Morocco "

THE EDUCATIONAL ASPECT OF THE MUSEUM OF WATER - MOROCCO

Ikrame SELKANI

Professor at CESINE University Center Santander - Spain

PhD in Heritage – University of Cordoba – Spain

ikrame.selkani@gmail.com

Resumen

Los museos contribuyen a la difusión de formas de conocimiento y cultura (Jacobi y Coppey, 1995).

Vista desde una perspectiva educativa, la exposición es un campo/recurso que el profesor utiliza para que sus alumnos adquieran los conocimientos correspondientes a los objetivos de un programa

escolar. En este caso, la misma exposición puede utilizarse con distintos fines y métodos (Jacobi y

Coppey, 1995).

Son los profesores los que han tenido esta preocupación por sus alumnos y colegas del servicio

cultural, cuando los responsables de los museos han tratado de ampliar el objetivo de su acción, el servicio de la mirada o del deleite, algunos están tentados de decir, planteando así lo que les parece

la esencia de su acción: aprender, por supuesto, pero también aprender a mirar (Jacobi y Coppey,

1995).

Veremos aquí el caso del Museo Mohammed VI para la Civilización del Agua - AMAN situado en

Marrakech - Marruecos, que fue creado en 2017 por el gobierno como homenaje al genio marroquí en la gestión del agua, la gobernanza del agua, y como estima al trabajo contemporáneo en política

hidráulica.

El museo del agua dispone de dos salas pedagógicas dedicadas a grupos escolares: en ellas se

realizan ejercicios prácticos para talleres de aprendizaje, y actividades en grupo.

Los talleres pedagógicos del museo pretenden que los niños de 5 a 12 años descubran un conjunto

de temas en torno al agua, la sostenibilidad y los conceptos de desarrollo sostenible; así como la

preservación de los recursos naturales.

La pregunta que hay que hacerse es: ¿cómo podría el museo del agua de Marrakech ser una

herramienta educativa para niños y personas de corta edad?

Palabras clave: Aman Museo del agua, Marruecos, Educación, Pedagogía, Aprendizaje

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## Introduction

In truth, every contemporary museum's educational service prioritizes education while keeping the major goals and objectives: conservation, research, and marketing (Jacobi, & Coppey, 1995).

Museums, since their creation, participate in the diffusion of culture in society. In this respect, every museum is already a body that is part of the project of educating the public. Moreover, from the outset and in accordance with the museum project as described by Diderot in the Encyclopedia's article on the Louvre, museum institutions have taken the gamble of developing a specific educational policy. Today, even if it is not always a vocation that is seen as essential, museums cannot but seek to fulfill their educational mandate. In any modern museum, the educational service became captivating and unmissable.

To learn how to look at and to look for, the teachers had a real concern seeking the educational method applied on the museum exhibitions. This technique was launched by these museums that have thought about catch the attention of the students and the young learners.

The Mohammed VI Museum for the Civilization of Water - AMAN, located in Marrakesh, Morocco, was established in 2017 by the Moroccan government focusing on water management, water governance, and as esteem to modern efforts in hydraulic policy.

The objective of the multiple classes and workshops is to help and assist the learning process for the public target: children from 5 to 12 years old. These youngsters work out the sustainability knowledge personalized with their age and uncover the understanding about water and natural resources preservation.

In this paper we will discover how the Water Museum in Morocco adapts the knowledge to young people and juvenile learners. The school groups that benefit from this journey gain from the practical exercises developed while learning in seminars and group activities.

The point of this paper is, how can the Marrakesh Water Museum serve as a teaching instrument for children and young people?

# 1- Museum: a place of education

The types of educational activity vary considerably depending on the nature of the institutions or the general audience. The principal individual for a learning process for young learners is the teacher (Charalampopoulou, 2013). The teachers have had this preoccupation for their students and for their colleagues. It is about to learn certainly, but to learn to look. Museums therefore contribute to the diffusion of forms of knowledge and culture (Screven, 1976).

The first, seen from the educational side, makes the exhibition a ground or a resource that the teacher uses to enable his students to acquire the knowledge corresponding to the objectives determined in a school program (Screven, 1976 and 1986).

In reality, the objectives of educational actions organized in museums are rarely written in a precise manner and they do not lend themselves very well to the administration of a criterion-based evaluation (Screven, 1991). We can assume that the effects of these investigations testify some new relationships before, during or at the end of a museum visit:

Jacobi and Coppey (1995) states for example, a visit to the museum allows to escape from the school routine and the weight of habits (effect of disorientation), to take part in a new activity, not to have only to listen or to take notes (effect of novelty), to establish other types of between adults and students of other types of exchanges (relational effect), to escape the individualism inherent in school evaluation (sociability effect).

