involved in creating their classroom museums will remember their experience positively. I think that this could encourage students to voluntarily seek out museums and therefore could have positive implications for developing future museum visitors, patrons, and advocates.

APPENDIX A
TEACHER'S GUIDE TO DEVELOPING A CLASSROOM MUSEUM IN THE
PHILIPPINES

INTRODUCTION

Museums offer many great opportunities for learning regardless of a visitor's age, interests, or background (Hirzy, 1992). Museums make ideas more accessible, help facilitate intellectual connections, arouse visitors' curiosity and interests, encourage self-confidence and motivate them to pursue future learning. Research studies have supported the fact that people learn in museums. Studies have also shown that school field trips to museums have long-term impact on students (Falk, & Dierking, 1997) and that these are salient experiences especially to elementary school children (Falk, & Dierking, 1995).

Unfortunately, not all schools can send their students to field trips in museums. To help with this problem, I developed this *Teacher's Guide to Creating a Classroom Museum in the Philippines*. If school children cannot go to museums, and museums do not have the means to reach them, then schools should create classroom museums so that students are provided with a museum experience. Aside from the benefits of having access to a museum, I strongly believe that students' participation in creating the classroom museum will be both academically and personally enriching.

Using principles of the Constructivist Theory of Learning, I designed learning modules that will equip students with analytical tools, content mastery, critical thinking, problem-solving, communication, and collaboration skills. The classroom museum is not only valuable because it will provide school children with a museum experience but it

will also offer learning opportunities that come from their participation in its creation process.

The modules in this *Teacher's Guide* are not discipline-specific and should apply easily to art, history, math or science. Modules one to three will introduce the students to the concept of a museum, museum collections, and museum exhibitions and education programs. Lessons and activities in these first three modules will prepare students in creating their own classroom museums. The fourth module will guide you through the classroom museum creation process and will require your students to apply skills that they will learn in the first three modules.

MODULE ONE: WHAT IS A MUSEUM?

Objectives

At the end of this module, students will be able to:

- Define a museum
- Understand various types of museums
- Create a concept for their own museum
- Share with their classmates the museum they created

Duration of module

One class period

Materials needed:

Images inside museums (included in this packet)

Magazines, postcards, and other sources of images

Scissors

Glue

Markers

Blank sheets of paper

Background information

The International Council of Museums (ICOM) defines a museum as:

“A non-profit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environment.”

A shorter and simpler definition is provided by the American Association of Museums (AAM). According to AAM, a museum is an institution that provides a "unique contribution to the public by collecting, preserving, and interpreting the things of this world."

Museums come in various shapes and sizes. There are very small museums that may only be as big as your classroom. But there are also very large museums, such as the State Hermitage Museum in St. Petersburg, Russia, that has a total of 365 rooms. Museums in the Philippines have equally diverse structures. The National Museum of the Philippines, located in Manila, is composed of three buildings. The National Art Gallery is located inside the National Museum Main (formerly the Old Congress Building). The Museum of the Filipino People is housed in the former Finance Building, and the future Museum of Natural History will occupy what was formerly the Department of Tourism Building.

There are different kinds of museums, and what you can see inside depends on what kind of museum it is. Works of art, such as paintings, sculptures, drawings, photographs, decorative objects, even furniture can be seen inside art museums. History museums houses historic artifacts or objects, memorabilia of famous people, antique objects, photographs, or old clothes and shoes. Dinosaur bones, fossils, different types of rocks, preserved animal specimens, scientific apparatuses and instruments, and experiments explaining scientific concepts are just some of the things

you can explore inside science museums. Children's museums are especially designed for children to explore and learn while having fun. A number of children's museums have a combination of art, history and science themes.

Class discussion

Start the discussion by asking students what they think a museum is. Then ask who have been to a museum before. Allow a few students to share their experience by answering the following questions:

- What is the name of the museum you visited?
- When did you visit?
- What did you see inside the museum?
- What else did you do while at the museum?

Share the definition of museums provided by ICOM and AAM. Then discuss different types of museums. Use the pictures provided in this resource packet to show the students what museums look like inside. Ask the students what other types of museums they can think of. Possible answers include zoos, aquaria, arboretums, anthropology museums, and planetariums.

If your classroom has internet access, you can show your class a virtual exhibit or take them on a virtual tour of some museums. A list of websites is included at the end of this resource packet.

Activity

The students will now have a chance to create their own museum! Review the different types of museums discussed and what can be seen inside. Ask the students to imagine what kind of museum they would build if they were given the chance to create one. Where will their museum be located? How big will it be? Who do they think will visit their museum?

Next, students will cut out pictures from magazines and create a collage of what they want visitors to see inside their museum. Then they have to choose a name for their museum.

Provide an opportunity for students to share their museum concepts with their classmates. They can talk about why they decided to create that kind of museum, where they will build it and what they think people will like about their museum. Students in higher grade levels can write an essay about their museums.

