EDUCATION AS A PREMISE FOR WELFARE SOCIETY

Educating Students in Museums: Possibilities for Forming Personal Learning Environments

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Abstract

The concept of lifelong learning and museums as institutions its implementation open up numerous learning opportunities for learners. The research literature (Edson and Dean, 1996; Hilde and Hein, 2000; Falk and Dierking, 2000) emphasizes that learners learn at museums in a similar way they do in non-formal 'schools' where educational activities are in line with general programmes offered at a common school. Meanwhile, aiming to make the learning process attractive and joyful, the museums offer the possibilities of *edutainment*. Therefore, while exploring of museum visitors' reactions to the surrounding environment of a museum, it is important to reveal what personal learning environments in the same museum are being identified by different visitors and what factors influence the formation of these personal environments. The aim of this article is to answer the following questions: what personal learning environments in the same museum are identified by various visitors; what factors determine the construction of such personal learning environments; can certain types of visitors as learners be identified?

Keywords: education in museums, edutainment, educational environment, learning environment.

Introduction

Until the end of twentieth century the majority of museums functioned as the information and training centres on the past events. However, the political, social, cultural, technological and economic changes, as Edson and Dean (1996) note, expanded the role of museums in the society and forced them to think over and describe differently the concept of their activity.

Museums follow the understanding about their role to assist people in developing the perspective of lifelong learning in different educational activities that are being organized in museum environment; in that way the museums become professional institutions of discovery that attract more and more visitors and aim to meet the

rapid transformation of society, its needs and the way of spending their leisure time. Recently, as Jankeviciute (2009) claims, the priority is has become not an object itself but a society, usage instead of storage.

Together with these changes, the society members feel the need to spend their leisure activities in a more pleasant and relaxed manner, as it is considered to be the antidote against the increased workload and pace of life. Scott (2000) argues that the above reasons cause the greater interests of visitors in entertaining and social aspects instead of learning.

These people often spend their leisure time in a museum space where attractive, impressive and entertaining activities are offered a certain information input related to museum objects.

Learning activities in museums are not organized in an accidental way. It was noticed that students have difficulties in perceiving the past events and historical sources from the predecessors' perspective. Thus 30 years ago visits to museums were made compulsory and included into the educational programmes of schools in the USA, Great Britain and other countries. This initiative made the cooperation between schools and museums more active and, above all, gave opportunities for students to work with the original historical objects in the informal, pleasant and meaningful environment of a museum, where by means of cultural values the personality is developed, self-expression is encouraged, personal needs and interests of each visitor are satisfied, the existing knowledge is enriched and new experience is gained.

Museums provide visitors with numerous displays, interesting excursions, educational routes, programmes and interactive galleries each visitor is able to choose from (Anderson, 1997; Kazoniene, 2005; Eshach, 2007).

The *National Science Education Standards* (National Research Council, 1996) of Washington state that museums and research centres have the potential to contribute to the effectiveness of learning with the purpose to help better understand different spheres of research and to stimulate the learners' deeper involvement in learning outside a school. It is assumed that discovery and scientific inquiry is an active process. Instead of receiving the

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already prepared information chunk, students have to actively research and act in the exploration of science fields. It is likely that practical *'hands-on'* assignments devoted to learning and aiming for discovery are quite rare. Moreover, it is considered that *'minds-on'* activities and experience are even more important for students, since they develop their reasoning.

Aiming to justify the name of a museum as a professional institution of education, which maintains effective dialogue with museum visitors, it is necessary to implement the most important objective of museum education. It is emphasized that instead of educating the interrelatedness and emotions should be fostered; instead of teaching, intellectual and meaningful pleasure should be stimulated in the minds of visitors (Hilde and Hein, 2000). Museum visitors have to be excited by letting them touch, explore and research. It is important to perceive that the mission of a museum is not attributed to its institutional meaning or its objects; here a museum is perceived as an environment and tool for implementing an important educational mission.

Therefore, museums are expected to react to the societal needs and to supply a diverse public access with the perspective of edutainment. As Allen (2004), Falk and Dierking (2000) claim, in this museum environment the freedom of choice, the possibilities for individual learning based on personal interests, the possibility to explore, to gain information, to develop different ideas and construct individual knowledge exist.

With reference to different opportunities for learning in a museum, it is relevant to discuss the importance of museum potential learning and educational environment as well as the formation of personal learning environment on the basis of the first ones (the latter environments are discussed in detail in the second part of this article).

Although education in museums and the organization of their environments have been the subject of many research works (McManus, 1992; Hein, 1998; Falk, Dierking, 2000; Lucas, 2000; Mikucionyte and Lianzbergis, 2001; Allen, 2004; Packer, 2006; Jarockiene, 2008), there is a lack of inquiry into the reactions the museum visitors express towards the museum environment. What personal learning environments are identified by various visitors in the same museum? What factors determine the construction of such personal learning environments? Can certain types of visitors be identified as learners?

This article aims to search for answers to the above questions. The research, however, takes into account only one social group of students, since they make the most accessible sample in exploring the specific part of museum educational factors, i.e. the educational programs offered by a museum. Thus the aim of this article is to reveal the possibilities of forming the students' personal learning environments in the education process at museum. The research is based on the constructivist theory and the concepts of lifelong learning and *edutainment*. The research literature analysis and document analysis are the research methods applied.

The first part of the article is devoted to the analysis of museum education concept. The second part reveals the

features of edutainment in a museum. The third part highlights the possibilities for forming students' personal learning environments out of potential learning and educational environments with the emphasis on self-directed, accidental, teaching-based learning types in museum and presents the model of factors for formation of personal learning environments (PLE) in a museum.

1. The educational mission of museums

Every museum, when creating potential learning and educational environments, pays great attention to the choice of education philosophy, which is the key to success in order to implement educational goals. A museum, non-formal education institution, owns so much property that creates the potential to arise students' interest, to educate and stimulate their understanding by enabling them to take responsibility for their further learning. According to Hein (1998), there is no aim to duplicate the school; however by organizing learning processes, school curriculum is enriched, different educational methods, forms are applied, and versatile cognition possibilities are provided.