### 2- The features of museum education

The museum as well as institutions with collections such as zoos, botanical gardens aquariums... They are an alternative<sup>1</sup> education structures and educational forms.

The school is, moreover, the only institution that has the social responsibility to instruct and educate (Boudjema, 2016). Nevertheless, the school is not the exclusive place for education, many private and public institutions are providers of educational services, and the museum occupies a privileged place in the chain of distribution.

Indeed, learning in an exhibition or a museum is characterized above all by a freedom of choice in the exploration of the visit, whereas school is mandatory.

Moreover, the museum offers an active pedagogy called differentiated with a multitude of tools to help the exhibits understand (real objects, multimedia, software, manipulations etc.) where the actor is solicited by activities (Guichard, 1995).

Learning in museums, in its broad sense, is a by-product of the free interaction of leisure oriented visitors with exhibitions and their surroundings"<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> https://infed.org/museums-and-informal-education/

The museum can become a privileged partner of the school and offers an educational approach which is certainly different, but at least complementary.

## 3- The museum as a school support

The essential role of the educational mission is to include the institution in a process of knowledge. The partnership between school and museum is going to be placed in a complementary practice of transmission of knowledge (Buffet, 1998). It is by constituting programs intended for school audiences, directly or not in connection with school programs, and by encouraging active participation that the museum fully fulfills its educational function.

It is important to note that research shows that educational programs linked to the school curriculum tend to foster knowledge acquisition and develop a positive attitude towards the museum (Du Sablon. & Racette, 1991)

The museum is seen by teachers as an informal place of experience and exploration, it is an instrument for mediating knowledge that complements the school (Darras et al., 1998). The museum is also seen as a resource for teaching (Paquin, 2007)

The museum is thus a place conducive to learning with alternative resources that the school can exploit. It is in this sense that Claude Fourteau states: "as a whole, the pedagogical experiences reported in the case studies show that museums have a considerable and largely unexploited potential of resources and offer an irreplaceable environment for lifelong learning. They can offer new educational, they can provide new educational models and alternative learning spaces (Fourteau, 2006).

Museums, especially science and technology museums have been able to develop real educational actions based on school educational actions and on school programs, allowing teachers to use museums as supports for their museums as a support for their lessons. Thus, the Museum of natural history of Paris has proposed, at the end of the 80's, to the students of scientific field, sessions on the photosynthesis. Here, the museum proposes a theme of the school program but goes further the predominant presentation of the textbooks and invites the student to put himself in a situation: "the means used are the same as those currently used in laboratories" (Girault and Guichard, 1995).

The museum thus does not hesitate to become a partner of in the practice of scientific experimentation. It contributes to the acquisition of concepts for the different levels of education from kindergarten to university (Allard et al., 1993).

The museum will therefore develop concepts and intellectual skills. However, what is acquired is not only of a cognitive nature, they are also of an affective order, of the imaginary, of the sensitive or of the social. It encourages questioning and places the visitor in a situation of learning by trial and by error (Guichard, 1995).) According to Jack Guichard's expression, unlike school, which seeks the right answer. The museum offers visitors the possibility of interacting and verbalizing the tasks to be carried out. It authorizes a quest on the approach, the answers to a reflection. In this sense, the museum and

<sup>&</sup>lt;sup>2</sup> https://infed.org/museums-and-informal-education/

the school are mutually complementary and as Michel Allard reminds us, "the school-museum partnership requires that both of them erase and harmonize their differences. They can then contribute to the integral development of young people (Allard et al., 1993), the museum could provide the school with its own resources that are complementary and beneficial to all learning.

### 4- The museum as an instrument of education.

Since their establishment, museums have played an important role in the spread of culture across society. That means that every museum is already a part of the public education mission.

It is fundamental not to underestimate the value of educational services to students and instructors, because traditionally, teachers have been the ones who have shown concern for their pupils and colleagues (Jacobi, & Coppey, 1995).

Museums generally help to the spread of various types of knowledge and culture in some way. It's favorable to create it obvious to adults that a visit to the museum is a voluntary activity done in one's spare time, without a pre-established program or a system of punishments and rewards that may provide motivational energy. It might also add that it is an activity in which relaxation, enjoyment, or even play are never distant from the desire to learn and grow.