Keep the collages for future modules. These may be used as references in succeeding activities or even displayed as part of the classroom museum.

Extension

The best culminating activity for this module is to bring your class to a local museum, if there is one in your area. If possible, make arrangements with the museum staff for a behind the scenes tour of the facility. Students will benefit from the opportunity to hear about the museum staff's job and their responsibilities.

Evaluation

Students can be evaluated through their participation in classroom discussion. The collage they made and how they talk (or write for older students) about it during the sharing exercise can also be used to evaluate how well students understood and applied what they learned in this module.

Additional reference

Hirzy, E. (1992). *Excellence and equity: Education and the public dimension of museums*. Washington, D.C.: American Association of Museums.

MODULE TWO: WHAT IS A COLLECTION?

Objectives

At the end of this module, students will:

- Research the concept of museum collecting
- Share with their classmates a sample of their collection
- Create catalog entries or document objects

Duration of module

Two class periods

Materials needed

Catalog template (included in this packet)

Ruler/tape measure

Pencil or drawing materials

A set of objects you personally collect to share and discuss with the class

Background information

People collect different objects for various reasons. Some people collect for sentimental reasons, to tell stories, as a financial investment, or for learning. Others collect certain things because they are really just interested in them.

Collections can be as simple as a bag of marbles with varying sizes and colors, or as grand as a collection of houses and airplanes. Naturalist Charles Darwin collected plants and animals, which he studied and use to help him formulate his Theory of

Evolution. Former Philippine first lady, Imelda Marcos, has a famous collection of shoes that are now at the Marikina Shoe Museum.

Some people donate their collections to museums so that others can see, appreciate, and learn from these objects. In 1753, Sir Hans Sloane bequeathed his collection of 71,000 books, antiquities and natural specimens to the UK government; this became the British Museum's founding collection. Solomon R. Guggenheim, an American businessman, donated his art collection to the Solomon Guggenheim Foundation, which later established the Guggenheim Museum. When putting together exhibitions, museums sometimes borrow objects from private collectors (people who have collections) to add to objects from their collection.

Objects in the museum are cared for by the museum's Collections Manager or Registrar. They make sure that objects in the collection are properly handled, stored, and displayed. They also make sure that the objects are documented properly. Details such as the name and dimension of the object, who made it, when it was made, what it is made of, as well as descriptions and other information about the object are recorded and stored in a database. Pictures or illustration of the object are also added for easier identification.

Many objects in the museum's collection, especially old objects, are fragile and irreplaceable. This is one of the many reasons why museums do not allow visitors to touch objects on exhibit. Museums have to take good care of their collection to ensure

that future generations will also have the opportunity to see and learn from these objects. However, there are also museums, in particular children's and science museums, that allow visitors to touch objects on exhibit. These types of museums rely on hands-on experience to teach visitors about concepts in the exhibition. Most of the objects in their exhibition are intended to be repaired or replaced when damaged.

Class discussion

Day One:

Review what students learned about museums from the previous module. Focus the discussion on the objects that can be seen inside museums as segue to discussing the concept of collecting. You can facilitate the discussion by asking students the following questions:

- What do you collect?
- Why do you collect those objects?
- Where did you get those objects? Were they gifts, did you buy, or make them?
- How many of these objects do you have?
- How do you take care of your collection?

Share your collection with the students. You can also use the questions above to talk about your collection. You can display your collection on a table or shelf so students can examine them. If your objects are not fragile, and you do not mind that they are handled, you can pass them among the students so they have a chance to closely examine them.

It is important to highlight that while one object may be valuable for someone, it may be considered worthless to another. There are a lot of objects that are collected not for its monetary value but for its historic, scientific, cultural, or emotional significance.

Objects included in the collection could also tell something about the person who collected them.

- What can the students tell about you from the collection you brought? Let them explain how they came to that conclusion.
- Ask students to imagine that each of them is preparing a personal time capsule that will be opened 100 years from now. What objects would they put inside the time capsule to let people in the future know about who they are? Why?
- How about if they are putting a time capsule about their class, their school, or even their town? What objects would be useful to include in the time capsule?

Draw a large version of the catalog template on the board (or on a big piece of paper) and choose a few objects from your collection to catalog with the class.

For the next session, ask students to bring a set of objects they collect. Also make five copies of the template for students' use.

Day Two:

Ask students to share and talk about the collection of objects they brought. You may choose to divide the class into groups and students discuss their collection within their group. If you have enough space, you can even display all the objects (or choose several students to show theirs) on a table so everyone can have an opportunity to

examine them. Owners of the objects can stand around the table to talk about their collection.

Activity

Distribute copies of the catalog template to students. They are now going to catalog the objects from their collection.

Evaluation

Students can be evaluated through their participation in classroom discussion.

Completeness and accuracy of catalogue entries they prepared can also be used to evaluate how well they understood the lesson.