The organization of learning activities in the museum encourages schools and teachers to work away from the traditionally isolated classroom environment. They, first of all, strive to add a variety to the learning that has become routine in the classroom, and, secondly, to experience a new real world of things in the museum, which is carefully planned, broad in scope and content, full of assignments and especially necessary for a contemporary learner.

Teachers together with their students most frequently choose the educational activities in the environment of museum not unintentionally but with the exact knowing that the topics being studied in the museum are in line with school curriculum. This, according to Lucas (2000), enables the development of the topics analysed in the classroom by complementing them with significant cognition. It is important for students that in the museum they can learn with pleasure, be relaxed and feel entertained. One should point out that the students who in this case can be named as *learners initiated by teaching* type together with teachers going to the museum have to discuss beforehand what topics will be studied and what forms and methods will be applied.

Referring to Hein (1998), the philosophy of museum education as well as the attained educational goals is validated on a different basis: didactic – interpretative method, discovery method and the theory of constructivism, on the basis of which the author constructed the comprehensive and effective model. It embraces the realistic and idealistic viewpoints, different learning theories and methods; each combination is related to different pedagogical methods (Figure 1).

The *didactic – interpretative method* presented in the model, according to the author, is identical to the model of teaching/learning at school. A museum educator presents the principles and gives examples, which illustrate them and repeats the material till the visitors remember it. It is known that such teaching principles stand at school as well, where a teacher explains the material of a subject,
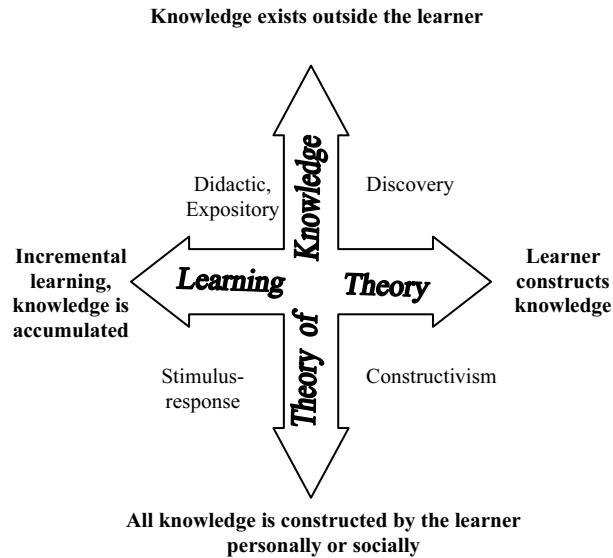
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Knowledge exists outside the learner

Didactic, Expository   Discovery

Incremental learning, knowledge is accumulated

Learning   *Theory*

Learner constructs knowledge

Stimulus-response   Constructivism

Knowledge

Theory of

All knowledge is constructed by the learner personally or socially

Figure 1. The model of knowledge, learning methods and theories (Hein, 1998)

presents information, practical examples for students to better master new knowledge.

Thus the application of didactic – interpretative methods implies the learning which is based on the principle of information transmission-absorption, when a museum visitor is considered to be a passive participant of learning process, i.e. the receiver of knowledge. The museums that follow this teaching method are characterized by the following features:

- Displays are organized in sequential order with a defined beginning and end; sometimes they are formed as 'case studies', i.e. the components are grouped according to particular topic;
- Each object under display and the exposition itself have the didactic elements which present the main information and knowledge to be learned.

Obviously, this method has essential drawbacks because visitors and their needs are ignored; no space is left for them to choose what and how to learn, in what pace or intensity.

Mikucionyte and Lianzbergis (2001), Zukauskiene (2004) place a strong emphasis on the method of discovery in museum education that also takes an important place in the model offered by Hein (1998). Here learning is an active process when people experience changes, get more involved into learning material than only by observing it, search for the answers by investigating objects, asking, interpreting, participating in practical activity. Namely, the latter activity is emphasized.

The discovery method, which is especially valued in museum education, occupies an important position in the model created by Hein (1998). The museums that follow this discovery method are characterized by the following features:

- Displays are organized in the way people can freely move and explore the exposition components;

- The didactic components contain the questions that stimulate visitors' interest and wish to find an answer, instead of receiving the information processed in advance;
- Museum educators prepare for visitors a number of meanings –so that they would be able to compare their own interpretation with the 'right' interpretation suggested by exposition;
- A number of learning programmes are developed that foster visitors' interest in different activities and stimulate the decision making.

It is observed that the discovery method makes learning process active, attractive and joyful by giving hints to ideas and meanings to be learned; however, a short explanation to the visitors has to be given in advance for they would be able to know something step by step and come to a correct answer.

The application of this method is mostly observed when constructing and organizing educational programmes in museums; they, as McManus (1992) notes, are constructed in order to render students the knowledge according to a certain learning programme or in order to consolidate and deepen the knowledge acquired at school.

Jarockiene (2008) argues that the main goal in developing educational programmes is not related to information transmission, but to the stimulation of visitors' perception and activeness by employing all means and education methods as well as the main tool – the sequential and attractive presentation of the museum objects.

The educational programmes are considered to be most popular and attractive among schoolchildren, since they are activated by joyful, entertaining activities and with creative practical 'do-it-yourself' or 'hands - on' tasks that stimulate students' imagination, self-expression, creativity, dialogue, communication, new knowledge is being constructed and the experience obtained.

It is observed that the museum environment stimulates not only students' educational needs, but also creates

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favourable conditions for their diverse development and a new experience excites and encourages for searching new information with their own efforts. A lesson in museum activates both advanced and weak students, because this creates a possibility for an individual approach to museum information of different perception level.

The constructivism theory reflected in Hein's model (1998) refers to the idea that learning is an active process of constructing meanings by the attempts of learners when they are involved in experimenting, active reasoning on possible solutions and learning by doing. Thus learning is activated through practical 'hands - on' activities; however, priority is given to 'minds - on' activities that stimulate thinking and reasoning.