Between leisure and enjoyment on the one hand and culture and education on the other, the museum (together with the theater and the concert, for example) is the prototype of the highly cultural and hence socially valued excursion. With children and young people being brought inside the exhibition by adults who supervise them, the non-formal character of the museum visit becomes more difficult to differentiate from other activities performed outside the educational institution, especially when some instructors are participating.

These two educational situations, obligatory schooling on the one hand and the museum or exhibition as a non-formal site of education on the other, have various connections. Between the museum as a resource center, which tolerates or claims the presence of school groups accompanied, even supervised, by their teachers, and the museum's educational service, which offers specific educational activities to publics that it recruits and welcomes under the supervision of mediators that it has chosen and, possibly, trained. - It is necessary to investigate a wide range of levels of engagement (Jacobi, & Coppey, 1995).

Non-formal stimuli favor school learning, whereas school discourages non-formal learning: the museum may make us want to be interested in what was previously seen as monotonous since it allows us to escape from the classroom environment and because it provides engaging activities of a playful character.

## 5- The educational effects of school visits

Traditionally, evaluation, especially when it comes to measure the educational impact, involves identifying the objectives of the museum program. In this case, it is the objectives, set in advance by the designers of the educational program, that allow the evaluator to measure whether these objectives have been achieved, partially achieved or not achieved. (Screven, 1991)

Moreover, it is rather infrequent to ask visitors at the end of the visit to produce a document with their evaluation (Uzzell, 1992; Borun, 1977).

Generally, to get an idea of the impact of an educational action in the museum, one relies only on oral statements or on the answers to ad hoc questionnaires. It is safe to assume that it is effects of a different kind that are reflected in these investigations (Uzzell, 1992; Borun, 1977). For example, a visit to a museum allows

- to escape the school routine and the weight of habits (effect of disorientation),
- to take part in a new activity, to not only have to listen or take notes (effect of novelty),
- to establish other types of exchanges between adults and students (relational effect),
- to escape the individualism inherent in school evaluation (sociability effect).

The evaluation of the visit effects presupposes the prior identification of precise objectives (Screven, 1991). It is clearly stated and specified objectives that then allow measurable effects to be identified and monitored.

The presence of labels, or signs, is intended to encourage the taking of information by structuring the message, or, on the contrary, only to encourage reading, if only from time to time (Gillet, 1994). Museums sometimes take the decision to offer devices which propose an active discovery.

According to (Jacobi, & Coppey, 1995), it is the case of the exhibitions 'hands on': exhibitions in which the visitor is supposed to touch and to act, which is generally forbidden in the museum of art for example; or of the North American Science center: where the young visitor has to act to provoke a phenomenon; or of the interactive devices: which stimulate the action of the user and react according to the answers that he proposes.

It is often said that non-formal education favors an active pedagogy to say that it solicits the activity and the reactions of young people: as opposed to teaching in the classroom, which is considered passive.

This dimension of active pedagogy would be the most visible difference, and therefore the essential asset in favor of the exhibition. (Jacobi, & Coppey, 1995).

It is therefore not the activity itself that is a result to be provoked, but the activity in relation to the learning context and the cognitive or socio-affective acquisitions that it aims at. (Jacobi, & Coppey, 1995). The visitor must operate, press, choose, click, move, touch, push, press several times, select, tap, hold for a long time, rotate... The possibilities offered are much more versatile than one would suppose. Without being able to choose between all these possibilities, the user fumbles around, presses randomly and quickly gives up if nothing holds him. Not only does the activity have no effect, but worse, it discourages any effort.

In 1909, Newark Museum Director John Cotton Dana wrote: "The Museum can help people only if they use it; they will use it only if they know about it and only if attention is given to the interpretation of its possessions in terms, the people, will understand" (Alexander, 1979).

Since the founding of the International Council of Museums in 1946 and the adoption of its statutes in 1974, education has been an integral part of the definition of museums. Along with collection, research, conservation and presentation, it is one of the five major functions of museums, which constitute a vast network parallel to the official educational systems. Centered around the object as a source of knowledge, learning, and enjoyment, museum education has developed since the opening of museums to the public in the second half of the 18th century. In the United States, the educational role of museums has grown to such an extent since the early twentieth century that public education is considered the major contribution of American museums to the evolution of the museum concept (American Association of Museums 'AAM', 1984).

Educational services often consist of a small core of permanent staff who supervises volunteer guides.