Additional reference

Buck, R., Gilmore, J., & American Association of Museums. (1998). *The new museum registration methods*. Washington, DC: American Association of Museums.

CATALOG ENTRY TEMPLATE

CATALOG ENTRY	
Accession Number	
Object	
Artist/Maker	
Title	
Date made	
Where made	
Medium/Materials	
Dimensions	
Value	
Provenance/Owner	
Date received	
Description	Picture/illustration
Catalogued by	
Date catalogued	

MODULE THREE: WHAT IS AN EXHIBITION?

Objectives

At the end of this module, students will:

- Articulate the concept of a museum exhibition
- Enumerate the steps in creating an exhibition
- Write object labels
- Create, as a group, a proposed exhibition complete with title, big idea, objectives, objects and education programs
- Present their exhibition proposal to class

Duration of module

Two class periods

Materials needed

Images inside museums (included in this resource packet)

Completed catalog entries from module two

Sample wall text and labels (included in this resource packet)

Background information

According to Beverly Serrell (1996) an exhibition is “a defined room or space, with a given title, containing elements that together make up a coherent entity that is conceptually recognizable as a display of objects, animals, interactive, and

phenomena”. The key word here is coherent. An exhibition is not just a group of random objects put together in a room. These objects, when taken together, should tell a story, introduce ideas, or teach a phenomenon.

The person primarily responsible for conceptualizing and putting together an exhibition is called a curator. In big museums, the curator works with group of people (collectively they are called Curatorial Department) to help his/her in organizing an exhibition. However, in small museums, curators often work alone or with people outside of the museum.

Below are the steps in creating an exhibition. Please note that there are more steps involved in creating an exhibition depending on its magnitude. Some museums develop a catalog or book, souvenirs (cups, shirts, postcards, etc.) or videos for the exhibition.

Topic - the focus of the exhibition.

Big Idea - a sentence stating what the exhibition is all about.

Objective - exhibitions are put together with specific objectives in mind. This is what the museum/curator hopes to achieve through the exhibition. The exhibition objective could be to teach visitors an idea or concept, a new way of doing things, advocate a cause, or perhaps tell a story about something or someone.

Title - name of the exhibition. A good title is concise but clear and can arouse visitor's curiosity about the exhibition.

Object list – these are the things that will go into the exhibition. The curator works with the registrar or collections manager to borrow objects from the museum's collection or from private collectors.

Exhibition lay-out - physical design of the exhibition. Once the objects are identified and collected, the exhibit designer, as the title suggests, designs the space where the exhibition will be installed. Together with the curator, the designer plans the lay-out of the exhibition. They decide where each object will be placed, how it will be displayed, and whether it will be clustered with other objects or displayed alone.

Labels - written words that provide visitors with information about the exhibition. There are different types of labels in an exhibition:

- Introductory label – introduces the visitors to the exhibition and tells them what to expect from it. Introductory labels should not be too long, otherwise visitors may not be interested in reading them. Serell (1997) recommends introductory labels to have between 20 to 300 words. Some introductory labels could also include pictures. Below is an example of an introductory label created for an exhibition about the American Thanksgiving, an annual family tradition celebrated by families in the United States:

GIVING THANKS: THE REAL FIRST
THANKSGIVING

When do you celebrate Thanksgiving?

“Giving Thanks: The First Real Thanksgiving” tells the story of the real first thanksgiving celebrated fifty six years before the Pilgrims landed at Plymouth Rock. The exhibition is divided into three aspects that were so integral to this event in St. Augustine: the people, celebrations, and foods.

Meet the Spaniards who played crucial roles in the celebration of the first Catholic mass as well as the Timucuan who celebrated with them.

See accurate representations of Timucuan based on information from historians and archeologists.

Compare concepts of giving thanks then and now.

Discover the food they shared during the feast.

Share your family’s Thanksgiving recipes and traditions.

- Section or group labels - provides information about a sub-topic of your exhibition. It can also be a label explaining why objects are grouped together.

Below is a group label for the same exhibition above:

Feasts typically followed masses of thanksgiving. This section concentrates on the food shared by Menendez and his men with the Timucuans in St. Augustine. Contrary to the traditional tale, this Catholic ceremony was the first celebration of Thanksgiving in the New World. Also included are recipes of two contemporary Thanksgiving dishes enjoyed by many American families.

- Captions- are labels for specific objects. Captions provide basic information about the objects on exhibit such as: name of object/title of artwork; name of artist; date created; place created/origin; medium (what it is made of); dimensions; owner (if borrowed from a private collector or other museums).

Captions are placed next to the object- but NEVER on the object itself!