Learning process can be carried out without a teacher and teaching methods, by stating that the best teacher is experience. This environment does not require understanding of the exposition correctly, the way compilers have envisaged, but here visitors are encouraged to interpret, understand individually, according to their personal life experience. Thus in such exposition *self-directed learners* (motivated, possessing the aim to learn, able to identify learning environments and their learning needs, relying on self-directed group learning and application of reflection) as well as *random learners* (not motivated, not possessing specific needs to acquire new knowledge, seeking for entertainment, attraction) can most frequently implement their learning possibilities.

It becomes evident that the *museum* is an intelligent educational institution implementing teaching by entertaining that is followed by learning based on the method of discovery and theory of constructivism.

When learning by the method of discovery, different practical assignments are offered; they activate and encourage a learner to act, investigate, ask and get deeply involved. However, such activities do not induce emancipated thinking, reasoning and creating of personal meanings based on knowledge, but is going through 'beaten path' by seeking entertainment to the illusion of discovery. Therefore, according to Khaled (2010), the active and entertaining learning in a museum has to emphasize not only physical activity and involvement, but also the active intellectual actions

As a concluding remark, it is worth noting that the theoretical base of *discovery method* and the constructivism theory differ, because in the first case the search of meanings for a pupil ends with the 'correct' solution set by the museum, following the pre-designed model; in the second case a pupil finds his/her own understanding on the displays, relying on his/her experience and knowledge and not necessarily aiming for the correct answer. The unifying idea is that in both cases learning process is active, a learner has to be motivated and actively involved into activities. Thus, effective dialogue with the museum visitors has to be built on educational activities involving the learning by discovery method and implementing the constructivist ideas, by offering active, attractive activities that sometimes contain the edutainment elements and rejecting the didactic-interpretative method which ignores visitors and their needs.

2. The features of edutainment in museum

Hein (1998) noticed that the application of discovery method and the constructivist ideas enable visitor to learn attractively with the joy of research, looking for the answers to the questions he/she is concerned about. This is especially important for a contemporary learner who seeks different, unusual and amusing learning. Sermuksnyte (2008) also mentioned that learning in museum has to be organized in a different way as compared to school and learning has to be related to entertainment.

What are the essence and peculiarities of *edutainment*?

The contemporary learners search for the environments that give possibilities of exploring, discovery, questioning and arguing, enable for better self-perception and the understanding of the surrounding world (Anderson, 1997; Mitchell, 1998). That kind of learning could be similar to children's games accompanied with surprise, excitement, adventures and findings that become the main ingredients (Melamed, 1987). Learning in leisure time environments become relevant by using various game-based learning ways; and the possibility to be entertained by learning encourages learners to actively participate. So learning could be joyful, accompanied with inner satisfaction, challenging, demanding some efforts, attractive and interesting, full of adventures and risks, competitive and even involving a sense of danger.

While explaining the wide context of edutainment, Buckingham and Scanlon (2000) note that this is a multi-dimensional non-formal learning activity that applies different means (fascinating visual material, stories, games, animation, interactive displays, practical 'hands – on' activities) and aims for attracting and maintaining the attention of learners with the positive emotions. The edutainment is the experience of playful learning which is believed, as Savidis et al. (2007) claim, to be intrinsic to the learner's inner motivation. The feeling of satisfaction and pleasure is born when learners not only use interesting learning material, but also are able to solve their problems with the help of games and entertaining learning.

It is essential for students that the information they receive is attractive, motivating for inquiry, discovery and wish to find things; therefore, as McKenzie (2000) argues, learning material has to be attractive since it sends a message to learner, and entertainment is useful for developing children's skills in practice with the certain knowledge on different topics.

Aiming to meet these needs, museums put their efforts and offer a number of attractive, edutainment - based activities which employ different game oriented methods and present the important scientific knowledge and information related to museum objects. Educators organize excursions, educational roots, programmes with story telling, suggest the visitors to become detectives and search for the treasure by finding the answers to the tasks given.

Educational activities in museums are organized in a creative, attractive way and, according to Edson and Dean (1996), are influenced by the following factors:

- *entertainment*, the amusing and relaxing activity and at the same time activity that holds the attention;

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- *sense of community* implies that people meet and deal with each other and participate in public activity;
- *gaining the learning experience* means the collection and perception of information, development of curiosity, discovery and senses, the efforts to understand, reasoning, thinking and visualization, application and attempts to employ skills and abilities.
- *development of aesthetic experience* (especially the visual and sensory perception of images and aesthetics of objects) when objects observed stimulate reasoning, imagination and spirit; they are discussed and the trivial matters are eliminated.

These factors activate the live development of museum activities and emphasize the relationship with discovery method and constructivist theory in museum education. Learners in this process of obtaining information, knowledge, new experience are involved in edutainment, learn by means of imagination and are focussed on observation, research, reasoning, discussion and dealing with other learners and aim to satisfy their needs by employing skills and experience.

The essence of edutainment, however, is not solely related to spending time creatively, in a relaxed and joyful way. Edutainment, as Packer (2006) notes, embraces the following essential features: discovery, exploration, simulation of imagination and reason, emancipation and excitement. Learners as active participants in museums are empowered not only to research, to experience the joy of discovery, but also they are stimulated to think, reason, express their ideas openly and construct knowledge.

Education in museums is presented as entertaining activity when a learner is able to find something interesting about unknown things and to be better informed via practical activities that foster thinking. Nevertheless, it has been observed that traditional education in museum based on didactic-interpretative model ignores the visitor's needs and is too boring, unattractive for a contemporary learner. If a museum is considered to be an edutainment institution which offers only entertaining possibilities, without information search, the exploration of objects and acquisition of new knowledge, then its role would be too chaotic, spontaneous and useless for both learners and museums. Thus if museums strive to be professional institutions of education that attract audiences, respond to the rapid changes in society, its needs and ways of leisure time, they have to combine learning and entertaining to implement the museum's mission and to maintain a closer relationship with society.

Museum activities have to minimize learner's tension, to make them more relaxed, to stimulate learning motivation and help to reveal creative powers. Learners, as Bloom and Hanych (2002) claim, accept information, learn new things with difficulties if they do not enjoy the learning process. For this reason, the museum activities are deliberately enriched by edutainment perspective, in order to overcome the obstacles of implementing educational goals.