Museum educators help visitors see, understand, and respond to objects in museum collections in intellectually, aesthetically, and emotionally rewarding ways. Museum educators must have the skills to encourage interaction between the visitor and the objects on exhibit, at whatever level the visitor requires. To do this effectively, educators must know both their museum's audiences and their museum's collections. This means having a demonstrated knowledge of developmental psychology, philosophy of education, educational theory, and teaching, especially as related to the kind of voluntary and personal learning that takes place in museums. Equally important are a solid grounding in the history, theory or practice of a field of study relevant to the areas in which the museum collects, as well as the ability to identify and cooperate with scholars and specialists in appropriate fields. (AAM, 1990).

## 6- The Mohammed VI Museum for Water Civilization in Morocco - AMAN

The Mohammed VI Museum for Water Civilization in Morocco – AMAN, inaugurated in January 2017 by HRH Crown Prince Moulay El Hassan, this first structure, created particularly to show the history and culture of water in Morocco, shines light on the Kingdom's water policy and the Moroccan ingenuity in entrepreneurship of this treasure. Morocco's Mohammed VI Museum for Water Civilization, a pioneer in Africa, has a multifaceted mission: historical, scientific, cultural, and educational.

The Aman Museum is a cultural institution dedicated to preserving, sharing, and promoting Morocco's hydraulic history as a global water management model. "It's definitely a venue that welcomes Moroccans to come and learn more about the country's history and culture," said Jamal Britel.

The Moroccan Ministry of Habous and Islamic Affairs, which oversees it, invested 163 million Dirhams in the creation of this new generation museum (almost 15 Million Euros).3

Due to a multitude of technical aids, the display is especially well-designed. The water tale is developed through ten thematic axes, each with its own scenographic approach. These subjects are given with concrete examples thanks to a range of museographic aids such as artifacts, maps, models, photographs, handwritten documents, videos, and audios...

By re-creating the history of water in a unique atmosphere in which the visitor is immersed, the ultramodern Aman museum will let the visitor appreciate the water journey throughout a voyage through Morocco's hydraulic epic from the Almoravid period to vital and essential achievements.

"The main purpose of the museum is to demonstrate Moroccan genius in the management of water, its virtues in all of its states," said Jamal Britel, the establishment's commercial representative.

This museum's main mission is also to raise community awareness of the value of water in order to encourage them to rationalize their consumption, as well as to serve as a bridge between the past and the present by telling the story of the country's heritage and hydraulic legacy, particularly in terms of specificities and techniques for mobilizing, transferring, storing, and distributing these vital resources.

This museographic institution is built on 20,000 m<sup>2</sup> at the entrance to the Palmeraie's emblematic site, giving it an exceptional ecological and aesthetic dimension, and is equipped with a permanent exhibition space and another for temporary exhibitions, areas reserved for activities, and reconstructions of parts and techniques testifying to the Palmeraie's history.

On the educational front, the institution wants to be an interpretive center with cutting-edge teaching tools, as well as Africa's largest museum devoted to the issue of water. "We provide workshop rooms for instructional activities for schools ranging from kindergarten to university level." Nowadays, we are bombarded with lessons. We hope to invite schools from the region as well as other regions of Morocco and Africa. We receive Spanish, French, and Italian. "We will have various educational and pedagogical efforts to provide to schools," he said.

In order to enhance management, the biggest priority is to increase the quality of the visits. "To be honest, we don't have an economic goal since our goal is to raise awareness of Morocco's water culture and civilization, as well as to bring the museum to life. As a result, our yearly visitor goal is set at 200,000 individuals. We don't want a huge crowd to choke the museum "Jamal Britel added.

"We have a procedure in place to ensure that no one comes in and tramples on someone else's territory. The trip, by the way, culminates with a sound and light extravaganza. As a result, there is no choice except to separate into smaller groupings. It's perfectly timed "He went on to explain. "The aim is to ensure that the quality of the visits is impeccable and to keep the venues as they are," he explains.

The project is divided into two parts that encompass a total of 5 ha: the park project and the building project. The first, in the museum's continuity, will be a model of regeneration of the palm grove where

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<sup>&</sup>lt;sup>3</sup> https://www.lecourrier.vn/le-musee-aman-une-histoire-de-leau/452013.html

the museum is located, spanning three hectares. The building has an auditorium, a café, a bookstore, and a permanent display tower.

# Museum pedagogical part

The Water Civilization Museum is bold and imaginative, exhibiting a well-crafted museography, a new scenography with a sophisticated dance of sounds and lights. The Ministry of Habous is unable to manage some issues on its own. Couleurs Com, a private Moroccan business specialized in cultural mediation, was thus tasked with the project.