Example of a simple caption for a painting:

Burst of sunshine

Felisimo Andres

Philippines, 1973

Oil on canvas

36" X 48"

On loan from the National Museum

Example of a simple caption for a capiz shell jewelry box:

Jewelry box

Cebu, Philippines

Capiz shell

Donated by a private collector

Captions that provide more than the basic information about the object are described as interpretative labels/caption. These may be more effective because they make visitors take a closer look at details of the object or share interesting information about the object. Below is an example of an interpretative caption for a painting:

Chief Outina

Theodore Morris

America, date unknown

Oil on canvas

26" X 17"

Courtesy of artist

Timucuans were already occupying the area of what would later be known as St. Augustine when Menendez landed on September 08, 1565. This is a portrait of the chief of the Timucuans, Chief Outina, as rendered by Theodore Morris. The Tattoos and the red paint on the Chief's body signify his nobility. His hair is worn at the top of his head in a knot, said to make him appear taller and add to his commanding appearance. He also has long and pointed fingernails, and his ears are adorned with small inflated fish bladders.

Captions for interactive objects provide directions on how to use them. Below are examples:

Press the button on the left to hear a current version of *Te Deum laudamus*.

Press the button on the right to hear Father Lopez narrate the sequence of events that led up to the mass.

Education programs

As soon as the exhibition concept is finalized and approved by the Museum Director, the Museum Educator starts to think about programs and activities that will help visitors better understand the exhibition and maximize their opportunities for learning. If budget permits, educators also develop guides and activity sheets for the exhibition. It is the educator's job to ensure that visitors to the museum get the best possible educational experience from their visit. Education programs for exhibitions can include lectures, informal discussions, demonstrations, arts and craft activities, story-telling sessions, and performances. Some of these programs are held during the exhibition opening reception.

Marketing/Promotion

Museums make sure people know about their exhibition through a variety of ways. They send out press releases to TV and radio stations, newspapers and magazines. They also produce banner, posters, fliers, and postcards. Exhibitions are also announced at the museum's website.

Exhibit Opening

After exhibition installation is completed, the museum holds an exhibit opening reception. This marks the formal opening of the exhibit to the general public.

Class discussion

Day One:

Show pictures taken from the *Country Music Hall of Fame and Museum* and *Orlando Science Center* to your class. Encourage the students to look closely at each of the pictures. Ask the following questions to direct your classroom discussion:

- What objects do you see in this picture? (let them enumerate as many objects they can see)
- Based on the objects you can see, what do you think this exhibition is all about?
- What do you think is a good title for this exhibition?
- Aside from objects what else do you see? Draw their attention to the small pieces of paper next to the objects. These are called captions.
- How do you think this exhibition was put together? Can you imagine what people at the museum did to put this exhibition together? (possible answers: thought of a good topic, thought of a title, borrowed instruments from musicians, wrote captions, assembled the dinosaur bones, asked old people for pictures, etc.).

Write down on the board their answers.

Start discussing the steps in creating a museum exhibition. As you discuss the steps, take special notice to student answers that are correct or close to the idea of the steps being discussed. You may choose to discuss the section about labels right before the label writing activity. Practice conceptualizing an exhibit by going through the exhibit creation process using specific topics. Below are a few examples of exhibition topics

that may help your students understand how to conceptualize an exhibition. Please note that these examples have been simplified.

Example #1

Topic: Dengue

The Big Idea: Dengue: Cause, symptoms, and prevention

Objective: Introduce visitors to the deadly disease and teach them preventive measures to avoid getting infected

Sub-topics: (Introduction) What is dengue?
(Diagnosis) What are its symptoms?
(Aedes mosquito) How does one get infected?
(Prevention) How can we avoid getting infected?

Objects: Pictures illustrating symptoms of dengue
Diagram of how a blood test is conducted
Stethoscope, blood pressure apparatus, blood test kit, and other medical tools
Picture of the Aedes mosquito, a diagram of its life cycle, and illustrations of its breeding sites
Mosquito net, insect repellents, long sleeved shirts, pants, socks, and other objects that could help keep prevent being bitten by mosquitoes

Interactive/multimedia components:

Videos of a children taking about their dengue experience
A big jigsaw puzzle of the aedes mosquito
Q&A board about symptoms of dengue
Posting board where visitors can leave their suggestions in stopping the spread of dengue in the community

Education programs:

Invite a doctor to talk about dengue

Design a poster/slogan on dengue prevention

Example #2

Topic: Simple Machines

Big Idea: Simple machines make our daily lives easier by allowing us to accomplish work with little effort.

Objective: Help visitors understand the six different kinds of simple machines, how these work, and where they have been used to make our everyday lives easier.

Sub-topics: The six types of simple machines
Compound machines
Mechanical innovations that use simple machines
Everyday challenges simplified with the help of simple machines
The future of simple machines

Objects: Simple machines
Example of everyday objects that use simple machines (bicycle, screws, slides, door stopper, scissors, pliers, hammers, etc.)
Illustrations of other simple machines at work (elevator, escalator, ramp, see-saw etc.)
Inventions, gadgets, tools created by students using simple machines

Interactive/multimedia components:

Videos of how simple machines work

Challenge corner: list a number of common day problems (in school or at home) and ask visitors to design a gadget that uses simple (or compound) machines to solve them

A set of small simple machines that visitors can explore

Education programs:

Demonstrations on how simple machines work

Inventor-challenge (use simple machines to create an invention)

Divide the class into small groups. Assign an exhibition topic to each group. You can also assign the same topic to all groups to see which group could come up with the most creative ideas. In the following session, each group will present their exhibition concept complete with a title. This activity will help them prepare for the actual creation of their classroom museum.