Figure 2 presents a supplemented model of edutainment in museums (based on Hein's (1998) model) which reveals the role of traditional teaching at school, intellectual activity, learning by discovery with the emphasis on practical activity and the constructivism theory that prioritizes the stimulation of reasoning.

Traditional teaching at modern museums is quite boring, conventional and does not meet the needs and expectations of contemporary learners, so it is not desirable. The above mentioned efforts of the museum not to copy school's activities and to recognize the ideas of lifelong learning, to meet the needs of visitors imply a different approach on learning that is meaningful and based on edutainment. Museum activities are developed according to the discovery method and constructivism theory, when a learner is an active participant who is able to receive joyful, entertaining learning supplemented with practical activities that stimulate reasoning.
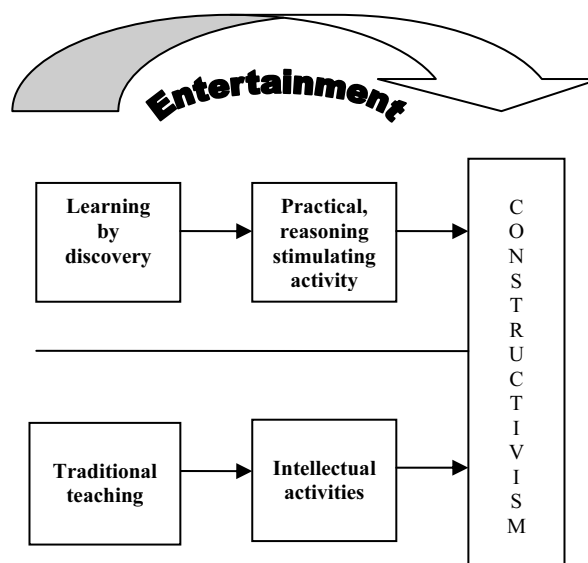

Figure 2. Model of edutainment at museums (based on Hein (1998))

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Moreover, learners construct their knowledge based on previous personal experience and gain new perspectives. Obviously, a contemporary museum combines learning with entertaining with the aim to implement the important educational mission of museums.

3. The possibilities of forming personal learning environments at museums

The first part of the article focussed on Hein's (1998) model of knowledge, learning methods and theories, that influences the choice of museum's education philosophy. And it was noticed that the main strive for museum is the organization of educational activities based on learning by discovery and on the constructivist ideas. These activities are attractive, active, joyful and based on entertainment elements with the rejection of didactic-interpretative method which ignores visitors and their needs.

The consideration of the thoughts presented implies that the similarities might be discovered in the discussion on the differences between teaching and learning paradigms. In this context, as Juceviciene (2007) notes, the approach to individual's lifelong learning is influenced by the transformation of educational paradigm: the traditional focus on teaching *(teaching paradigm)* has been changed into the contemporary *learning paradigm* which perceives learning as continuity from 'birth to death' and also not necessarily related to teaching. It does not ignore teaching, but it has a limited role in the context of lifelong learning. Teaching is a significant activity for children, teenagers and young people when they learn at different type schools. The latter formal educational institutions also value the learning paradigm and, thus, they have to reject the authoritative pedagogy. A formal education institution has to be ready to flexibly respond to learner's needs, to acknowledge the pupil's significant learning achievements that were not taken into account and obtained in informal learning environments. Learning paradigm is oriented to contemporary individual who aims for the life harmony and emphasizes that along the formal and non-formal ways of learning the human beings are deeply involved into informal learning, especially into experiential learning.

As noted above, the concept of lifelong learning and the museum institutions that rely on this concept imply a new approach for considering learning possibilities. The theoretical base of these possibilities, according to Juceviciene et al. (2010), is *educational environments.* These are dynamic, information based spaces for learning activity that have been created and influenced by educator and educational aim, educational content, education forms, methods and means that help to effectively implement the content. The educational environments contain other objects and subjects that have influence on learner, on educational information or/and the ways this information reaches a learner. Learners act in these environments and their learning is directly influenced by the educational environment's factors via the projection of educational environment into the personal learning environment.

In the research on non-formal education both the educational environments and *potential learning environments* are being explored, as they emerge out of life situations, events and participation activities a person is involved in with other people and exchanges the information. These environments are characterized by fixed verbal (written, visual, spoken) or virtual information and communication channels, e.g. TV, newspapers, the Internet.

Aiming for more effective learning of students that enables them to develop skills for setting the lifelong learning goals, to experience the attractive, joyful, discovery based learning, to acquire new knowledge, experience and improve their abilities, it is necessary to enrich their learning with the possibilities of potential, educational environments at museum.

The importance of personal learning in contemporary museum with the construction of learner's personal meaning lays emphasis on the context of *personal learning environment.* Personal learning environment is an environment that is perceived by person very individually, depending on his/her learning aims, skills, needs and experience; in other words, it is a part of surrounding information space that is being recognized and used by learner as his/her own personal learning environment (Juceviciene et al., 2010).

Falk and Dierking (2000) assume that museum information and knowledge are directly related to personal and social qualities of visitor. So, museum strives to present the multi-dimensional perspectives and allows visitors to freely construct their meanings based on their personal experiences. Here learning refers to the constructivist position by emphasizing that learning is not only what the museum wishes to teach a visitor, but is rather what meaning and sense a visitor attributes to the experience acquired in the museum.

Obviously, the meaningful and rich personal experience depends on the museum potential learning environments and educational environments, on the basis of which people are able to form their own personal environments.

With reference to the importance of museums' *potential learning environment*[*], it is distinguished by the following features: a) learning information; b) channels of information reception: how it reaches an individual: through observation/activity/by invoking the live senses (*vision, smell, hearing, taste, touching*); c) and their conditions (*education zones, children rooms, etc.*).

Educational environment in the museum is considered to consist of educational activities (educational programmes, educational routes, excursions, lectures, etc.) created by museum employees, educators, with a particular learning aim, the content that conforms to it as well as educational methods and forms that support its assimilation. Learners are actively involved in the environment and their learning is directly influenced by the factors of educational environment through the learning environment, which they understand.

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[*] Potential learning environment in the museum is physical and virtual space in the museum, which distinguishes in fixed verbal, non – verbal or virtual information as well as its reception channels, by means of which knowledge can be constructed, new experience acquired.