Several hydraulic devices and models, including the "Noria of Fez" to raise water, the "Mill of Ouirgane" to use hydraulic power, and a large model of the "Khettara" that still operates in the Todgha Valley to capture water without depleting the underground water table, are displayed on the Museum's forecourt.

The museum's permanent tower is organized on three levels around an axis: the visitor moves from one story to the next by viewing numerous exhibition rooms, while in the central axis, he may enjoy a big multimedia performance.

Aside from museum spaces, the building features infrastructure for research and development, such as a multipurpose room for temporary exhibits, conferences, and seminars, a media library and an archive room for researchers, as well as workshop facilities for educational activities.

In a sense, it is a historical, scientific, cultural, educational, and recreational place that is unlike anything else in Marrakech, Morocco, Africa.

The visitor is transported on a trip via an original and emotive museography, especially because each thematic axis is the topic of a distinct scenographic treatment, integrating multiple museographic supports: object video, audio, interactive projection and multimedia display on model, etc...

# • Infrastructures for research and dynamization

In addition to a three-story permanent exhibition hall, the museum building features a multipurpose space for temporary exhibits, conferences, and seminars. A media library and archive area for scholars Workshop spaces for educational activities

# • Innovative museography

The visit gives a physical and sensory immersion in the topic of water through different museographic supports: object, video, audio, interactive projection, multimedia presentation on model, and so on. The museum aspires to be an interpretation center with cutting-edge didactic tools and novel topics.

## • Musuem integrating good ecological practices

The Mohammed VI Museum for the Civilization of Water in Morocco incorporates ecological processes connected to sustainable water resource management into its architectural and landscape design in order to be a modern institution concerned with and respectful of the environment. The

museum itself becomes an exhibition item, exhibiting excellent practices and technological advancements in Integrated Water Resources Management in both the building and the park project.

### **Educationnal room**

Two classrooms for school groups. It's ideal for learning sessions or team building. Throughout the school year, the educational workshops of the MOHAMMED VI Museum for the Civilization of Water in Morocco - AMAN introduces students aged 5 to 12 to a variety of subjects centered on water, sustainability, and the protection of natural resources.

The manipulation step of the workshop leads to a personal awareness that the youngsters take away. The finding is then followed by a trip to the museum to see the artifacts created. The museum's programs and visits for youngsters offer numerous significant advantages. They instill a lively interest in culture, exploration, inquiry, and knowledge.

One of the water management that were used in the past:

**Khettara** is an underground water channel allowing the supply and transport of water from the mountains to the plain over several kilometers.

This canal is connected by vertical shafts used for maintenance and ventilation.

In Morocco, the Khattaras are located in the south of Morocco like: Marrakech, Ouarzazate, and Taroudanat.

The water mill is an ancestral hydraulic technique whose main objective is to transport water from the river to the surrounding agricultural lands.

It has several functions: It consists in raising water from a low place to a higher one. This method has been used a lot in the industry.

The ancestors exploited the hydraulic energy to mill several products: cereals: wheat, barley, corn, sugar, etc. The rest of these Naouras are found in numerous Moroccan cities: Fez, Meknes, Tangiers, Tetouan,

**Seqqaya** is a very old hydraulic construction known by most Arab countries since the beginning of the Islamic era.

In the East, it is called: Sabil.

Morocco has known the construction of this very old hydraulic institution through the different reigning dynasties from the Idrissides to the Alaouites, and whose objective is to serve the passers-by, the inhabitants of the city or the visitors of drinking water.

# Park project

The park, with three hectares, is designed to serve as an extension of the museum beyond its walls as well as a rejuvenation of Marrakech's palm grove. Its path will take the visitor through ancient ways of sustainable land and water usage, complete with live representations of the hydraulic legacy.

The park will also serve as a didactic demonstration place for current ecological best practices. It will provide pleasant walks through the kingdom's historic gardens, as well as a variety of services and leisure activities for both young and elderly.

# Educational Activity booklet: to discover water in Morocco

There is an activity booklet in two levels according to age: the first level is for children from 7 to 11 years old, and the second from 12 to 15 years old, to discover water in Morocco.

This document is given to the student during his visit to the museum accompanied by his parents or his teacher.

A word of welcome is presented as follows:

"In Morocco, the subject of water is linked to several ecological, technical, social, historical and even cultural. In the museum, you will learn a lot about water in all its different aspects. You for example, how our ancestors collected and ancestors collected and transported water, what festivals are linked to water or how many dams there are in Morocco. You will also learn the right actions to adopt for the preservation of water in your home.