Day two:

Group presentations.

Activity

Remind the students again about the captions in the exhibition. Share examples of the labels. It is now their turn to write captions for the objects they brought in during the previous module. Use the information listed in the catalog entry for the objects.

Below are a couple of reminders about writing captions:

- When writing labels, remember to K.I.S.S – keep it short & simple.
- If this object can speak, what would it say to you?

- What is the most interesting information about this object: is it the person who made it, how he made it, or where it came from?
- What is unique about this object?

Evaluation

Students can be evaluated through their participation in classroom discussion. Captions that students write individually should demonstrate how well they the concept of writing labels, particularly captions. Students should also be evaluated based on their contribution to the group presentation.

Additional reference

Serrell, B. (1996). *Exhibit labels: An interpretive approach*. Walnut Creek: Alta Mira Press.

MODULE FOUR: CREATING YOUR CLASSROOM MUSEUM

This final module is the culmination of the first three modules. Skills that your students learned from activities in modules one to three will be applied in this module.

Objective

At the end of this module, students will:

- Create their classroom museum

Duration of module

Number of class periods required to complete the classroom museum

Materials needed

Images inside museums (included in this resource packet)

Catalog template (from module two)

Tape measure

Art materials

Pedestals/tables/boards for mounting exhibit objects

Objects for the exhibition

List of museums with virtual tours and online exhibitions (included in this packet)

Background information

Information needed will depend on the topic of the exhibition

Class discussion and activities

Start by choosing a topic for your classroom museum. Remember that you can create an exhibition about practically any topic in your academic curriculum. How about an exhibition on fractions, whole number or even integers? Maybe your class would like to put together an exhibition about verbs, nouns, adjectives. Perhaps even an exhibit on Philippine idiomatic expressions. One of the great things museums are able to do is to help make abstract ideas become more accessible to visitors. How you can achieve that is the challenge to you and your students.

Once you have identified your topic, you need to decide on the Big Idea. This statement will help your students think about what to include and not include in the exhibition.

These steps should involve your students:

A. Brainstorming session to establish objective and sub-topics of the exhibition

Review group presentations from module three to remind students about the conceptualization process. During this session, you should encourage students to contribute ideas freely. Remind them that no idea will be considered silly or ridiculous and the every single idea will be considered. You might be surprised with what your students come up with once they become confident about voicing their ideas and thinking out of the box.

What story will your classroom museum tell? What new knowledge do you wish to impart on your visitors? When thinking of an objective for your classroom museum, consider what you want visitors to get out of their classroom museum

experience. Do you want them to view something in a different light? For example, you want students to think that math is fun, or history is exciting, or science is not limited to textbooks, then your class can put together an exhibition that will result in visitors feeling this way.

Once the objective has been established start discussing what will be included in the exhibition. Write down all the ideas that students suggest. Cluster together similar ideas and see if a bigger idea emerges from them. Review the list and choose four to five clusters of ideas that support the topic identified. Assign each cluster of ideas to a group.

B. Research

Each group will have to research their assigned topic. Information from their research will help them decide what objects to include in their exhibition as well as what to write in the exhibition labels.

C. Agree on Title

As discussed in module three, titles should tell visitors what the exhibit is about as well as arouse their curiosity about it.

D. Generate an object list

Students can create objects for the exhibition or borrow them from the school or community. Remind students to think of specific objects that will help tell the story of their exhibition. Objects can be photographs, illustrations, art works,

videos, artifacts, or costumes. Students can borrow or create these objects themselves. Make sure that a catalog entry is prepared for each object as this will help facilitate return of objects to their rightful owners. Review how to write catalog entries from module two.

E. Layout exhibition

Decide how the exhibition will be installed. Students can draw a map of the exhibition space to help them plan where objects will be placed and how they will be presented. Unless they are very large, avoid putting objects directly on the floor as it might make it difficult for visitors to see them. Putting objects on the floor could also damage them. Avoid sticking pins or applying glue or adhesive tapes directly to photographs (or objects) and attaching them directly on the walls/exhibition boards as this will make it difficult to remove them later and result in damaging the objects.

F. Write text and labels

Review guidelines on writing captions and labels from module three. Exhibition text should be written in the language that most of your visitors will understand. Some museums provide bi-lingual or multi-lingual text to accommodate visitors speaking different languages. Consider writing your text in English and your local language. Labels should be big enough that people can easily read them. Place labels at a height that visitors will easily see. Since your primary target visitors are students, place labels at the eye level of a student with an average height.