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Museum interior;
Exhibition design;
Educational material;
Educational zones; classes
etc.

Group, family, learning;
Collaboration;
Museum guide impact
etc.

Websites;
Databases;
Catalogues
etc.

Education aim;
Education content;
Education forms,
methods, means;
Educator;
Other objects

Physical context   Social context   Virtual context

Educational context

Educational
environment

Personal learning
environment

Potencial
learning
environment

Personal context

Motivation, expectation;
Prior acquirement knowledge;
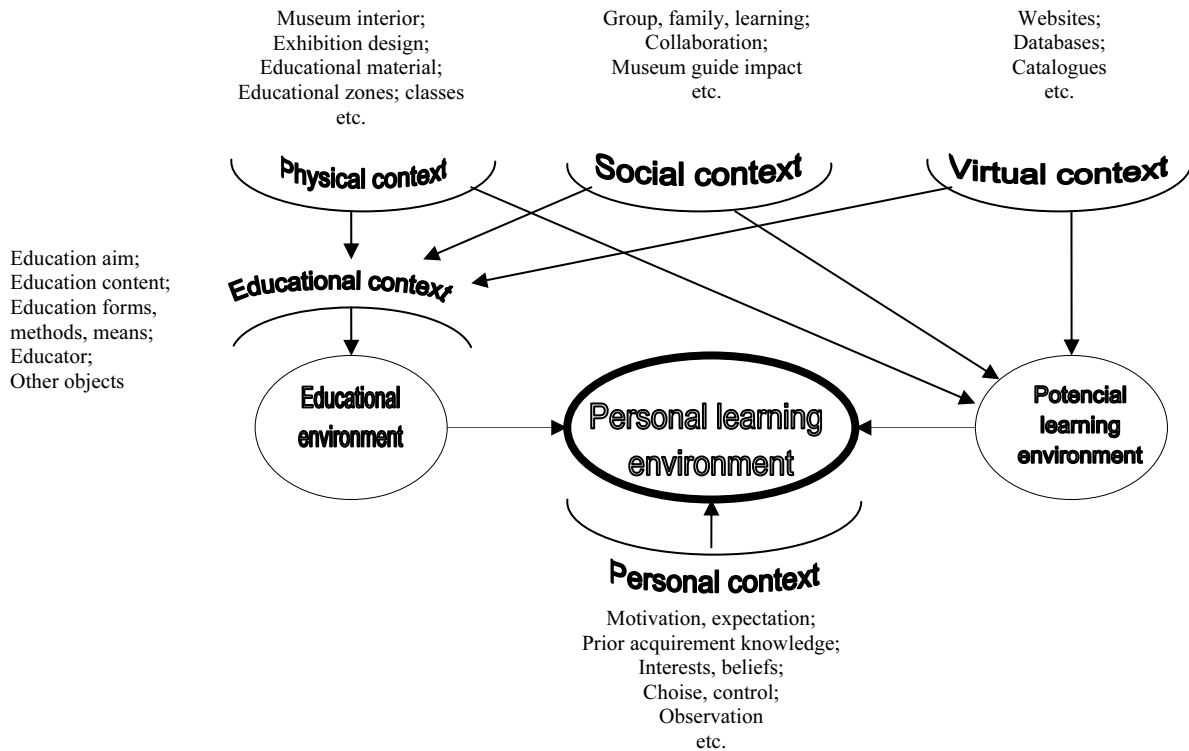Interests, beliefs;
Choise, control;
Observation
etc.

Figure 3. Model of factors for formation of personal learning environments (PLE) in museums

The potential learning environment of museum that embraces all the museum spaces with the objects and subjects inside could be transformed by the learner into personal learning environment. This is influenced by learners' personal qualities, as Falk and Dierking (2000) claim. Learners combine into one whole what they see, do and feel with the already known, familiar and accepted things.

Here it is important how people work with information, perceive objects and ideas, what their learning style is and so on. This influences the learning quality, the construction of new meanings and, accordingly, the formation of personal learning environment.

Learning always takes place at a certain moment, under certain conditions and always depends on the context. Referring to the ideas by Falk and Dierking (2000) as well as Juceviciene et al. (2010), it is possible to offer a model of factors for formation of personal learning environments (PLE) (Figure 3).

The model reveals the personal context, which defines all personal characteristics that people bring to their learning process: motivation and expectations, prior knowledge, interests and beliefs, choice, etc. They are internal factors, which determine what information, means of its formation or dissemination channels a person will select from educational environments and potential learning environments; and in that way the personal learning environment will be formed.

The factors of educational context forming the educational environment and able to influence the construction of personal learning environment are as follows: education aim, content, methods, forms, means,

an educator, their competence and other features as well as learners, whose activity can influence a person, who is forming his/her personal learning environment out of this educational environment. Educational environment in the museum can be created by a) using already possessed physical, social, virtual context of the museum; b) the purposively formed educational environment.

Relationships are the factors of social context able to influence the formation of personal learning environment of a particular person through potential learning environment as well as through educational environment. These relationships are built when people communicate in the museum with a person, and this communication helps forming the personal learning environment. This communication with a person under analysis could be carried out by family members, excursion guide and other visitors.

The factors of physical context are the museum's objects, their aesthetics and their display, which when used in educational environment can influence the construction of personal learning environment through it. The factors of physical context may manifest in potential learning environment and influence the construction of personal learning environment.

The factors of virtual context can be the same factors of physical, social, educational context transformed into virtual environment.

Finally, the following concluding remarks may be drawn on the basis of the above analysis:

The construction of museum educational activities based on constructivist ideas and learning by discovery reveals the multi-dimensional learning perspectives with

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the emphasis on active, motivated visitors who construct their personal meanings and rely on their own experience. Their learning during educational programmes is activated not only by practical 'do-it-yourself' or 'hands - on' activities, but also by 'minds - on' activity which implies the stimulation of thinking.

The main characteristics of edutainment are the following: discovery, exploration, stimulation of reason, imagination and emancipation. Learners thus become active participants of the process who taught attractively in museum, in a playful and entertaining way, by means of games solving their problems. They not only explore and experience a sense of discovery, but also learn to reason, think, express their ideas openly and construct knowledge.