This workbook will be your companion throughout your journey through the museum! The answers to the answers to the exercises can be found somewhere on this tour.

Don't hesitate to ask your parents or teachers for help.

Now it's your turn to discover the blue gold!

What does Aman mean?

Aman means "water" in Amazigh and "security" in Arabic. Our duty is to protect and manage our water resources our water resources, for our well-being and security."

The summary of the exercises groups the different information about water in the different floors of the museum: ground floor, first floor, basement.

The handout presents information with concrete examples and on the same page; questions are asked to animate the child's dynamics and to make his memory work.

The summary of the document of the first level is composed of:

## First floor

- Water in living organisms
- Water needs for survival
- Where is water found?

- The planetary water cycle
- Morocco's climate
- The great fleuves of Morocco
- Islam and water
- The hydraulic systems of Morocco

## **Ground floor**

- The different wells in Morocco
- The Khettara
- The traditional techniques of water measurement
- The difference between the matfyaa and the well
- Folklore and water rituals
- The hydraulic systems of the high mountains
- The various uses of water
- Tap water and mineral water

### **Basement**

- The gardens of Marrakech
- How does the Noria work?
- The fallout from large dams
- Good water consumption habits

For level two, addressed to children from 12 to 15, their booklet is also articulated in three levels: ground floor, first floor and basement.

The summary groups these themes:

## First floor

- The different stages of the planetary water cycle
- Climate diversity in Morocco
- Wetlands in Morocco
- Groundwater
- Water and climate change
- The functions of the Jemaa

### **Ground floor**

- The hydraulic system of oases
- The functioning of the khettara
- The mechanisms of water extraction from wells

- Upstream and downstream in the high mountains
- The water mill
- The ancient industrial uses of water in Morocco

#### **Basement**

- The ancient network of khettaras in Marrakech
- The art of fountains
- The urban water distributor of Fez
- and the priority rule of the Habous
- Urban hydraulic networks
- The large dams of Morocco
- The functioning of a dam
- The watershed
- The law of water
- Non-conventional waters
- How many liters of water?

The typologies of exercises are articulated to multiple choices, true or false of the diagrams to be filled, coloring of the zones in a geographical map, to complete sentences with a vocabulary relative to the water.

We also find letters to mix in front of definitions, and the child here should guess the correct term putting in order.

Linking words with their meanings, finding words in a word grid. Guessing the amount of water consumed daily related to the uses: dishwashing, toilets, brushing teeth, washing machine, etc. to sensitize the young public on the point of waste.

The visitor continues his journey on the lower floor, discovering the waters of Marrakech's Haouz, admiring water techniques and urban cultures before concluding his journey with the major transformations made in the field during the twentieth century and the great challenges of the twenty-first century.

Indeed, this permanent display provides an immersion in Moroccan hydraulic genius and legacy, both ancient and modern, as well as an opportunity to consider future concerns and challenges.

"The physical and chemical characteristics of water," "Water resources in Morocco: State of the Art," "The traditional rural hydraulic heritage of the great Moroccan ecosystems (the oases, mountains, plains, and Sahara")," "The urban hydraulic heritage of three historical cities (Fez, Marrakech, and Tetouan")," "Customary law and traditional management methods," and so on are some of the major topics covered.

### Conclusion

The museum is not an educational institution in the same sense that a school or university is, but it does disseminate forms of knowledge and culture. It is a location for idea learning and growth. Indeed, knowledge diffusion is mostly visual, but not exclusively so. The museum encourages the creation of questions, leads contemplation, and elicits interrogations. The museum provides an active connection to weave ties between objects and settings that contribute to forms of education, and as Colette Dufresne-Tassé points out, these educational acts cannot be synonymous with the academic environment. The museum's educational role falls under the category of informal or non-formal education, as opposed to formal educational institutions such as schools, which are defined by a system of rules and conventions that are mainly "codified and where teaching is compulsory."

As a result, the educational collaboration between school and museum may be viewed as a scenario of social experience, as Dubet defines it: "The notion of social experience imposed itself on me as the least awkward way to designate the nature of the object encountered in some empirical studies where the social behaviors did not appear reducible to pure applications of internalized codes or to the sequence of strategic choices making the action a series of rational decisions." (Dubet, 1994)

Education in a museum is more than the sum of the skills of its educators or the number of school buses that stop at its door; it is above all a state of mind, a deep awareness that must permeate all those who work there.