Again, avoid putting labels directly on the objects. Also make sure that the labels are not obscuring visitors' view of the objects.

G. Think of programs and activities

The type of education programs and activities you can organize depends on the focus of your classroom museum. Refer to module three to get ideas on types of that can complement an exhibition. Your class can invite an artist to conduct a painting or drawing demonstrations. You can also provide a corner in your classroom museum where visitors can try their hands at painting, drawing, or creating something relevant to your exhibition. Consider inviting an expert to come to your classroom museum and talk about a specific subject within the topic of your exhibition. Explore your community for people who have firsthand experience or interesting stories that relate to your exhibition. For example, your exhibition is about natural calamities. Perhaps one of your students has a parent who is a geologist; your class can invite him or her to come to class to talk about earthquakes.

H. Promote the museum

Think of creative ways to invite other classes (or grade levels even other schools) to visit your classroom museum. Students can create flyers and posters to promote their exhibition.

I. Open museum to the public

Your classroom museum can have an opening reception. You may choose to invite family and friends of your students to visit the classroom museum. This will provide your students with an opportunity to showcase their work and be proud of what they have accomplished. Some students can play the role of a museum guide during the opening to engage visitors, answer questions, conduct demonstrations, and lead activities.

Evaluation

Students can be evaluated based on their participation and contribution in the classroom museum creation process. For older students, you can ask them to write an essay about their experience, what they liked most about the process of creating their classroom museum and why, and what they would change if they had a chance to re-do the exhibition. For younger students, ask students to list down what they learned from the experience. Other forms of evaluation could include asking students to maintain an individual journal to record their personal reflections, or a scrap book to document their participation.

Additional reference

D'Acquisto, L. (2006). *Learning on display: Student-created museums that build understanding*. Alexandria, VA: Association for Supervision and Curriculum Development.

PICTURES OF MUSEUMS

- Baltimore Museum of Art
Baltimore, Maryland, United States of America
<http://www.artbma.org/>
- National Museum of American Indian
Washington, DC, United States of America
<http://www.nmai.si.edu/>
- Country Music Hall of Fame and Museum
Nashville, Tennessee, United States of America
<http://countrymusichalloffame.org/>
- Orlando Science Center
Orlando, Florida, United States of America
<http://www.osc.org/>
- Strong National Museum of Play
Rochester, New York, United States of America
<http://www.museumofplay.org/>