The construction of students' personal learning environments in the museum from educational environments and potential learning environments is influenced by the factors of educational, physical, social and virtual contexts, and the degree of their influence is determined by the factors of personal context.

It is logical to assume that factors of educational, physical, social and virtual contexts in the museum interacting in educational environment, i.e. have already become factors of educational environment, can be more purposeful and more influencing the formation of personal environment than the ones acting in potential learning environment.

It is presumable the formation of learning environments of self-directed learners and the learners initiated by teaching will mostly be determined by factors of physical, social and virtual contexts, which are related to the factors of personal context, especially learning motivation Meanwhile the formation of personal learning environments of random learners would be mostly determined by factors of physical, social and virtual contexts if they are particularly impellent in a particular situation.

References

1. Allen, S. (2004). *Designs for Learning: Studying Science Museum Exhibits That do more Than Entertain.* Published online in Wiley InterScience.
2. Anderson, D.A. (1997). Common Wealth: Museums and learning in the United Kingdom. Printed in the UK for the Department of National Heritage, p. 89-104.
3. Bloom, M.V., & Hanych, D.A. (2002). Skeptics and true believers hash it out. Community College Week 4, 14.
4. Buckingham, D., & Scanlon, M. (2000). That is edutainment: media, pedagogy and the market place. Paper presented to the International Forum of Researchers on Young People and the Media, Sydney.
5. Edson, G., & Dean, D. (1996). *The Handbook of Museums.* London: Routledge.
6. Eshach, H. (2007). Bridging In – school and Out – of – school Learning: Formal, Non – Formal and Informal Education. *Journal of Science and Technology,* 16, 2.
7. Falk, J.H., & Dierking, D.L. (2000). *Learning from Museums: Visitor Experiences and the Making of Meaning.* AltaMira.
8. Hein, G.E. (1998). *Learning in the Museum.* London: Routledge.
9. Hilde, S., & Hein, G.E. (2000). *The Museum in Transition, a Physophical Perspective.* Washington, p. 110–118.
10. Jankevičiūtė, L. (2009). *Lietuvos muziejų leidybinė veikla: ypatumai ir tendencijos.* Knygotyra, Vilnius. Nr. 53.
11. Jarockienė, N. (2008). XXI amžiaus muziejininkų kompetencijos ir gebėjimų ugdymas: straipsnių rinkinys. Vilnius: Lietuvos muziejų asociacija.
12. Jucevičienė, P. (2007). *Besimokantis miestas.* Kaunas: Technologija.
13. Jucevičienė, P., et al. (2010). Universiteto edukacinė galia: atsakas 21-ojo amžiaus iššūkiams: monografija. Kaunas: Technologija.
14. Kazonienė, G. (2005). Konferencija Kultūrinių — edukacinių programų plėtra Klaipėdos apskrityje. Lietuvos dailės muziejaus septyniasdešimtieji metai — istorijos fragmentai. *Lietuvos dailės muziejaus metraštis,* 7, 312–318.
15. Khaled, A. (2010). The role of edutainment in e-learning: an empirical study. (Phd thesis, De Montfort University, 2010).
16. Lucas, A.M. (2000). Scientific literacy and informal learning. *Studies in Science Education,* 10, 1-16. http://dx.doi.org/10.1080/03057268308559903
17. McKenzie, J. (2000). Beyond edutainment and technotainment From Now On 10, 1.
18. McManus, P. (1992). Topics in museums and science education. *Studies in Science Education,* 157–182. http://dx.doi.org/10.1080/03057269208560007
19. Melamed, L. (1987). The role of play in adult learning. In D. Boud, V. Griffin (eds.). Appreciating adults learning: From the learners' perspective. London, Kogan Page, 13-24.
20. Mikučionytė, R., ir Lianzbergis, L. (2001). Šiuolaikinė dailė ir edukaciniai procesai. *Menotyra,* 4, (25), 75–81.
21. Mitchell, R.D. (1998). Learning through play and pleasure travel: using play literature to enhance research into touristic learning. *Current Issues in Tourism,* 1, (2), 176-188. http://dx.doi.org/10.1080/13683509808667838
22. National Research Council (1996). National Academy Press Washington, D.C.
23. Packer, J. (2006). Learning for Fun: The Unique Contribution of Educational Leisure Experiences. *Curator: The Museum Journal,* 49, (3), 329-344. http://dx.doi.org/10.1111/j.2151-6952.2006.tb00227.x
24. Savidis, A., et al. (2007). Developing inclusive e-Learning and e-entertainment to effectively accommodate learning difficulties. *Universal Access in the Information Society,* 5, 4, 401-419. http://dx.doi.org/10.1007/s10209-006-0059-3
25. Scott, C. (2000). Leisure and Change: Implications for museums in the 21st century. Sydney, UTS and Powerhouse Museum, p. 115-126.
26. Šermukšnytė, R. (2008). *Istorija, muziejus ir didaktinė perteikimo problema: metodinė priemonė.* Vilnius: Vilniaus universitetas.
27. Žukauskienė, R. (2004). *Raidos psichologija.* Vilnius: Margi raštai.

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Mokinių ugdymas muziejuose: asmeninės mokymosi aplinkos susiformavimo galimybės

Santrauka

Muziejuose besimokantieji mokosi kaip neformalaus ugdymo „mokykloje", kurioje vyksta edukacinės veiklos, suderintos su mokyklų bendrosiomis programomis. Tuo tarpu siekiant atraktyvaus, smagaus mokymosi, muziejai siūlo mokymosi pramogaujant (angl. *edutainment*) galimybes. Šios mokymosi galimybės kelia tam tikrus iššūkius besimokantiesiems. Tai reiškia, jog šie privalo būti pakankamai profesionalūs ir motyvuoti mokytis „visur" ir „visada". Tad tyrinėjant muziejaus lankytojų reakcijas į juos supančią muziejaus aplinką, svarbu išryškinti, kokias asmenines mokymosi aplinkas tame pačiame muziejuje identifikuoja įvairūs lankytojai ir nuo kokių veiksnių priklauso šių asmeninių aplinkų susiformavimas.