The degree of integration of the educational function in a museum can be seen both in the techniques of exhibition presentation and in the texts and support materials provided to visitors. When the educational intentions of the institution are manifested even in its store and bookstore (quality and presentation of the objects for sale, choice of materials, etc.), the museum is able to presentation of the objects offered for sale, choice of publications according to the collections and exhibitions), one can say that this function is well integrated. (Trudel, 1991). The Mohammed VI Museum for the Civilization of Water in Morocco - AMAN was created by the Ministry of Habous and Islamic Affairs as a tribute to the Moroccan genius in water management, to the historical role of the Habous in water management, and to the contemporary work of His Majesty Hassan II and His Majesty Mohammed VI in the hydraulic policy and achievements of the Kingdom. A unique building by its location at the gates of the ochre city of Marrakech, this museum is a novel project in the varied universe of museums in Morocco. At the same time, it is a museum of anthropology and science, a modern and interactive interpretation center, a place of teaching, meetings and exchange dedicated to knowledge and hydraulic know-how. It is positioned as a cultural, historical, scientific and technological reference for water in Morocco. The AMAN museum is both a place of history with a benevolent look at the past, its traditions and know-how, and a place of good practices and technical and technological innovations resolutely turned towards the future. In the middle of the emblematic palm grove of Marrakech, it will unveil its exhibitions and invite you to a deep immersion in the theme of water, its uses, its techniques, its legends and its mysteries...

To summarize, we must consider the many sorts of educational policies for museums. All examples exist, from collaboration to indifference, from complementarity to forms of rivalry, some of which are

examined by Françoise Buffet. This is especially true given that no museum, in the eyes of its supervisory authority, may exclude school groups from calculating its yearly attendance. It is simple to see how difficult it is to envision a system for investigating the cultural or educational influence of a museum that is unique and homogenous, and therefore capable of responding to the diversity of examples and conceivable modalities of educational activity under these conditions.

The workshops and visits for children in the museum present several considerable advantages. They awaken a taste for culture, discovery, research, and knowledge in a playful way. In the workshop the hands-on stage leads to a personal realization that children take away. The discovery is then accompanied by a visit to the museum to visualize the objects made. In this sense, Chandler Screven (1992) states: "Learning in museums, in its broad sense, is a by-product of the free interaction of leisure oriented visitors with exhibitions and their surroundings" Museums and schools are different. The museum has a more active role as an educator that can shed light on a particular subject, or provide information on a phenomenon within a multidisciplinary vision.

### References

Alexander, Edward Porter. (1979). *Museums in motion: An introduction to the history and functions of museums*. Nashville, TN: American Association for State and Local History.

ALLARD Michel, BOUCHER Suzanne et FOREST Lina, « Effets du nombre de visites dans un programme

éducatif muséal », In : Revue des sciences de l'éducation, vol 19, N°2, 1993, pp. 275-290

American Association of Museums. (1984). *Museums for a new century: A report of the Commission on Museums for a New Century*. Washington, DC: American Association of Museums.

American Association of Museums. (1990). Standards: A hallmark in the evolution of museum education. *Museum News*, 69(1), 78–80.

Boudjema, C. (2016). La fonction éducative des musées dans la société numérique: analyse comparative de l'offre pédagogique en ligne de huit musées nationaux dans quatre pays (France, Angleterre, Australie, Etats-Unis) (Doctoral dissertation, Université Charles de Gaulle-Lille III).

BUFFET Françoise (1995). « Entre école et musée : le temps du partenariat culturel et éducatif ? ». In : Publics et Musées, N°7, pp. 47-66

BUFFET Françoise (1998). « Une situation problématique : le partenariat culturel et éducatif ». In : Entre école et musée : le partenariat culturel d'éducation. Presse Universitaire de Lyon, pp. 17-23

Charalampopoulou, C. (2013). L'éducation interculturelle par le biais des musées: revue de littérature. In *Congrès de l'Actualité de la Recherche en Éducation et Formation (AREF-AECSE)*.

Cheff, Michel. (1989). Éducateurs et conservateurs: pour une collaboration globale. *Muse*, *3*, 47–48. Communications Canada. (1989). *Le personnel des musées canadiens: situation actuelle et besoins prévisibles*. Ottawa: ministère des Approvisionnements et Services Canada.

Crête, Florian V. (1945). Les musées et leur rôle en éducation. *Rapport annuel de la Société Provancher d'Histoire Naturelle du Canada* (p. 82–92). Québec: Société Provancher d'Histoire Naturelle du Canada.