BALTIMORE MUSEUM OF ART



BALTIMORE MUSEUM OF ART



BALTIMORE MUSEUM OF ART



NATIONAL MUSEUM OF THE AMERICAN INDIAN



NATIONAL MUSEUM OF THE AMERICAN INDIAN



NATIONAL MUSEUM OF THE AMERICAN INDIAN



COUNTRY MUSIC HALL OF FAME AND MUSEUM



COUNTRY MUSIC HALL OF FAME AND MUSEUM



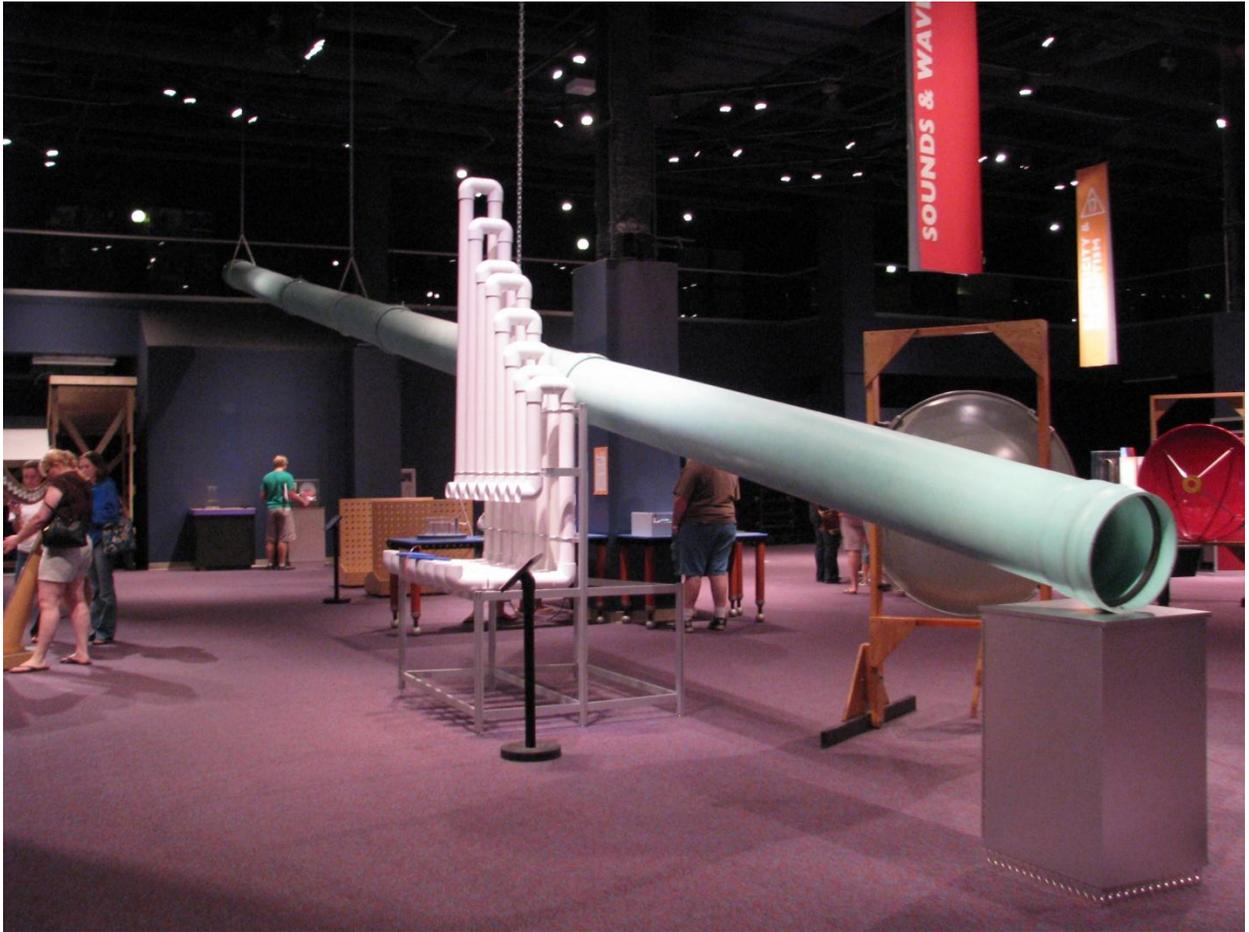
COUNTRY MUSIC HALL OF FAME AND MUSEUM



COUNTRY MUSIC HALL OF FAME AND MUSEUM



ORLANDO SCIENCE CENTER



ORLANDO SCIENCE CENTER



ORLANDO SCIENCE CENTER



STRONG NATIONAL MUSEUM OF PLAY



STRONG NATIONAL MUSEUM OF PLAY



STRONG NATIONAL MUSEUM OF PLAY



ADDITIONAL ONLINE RESOURCES

If your school has access to the internet, I recommend that you explore a few of these websites with your students. I have listed two types of museum websites, those that offer virtual tours of their museum and those that have online exhibitions. The virtual tours will provide you and your students with an opportunity to see and explore real museums virtually. You can use websites that have online exhibitions to get inspirations on topic, theme, content, and even activities for your classroom museum. Observe labels and text of the online exhibitions and use these as reference and example in helping your students write their own text and labels for your classroom museum.

VIRTUAL TOURS

Louvre (France)

http://www.louvre.fr/llv/musee/visite_virtuelle.jsp

State Hermitage Museum (Russia)

http://www.hermitagemuseum.org/html_En/08/hm88_0.html

The Monticello Explorer (US)

<http://explorer.monticello.org/>

ONLINE EXHIBITIONS

Smithsonian National Museum of African Art (US)

This offers an opportunity for users to select objects from the museum's collection, save them, view online, and share with others. They can even create labels and descriptions of their chosen objects. It's like setting up your own exhibition!

<http://africa.si.edu/collections/createselections.asp>

Smithsonian's National Museum of American History (US)

Online exhibitions

<http://americanhistory.si.edu/exhibitions/category.cfm?category=online>

Natural History Museum (UK)

Online exhibitions

<http://www.nhm.ac.uk/nature-online/online-exhibitions/index.html>

National Gallery of Art (US)
Online exhibitions
<http://www.nga.gov/onlinetours/index.shtm>

British Museum (UK)
Online exhibitions
http://www.britishmuseum.org/explore/online_tours.aspx

UC Berkeley Museum of Paleontology (US)
Online exhibitions
www.ucmp.berkeley.edu

Smithsonian National Museum of Natural History (US)
Online exhibitions
<http://www.mnh.si.edu/exhibits/virtual.html>

Exploratorium (US)
A collection of online exhibitions, hands-on activities, articles videos, and more.
<http://www.exploratorium.edu/explore/exhibits.html>

Museum of Science Boston (US)
Online exhibitions
http://www.mos.org/events_activities/virtual_exhibits

Florida Museum of Natural History (US)
Online exhibition
<http://www.flmnh.ufl.edu/staugustine/>

The Micropolitan Museum (UK)
Online exhibition
<http://www.microscopy-uk.org.uk/micropolitan/index.html>

The Franklin Institute (US)
Online exhibition on the human heart
<http://www.fi.edu/learn/heart/>

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- Falk, J., & Dierking, L. (1997). School field trips: Assessing their long-term impact. *Curator*, 40, 211–218.