Siekiant pateisinti muziejaus kaip profesionalios pažinimo institucijos vardą, kuriame vyktų sklandus, efektyvus dialogas su muziejaus lankytojais, būtina įgyvendinti svarbiausią muziejinės edukacijos uždavinį. Pabrėžiama, jog reikia ne ugdyti, o sieti ir kartu jausti, ne mokyti, o mėginti lankytojams suteikti intelektinį ir prasminį malonumą (Hilde, Hein, 2000). Taip pat svarbu nepalikti muziejaus lankytojų abejingų, tad būtina ką nors siūlyti, duoti, leisti imti, tyrinėti, nepamiršant, kad muziejaus tikslas yra ne jis pats ir ne jo objektai – jis yra terpė ir priemonė atlikti svarbią švietimo misiją.

Šiame straipsnyje siekiama atsakyti į tokius probleminius klausimus: kokias asmenines mokymosi aplinkas tame pačiame muziejuje identifikuoja įvairūs lankytojai? Nuo kokių veiksnių priklauso šių asmeninių aplinkų susiformavimas? Ar galima išskirti lankytojų, kaip besimokančiųjų, būdingus tipus?

Straipsnio tikslas – atskleisti mokinių asmeninių mokymosi aplinkų susiformavimo galimybes, mokantis muziejuje. Straipsnis grindžiamas konstruktyvistine teorija, mokymosi visą gyvenimą bei *edutainment*

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koncepcijomis. Jį rengiant buvo taikyta mokslinės literatūros analizė bei dokumentų analizė.

Pirmojoje straipsnio dalyje analizuojama muziejaus edukacijos koncepcija. *Antrojoje* atskleidžiami mokymosi pramogaujant (angl. *edutainment*) muziejuje bruožai. *Trečioje dalyje* išryškinamos mokinių asmeninių mokymosi aplinkų susiformavimo iš potencialios mokymosi bei edukacinės aplinkos galimybės, akcentuojant savivaldaus, atsitiktinio, mokymu inicijuoto besimokančiojo mokymosi muziejuje tipus bei pristatant asmeninių mokymosi aplinkų (AMA) muziejuje susiformavimo veiksnių modelį.

Edukacinių uždavinių muziejuje įgyvedinimą užtikrina Hein (1998) sukurtas efektyvus žinių, mokymosi metodų ir teorijų modelis, kuriuo remiasi visa muziejaus edukacijos filosofija. Remiantis šiuo modeliu, edukaciniai tikslai grindžiami įvairiai: didaktiniu - aiškinamuoju, atradimų metodais ir konstruktyvizmo teorija. Čia *mokymosi atrandant* metodo teorinė esmė ir *konstruktyvizmo teorija* skiriasi, nes pirmuoju atveju mokinys ieškojimų pabaigoje turi gauti „teisingą", muziejaus nustatytą sprendimą, siekdamas jo pagal iš anksto parengtą modelį, antruoju atveju – suvokti ekspoziciją savaip, remiantis patirtimi ir žiniomis, nebūtinai siekiant teisingo atsakymo. Tačiau juos vienija tai, kad mokymosi procesas yra aktyvus, besimokantysis turi būti motyvuotas ir aktyviai dalyvauti veikloje. Tad, siekiant efektyvaus dialogo su lankytojais muziejuje, edukacinės veiklos turi būti organizuojamos remiantis mokymusi atrandant bei realizuojant konstruktyvistines idėjas, siūlant aktyvias, atraktyvias, smagias veiklas, kartais net paremtas pramogavimo elementais, atmetant didaktinio – aiškinamojo metodo principus, kur ignoruojamas lankytojas ir jo poreikiai.

Svarstant pateiktas mintis, panašumų galima įžvelgti ir kalbant apie mokymo ir mokymosi paradigmų esminius skirtumus, kai, pasak Jucevičienės (2007), požiūris į žmogaus mokymąsi visą gyvenimą sąlygotas edukacinės paradigmos virsmo: iš tradicinio, ilgus amžius vyravusio mokymo akcentavimo (*mokymo paradigma*) į šiuolaikinę *mokymosi paradigmą*, kuri mokymąsi traktuoja kaip ne tik trunkantį „nuo žmogaus gimimo iki mirties", bet ir nebūtinai susietą su mokymu. Formalaus ugdymo institucija turi būti pasirengusi lanksčiai reaguoti į besimokančiojo poreikius, įskaityti jos iš anksto nenumatytus, tačiau vertingus mokinio mokymosi rezultatus, pasiektus informalaus mokymosi būdais. Mokymosi paradigma, akcentuojanti šiuolaikinį žmogų, kuris siekia savo gyvenimo darnos nuolat mokydamasis ir tobulėdamas, be formalaus ir neformalaus mokymosi, ypatingą dėmesį skiria informaliam mokymuisi, ypač - mokymuisi iš patirties.

Mokymosi visą gyvenimą koncepcija ir ją realizuojančios muziejų institucijos leidžia naujai pažvelgti į mokymuisi sukuriamas galimybes. Šių galimybių teorinis pagrindas, pasak Jucevičienės ir kt. (2010), yra *edukacinės aplinkos* Tuo tarpu nagrinėjant neformalųjį ugdymą tyrinėjamos ne tik edukacinės, bet ir *potencialios bei asmeninės mokymosi aplinkos*.

Siekiant kokybiškesnio, efektyvesnio mokinių mokymosi, kad mokiniai gebėtų formuoti mokymosi visą gyvenimą tikslus, patirtų smagų, atraktyvų, atradimo džiaugsmo papildyta mokymąsi, įgytų naujų žinių, patirties, pagerintų ir kitus savo gebėjimus, būtina jų mokymąsi papildyti edukacinių, potencialių mokymosi aplinkų bei asmeninių mokymosi aplinkų teikiamomis galimybėmis muziejuje.

Falk, Dierking (2000) teigia, jog muziejuje pateikiama informacija, žinios yra tiesiogiai susijusios su asmeninėmis ir socialinėmis lankytojo savybėmis, stengiantis atskleisti daugialypes perspektyvas, leidžiant lankytojams laisvai kurti jų asmenines prasmes, remiantis jų pačių patirtimi. Čia mokymosi procesas remiasi kontruktyvistine pozicija, pabrėžiant, jog mokymasis - ne tik tai, ko muziejus nori išmokyti lankytoją, bet labiau tai, kokią prasmę, reikšmę lankytojas priskiria muziejuje įgytai patirčiai.