DARRAS Bernard, KINDLER Anna M., « Le musée, l'école et l'éducation artistique », In : *Publics et musées*, N°14, 1998. pp.15-37

Decker, Andrew. (1988). The state of museums: Cautious optimism prevails. *Museum News*, 66(4), 23–33.

Dicosimo, Joanne. (1989). Les ingrédients communs d'une collaboration réussie. Muse, 3, 45-46.

Drouin, Oscar, ministre. (1941). Musées/Museums. In *Bibliothèques et Musées 1938/Libraries and Museums* (deuxième partie; p. 42–72). Québec: ministère des Affaires municipales, de l'Industrie et du Commerce.

Fortier, Chantal. (1989). Un couple d'avenir: éducateurs et conservateurs. Muse, 2, 22.

Du Sablon, C., & Racette, G. (1991). Les effets d'un programme éducatif muséal chez des élèves du primaire. *Canadian Journal of Education/Revue canadienne de l'éducation*, 338-351.

FOURTEAU Claude, « Collect & Share, un projet européen pour la médiation dans les musées », In : *La* 

Lettre de l'OCIM, N°107, 2006, pp. 24-31

GIRAULT Yves, GUICHARD Françoise, « Problématique et enjeux du partenariat école-musée à la Grande

Galerie de l'évolution », In: Publics et Musées, N°7, 1995. pp. 69-94

Guichard, J. (1995). Nécessité d'une recherche éducative dans les expositions à caractère scientifique et technique. *Culture & Musées*, 7(1), 95-115.

Guichard, J. (1995). Nécessité d'une recherche éducative dans les expositions à caractère scientifique et technique. *Culture & Musées*, 7(1), 95-115.

Honan, William H. (1990, 14 janvier). Say goodbye to the stuffed elephants. *The New York Times Magazine*, pp. 35–38.

Hudson, Kenneth. (1975). A social history of museums: What the visitors thought. London: Macmillan.

Jacobi, D., & Coppey, O. (1995). Introduction-Musée et éducation: au-delà du consensus, la recherche du partenariat. *Culture & Musées*, 7(1), 10-22.

Miers, Henry A., & Markham, S.F. (1932). *Directory of museums and art galleries in Canada, Newfoundland, Bermuda, the British West Indies, British Guiana and the Falkland Islands*. London: The Museums Association.

Ministère de la Main-d'oeuvre et de la Sécurité du Revenu. (1989). Devis de formation professionnelle: éducateur de musée. Québec: Gouvernement du Québec.

Munley, Mary Ellen. (1986). *Catalysts for change: The Kellogg Projects in museum education*. Washington, DC: The Kellogg Projects in Museum Education.

PAQUIN Maryse, « Les musées et les musées virtuels d'histoire : appréciation, utilisation et effet d'une

formation sur la pratique enseignante », In : Revue des sciences de l'éducation, vol. 33,  $N^{\circ}2$ , 2007, p.489-511

Racette, Geneviève. (dir.) (1986). Musée et éducation: modèles didactiques d'utilisation des musées. Montréal: Société des musées Québécois.

Rice, Danielle. (1989). Examining exhibits. Museum News, 68(6), 47–50.

Samson, Denis et Schiele, Bernard. (1989). L'évaluation: perspectives historiques 1900–1970. Dans Bernard Schiele (dir.), *Faire voir, faire savoir: la muséologie scientifique au présent* (p. 107–127). Québec: Musée de la civilisation.

Screven (C.-G.). 1991. «Présentations didactiques pour visiteurs libres», ICOM Éducation, 12 (13), p. 10-20

Screven, C. G. (1976). Exhibit Evaluation—A Goal-Referenced Approach. *Curator: The Museum Journal*, 19(4), 271-290.

Screven, C. G. (1990). Uses of evaluation before, during and after exhibit design. *ILVS review*, *1*(2), 36-66.

Screven, C. G. (1990). Uses of evaluation before, during and after exhibit design. *ILVS review*, *1*(2), 36-66.

Screven, C. G. (1992). Motivating visitors to read labels. *ILVS Review: A Journal of Visitor Behavior*, 2(2), 183-211.

Silver, Adele Z. (1978). Issues in art museum education: A brief history. In Barbara Y. Newsom & Adele Z. Silver (Eds.), *The art museum as educator* (pp. 13–20). Berkeley: University of California Press.

Trudel, J. (1991). L'intégration de la fonction éducative au musée. *Canadian Journal of Education/Revue canadienne de l'éducation*, 383-391.