APPENDIX B
MUSEUM RESOURCE MATERIALS PREFERENCE OF SCHOOL TEACHERS IN THE
PHILIPPINES SURVEY

Certificate of Informed Consent

My name is Ethel Villafranca and I am a Filipino graduate student pursuing my master's degree in Museum Studies at the University of Florida. I am conducting a thesis project entitled Building Bridges: Museum Outreach Resource Material for School Teachers in the Philippines. My faculty advisor is Dr. Glenn Willumson and he may be contacted at gwillumson@arts.ufl.edu or +1 352 273-3062.

Part of the project is a research study to determine what format of museum outreach resource materials (travelling suitcases, online resource materials, or posters and slides) school teachers in the Philippines would use if it were made available to them. Data collected from this study will inform the direction of the resource material that I am developing as my thesis project. The resource material will aim to introduce students to what a museum is, what they do and their important contribution to society. Lessons and activities, which will be aligned with the Philippine Department of Education's Revised Basic Education Curriculum, will teach how museums fulfill their educational role through collections and exhibitions. The resource material will be designed for multi-disciplinary use and can be applied to lessons in science, history, math or art. As a culmination, students will collaborate to create their own classroom museum.

This is a very short survey composed of only nine questions and should not take you more than ten minutes to complete. If you choose to participate in this study you will

be asked to indicate the format (travelling suitcase, online resources materials, or posters and slides) of the resource materials that you would be willing to use if museums developed and made these available to you. You will also be asked to provide basic information about yourself, such as location and type (private or public) of the school where you currently teach, the number of years you have been teaching, and the grade level of your students. Your personal details will remain private. There is no compensation for participating, and there are no risks associated with participation in this study. There are no direct benefits to you for participating in the study. Your participation is voluntary and you may withdraw your consent at anytime without consequence.

I may be contacted at ethelvillafranca@ufl.edu for any questions about the study and the project.

By answering this survey, you agree that you are at least 18 years old and that you read, understand, and accept the above information.

**MUSEUM RESOURCE MATERIALS PREFERENCE OF SCHOOL TEACHERS IN
THE PHILIPPINES SURVEY**

1. Name : _____

2. E-mail address : _____

3. Where do you currently teach? (Please indicate city and region)

4. How many years have you been teaching?

- | | |
|--|--|
| <input type="checkbox"/> less than one year | <input type="checkbox"/> less than ten years |
| <input type="checkbox"/> less than three years | <input type="checkbox"/> more than ten years |
| <input type="checkbox"/> less than five years | |

5. What grade level/s do you teach?

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Grade 1 | <input type="checkbox"/> Grade 4 |
| <input type="checkbox"/> Grade 2 | <input type="checkbox"/> Grade 5 |
| <input type="checkbox"/> Grade 3 | <input type="checkbox"/> Grade 6 |
- Other: Please specify _____

6. Have you ever brought your students to a museum for a field trip? Please specify name/s of museum.

- yes
 no

Please list names of museums where you have taken your students:

7. What educator/teacher resources offered by museums have you used to support traditional classroom teaching techniques? Check all that are applicable.

- None, I have never used any
- Pre-field trip guidelines/activities
- Field Trip Worksheet
- Curriculum Resource Units (Printed lesson plans and materials)
- Online Curriculum Resource Units (Lesson plans and materials that can be downloaded from a website)
- Traveling Museum Suitcases (Museum objects, information and activities sent to schools in a suitcase)
- Multi-media Resource Loans (Video, Audio, Poster, Slides)

Others: Please specify _____

8. Please provide name of museum/s where you got these resources from.

9. What type of school teacher resources from museums you would use in your classroom if it was made available to you? (Note: Resources will support DepEd's Revised Basic Education Curriculum) Please choose only one.

- Online Curriculum Resource Units (Lesson plans and materials that can be downloaded from a website)
- Traveling Museum Suitcases (Museum objects, information and activities sent to schools in a suitcase)
- Multi-media Resource Loans (Video, Audio, Poster, Slides on specific topics)

10. Other comments and suggestions.

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BIOGRAPHICAL SKETCH

Ethel Villafranca is a Fulbright Scholar from the Philippines pursuing her master's degree in museum studies, specializing in education, at the University of Florida. She completed her undergraduate degree in Philippine Arts, majoring in arts management, at the University of the Philippines in 1998. The same year, she joined the Ayala Museum, an art and history museum located at the heart of the business district of the Philippines. Six years later, she was hired to manage the Robinsons Children's Library, free access private libraries based inside shopping malls. She has held internship positions at the Florida Museum of Natural History, Harn Museum of Art, San Diego Museum of Art, and at the Smithsonian National Museum of American History. She has received fellowships/scholarships from the Asian Cultural Council (an affiliate of the Rockefeller Brothers Foundation), Association of American Museums, Florida Association of Museums, and the University of Florida. Although she is a museum educator by heart, she is also interested in technology, visitor research, and audience development.