Akivaizdu, jog prasminga ir turtinga individo patirtis labai priklauso nuo muziejaus potencialių mokymosi ir edukacinių aplinkų, kurių pagrindu jis geba susiformuoti savąsias asmenines aplinkas.

Išryškinant muziejaus potencialios mokymosi aplinkos reikšmingumą, jai būdingi šie bruožai: a) mokymosi informacija; b) informacijos priėmimo kanalai: kaip ji pasiekia individą: per stebėjimą/ veiklą/ pasitelkiant jusles (*rega, uoslė, klausa, skonis, lytėjimas*); c) ir jų sąlygos (*švietimo zonos, vaikų kambariai ir kt.*).

Tuo tarpu muziejaus *edukacine aplinka* laikoma muziejaus darbuotojų, edukatorių kuriamos edukacinės veiklos (edukacinės programos, edukaciniai maršrutai, ekskursijos, paskaitos, kt.), turinčios konkretų mokymosi tikslą, jį atitinkantį turinį bei jo įsisavinimą paremiančius ugdymo metodus ir formas. Šioje aplinkoje veikia besimokantysis, kurio mokymąsi per jam suprantamą mokymosi aplinką tiesiogiai įtakoja edukacinės aplinkos veiksniai.

Muziejaus potencialią mokymosi aplinką, kuri apima visą muziejaus erdvę, joje esančius objektus ir subjektus, įvairių tipų besimokantieji (mokymu inicijuoti, savivaldūs, atsitiktiniai) gali gebėti transformuoti į savąsias mokymosi aplinkas. Tai, anot Falk, Dierking (2000), sąlygoja jų asmeninės charakteristikos. Besimokantysis sujungia tai, ką jis mato, veikia ar jaučia su tuo, ką jis jau žino, supranta ir pripažįsta. Čia svarbu tai, kaip žmogus apdoroja informaciją, suvokia objektus ir idėjas, koks yra jo mokymosi stilius ir panašiai. Nuo jo paprastai priklauso mokymosi kokybė, naujų prasmių konstravimas, taigi - ir asmeninės mokymosi aplinkos kūrimas.

Pabrėžiant, jog mokymasis visada vyksta tam tikru momentu, tam tikromis sąlygomis ir visuomet priklauso nuo konteksto, pasiremiant Falk, Dierking (2000), Jucevičienės ir kt. (2010) idėjomis, galima pasiūlyti asmeninių mokymosi aplinkų (AMA) muziejuje susiformavimo veiksnių modelį, kuriame išryškintas *asmeninis kontekstas,* apibrėžiantis visas asmenines charakteristikas (motyvacija ir lūkesčiai, anksčiau įgytos žinios, interesai ir įsitikinimai, pasirinkimas ir kt.), *edukacinis kontekstas ir jo veiksniai* (ugdymo tikslas, turinys, metodai, formos, priemonės, edukatorius, jo kompetencija ir kt. savybės bei ugdomieji), *socialinis kontekstas ir jo veiksniai* (santykiai, susidarantys žmonėms bendraujant muziejuje su asmeniu), *fizinis kontekstas ir jo veiksniai* (muziejaus objektai, jų estetika, išdėstymas, kt.), *virtualus kontekstas ir jo veiksniai* (gali būti tie patys fizinio, socialinio, edukacinio konteksto veiksniai, perkelti į virtualią erdvę).

Taigi muziejaus edukacinių veiklų kūrimas, remiantis konstruktyvistinėmis idėjomis bei mokymosi atrandant metodu, atskleidžia daugialypes mokymosi perspektyvas, kai išryškinamas aktyvus, motyvuotas, laisvai kuriantis asmenines prasmes, remiantis savo paties patirtimi, lankytojas. Jo mokymasis edukacinių programų metu aktyvinamas ne tik praktinėmis pasidaryk pats „*do-it-yourself*" ar „*hands – on*" veiklomis, bet ir akcentuojant, įprasminant mąstymą skatinančią „*minds – on*" veiklą.

Mokymosi pramogaujant esminės charakteristikos yra: atradimas, tyrinėjimas, vaizduotės, proto stimuliavimas bei išlaisvinimas (*emancipation*). Tad besimokantieji, aktyvūs proceso dalyviai, muziejuje mokosi atraktyviai, smagiai, pramogaudami, žaidimų pagalba spręsdami iškilusias problemas. Čia besimokantieji ne tik tyrinėja, patiria atradimo džiaugsmą, tačiau nuolat skatinami protauti, mąstyti, laisvai reikšti mintis bei konstruoti žinias.

Mokinių asmeninių mokymosi aplinkų muziejuje susiformavimą iš edukacinių aplinkų ir potencialių mokymosi aplinkų įtakoja edukacinio, fizinio, socialinio ir virtualaus kontekstų veiksniai, o jų įtakos laipsnį lemia asmeninio konteksto veiksniai.

Logiška manyti, jog muziejaus edukacinio, fizinio, socialinio ir virtualus kontekstų veiksniai, sąveikaujantys edukacinėje aplinkoje, t.y. tapę edukacinės aplinkos veiksniais, gali būti kryptingesni ir įtaigiau veikiantys asmeninės aplinkos susiformavimą, nei veikiantys potencialioje mokymosi aplinkoje.

Tikėtina, kad savivaldžių, taip pat mokymu inicijuotų besimokančiųjų (*self – directed learners*) mokymosi aplinkų susiformavimą labiausiai lems fizinio, socialinio ir virtualaus kontekstų veiksniai, kurie siejasi su asmeninio konteksto veiksniais, ypač – mokymosi motyvacija. Tuo tarpu atsitiktinių besimokančiųjų asmeninių mokymosi aplinkų susiformavimą labiausiai turėtų lemti fizinio, socialinio ir virtualaus kontekstų veiksniai, jeigu jie yra ypač įtaigūs konkrečioje situacijoje.