

Salla Vuorisalo

**LEARNING OUTSIDE THE CLASSROOM:  
PRE-PRIMARY TEACHERS' VIEWS OF THE  
USE OF MUSEUM AS A LEARNING  
ENVIRONMENT**

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# ABSTRACT

Salla Vuorisalo: Learning outside the classroom: pre-primary teachers' views of the use of museum as a learning environment  
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The aim of this research was to find out pre-primary teachers' views on the use of museum as a learning environment. In this thesis I answer the research question: How do pre-primary teachers understand the museum as a learning environment? Numerous surveys have been conducted concerning museum as a learning environment but comparatively few concerning museum as learning environment specifically for young children in the perspective of their teachers.

The study was conducted as a qualitative interview research. The research data was collected through 3 Zoom semi-structured interviews individually on the theme. Interviews were analyzed by using a qualitative content analysis.

The results of this research show that museums are useful learning environments in pre-primary education from the view of interviewed teachers. Museums are an alternative learning environment for a typical pre-primary education classroom. Interviewed teachers feel that the social environment encourages the teachers to take their students to museum. However, they feel that the relationship between museums and educational sector is not sufficient nor do the museums promote their targeted educational services enough. The teachers appreciate the interactive and versatile museum environment which had been planned specifically for educational purposes. Teachers value the happiness they see in their students when exploring a new learning environment with their peers.

Keywords: museum, learning environment, pre-primary education

The originality of this thesis has been checked using the Turnitin OriginalityCheck service.

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# 1 INTRODUCTION

Learning does not happen only in classrooms. All over the world teachers use different learning environments as a support of teaching and children's learning. Museums are significant options for learning instead of a normal classroom. According to Mackety and Applegate (2003), the main task of museums is to educate their visitors. This means that students and their teachers are one of the most obvious users of museum services. In order for museums to attract visitors, it is essential that they know the pedagogical needs of the educational sector. Thus, creating these environments might entice teachers to visit the museum with their students. Successful museum experience enables the visitors to learn something new, connect their learning to previous knowledge and encourage the visitors to come back for more. (Mackety & Applegate 2003, 2) Also, the National Core Curriculum for Pre-primary Education highlights the significance of using "cultural services", including museums, as an additional environment for learning (National Core Curriculum for Pre-primary Education 2014, 34).

According to the Finnish Museum Association, museums are institutions which present and take good care of objects exhibited, such as specimens, works of art, objects, buildings, relics, monuments and stories connected with these materials. Furthermore, museums create knowledge by organizing exhibitions, publishing research, teaching as well as counselling on various matters related to the museum field. Museums maintain cultural heritage for generations to come by passing on experiences, stories as well as information connected with a community's legacy. There are different types of museums. Some museums concentrate on local or provincial art or cultural history. Personal history museums take care of the objects and introduces the life work of significant people. Outdoor museums are places where for example whole courtyards have been looked after for generations to come. Specialty museums concentrate on certain pieces of items or even on specific phenomena. Last but not least, natural

history museums take good care of artifacts, create more information as well as introduce the surrounding nature. (Finnish museums association n.d.)

According to Museovirasto, the Finnish museum sector offers more than 300 professionally maintained museums and several hundred non-professional museums. In 2019, all together 68 429, day care, school and student groups visited museums in Tampere. For example, Työväenmuseo Werstas had 3 572, day care, school and student groups visiting Werstas in 2019. Tampereen kaupungin historialliset museot (The historical museums of Tampere) had the highest number of visitors. Altogether 27 142, day care, school and student groups visited these historical museums. (Museotilasto) These numbers show that museums are being used as learning environments by these student groups.

I have always been interested in museums and what they have to offer especially for children. I fancied going to museums with my own children, since many of them offer their services even for free (children under 7 years old) and I find it an interesting way to spend a rainy day with the kids and learn something new, interact and have a good time. As a future pre-primary teacher, I am hoping to work in a city or a municipality where museums would be possible to visit and be used as out-of-school learning environments. I wondered, however, whether other teachers also use the museums and what their views are on them as a learning environment. Thus, I have chosen this topic for my bachelor's thesis in order to find out more of pre-primary teachers' views and experiences of using the museum as a learning environment.

In this study, I aim to find out how museums are used as learning environments in pre-primary teachers' views in pre-primary education. In addition, by interviewing teachers, I aim to find out more about their views of museums in general and their views on their usefulness in pre-primary education. The study is conducted as a qualitative research. The research data is collected through 3 Zoom semi-structured interviews with pre-primary teachers individually on the theme. Interviews are analyzed by using a qualitative content analysis.

First, I introduce the Finnish ECEC context, related literature and the theoretical frame of this research. I shall have a deeper look into learning environment and define what will be considered as a learning environment in this thesis. Second, I discuss the museum as a learning environment. Chapter three introduces the methodology and the method of this research. It also presents ethical considerations regarding my research. In chapter four, I introduce the data and perform the analysis of the collected data. I also explain my data management plan for conducting this research. Finally, I will conclude with summarizing my research and discuss how the research findings could be used for further research ideas.

## 2 REVIEW OF THE LITERATURE

### *2.1 Pre-primary education in Finland*

According to the National Core Curriculum for Pre-primary Education, the purpose of this nationwide regulation is to make sure that pre-primary education is meeting the standards in whole of Finland by providing equivalent and unite education for all of the children belonging to this age-group. It states that the main ideas and aims of pre-primary education is the collaboration between the early childhood education and care staff and guardians, as well as the ensuring the standards and aims of the student welfare in educational sector. Pre-primary education forms an entity of education and instruction. Thus, the curriculum states the aims of different components which are combined in order to establish the basis for the “operational culture”. (National Core Curriculum for Pre-primary Education 2014, 8-9) Hence, the core curriculum for pre-primary education consists of the rules on the aims of pre-primary education as well as explanations which help educators to understand these regulations (National Core Curriculum for Pre-primary Education 2014, 1.1).

Pre-primary education is a significant period of time in every child’s life. Pre-primary education ought to be well organized as well as thoughtfully carried out in order to give every child possibility to learn through experimentation and feel the inspiration of learning. Children find their individual abilities and expertise through playing and performing in various learning environments. In addition, pre-primary education aims to strengthen children’s capability to communicate and interact in society. One of the attempts in pre-primary education is to teach children to value their own identity and to respect people’s equal opportunities. To sum up, the main intention of pre-primary education is to enable every child to grow, learn and develop in their community. (National Core Curriculum for Pre-primary Education 2014, 2.0)

Every child needs to attend pre-primary education or achieve the aims of this education in some way at a certain age. Guardians are responsible for ensuring their child's attendance. Pre-primary education is arranged in every municipality one year before starting primary education. Pre-primary education usually lasts for one year and should contain at a minimum 700 hours. In Finnish pre-primary education, learning equipment used in education as well as needed student welfare services and daily lunch are free of charge. (National Core Curriculum for Pre-primary Education 2014, 2.1)

As mentioned above, pre-primary education is a significant period of time in every child's life. Since pre-primary education should give every child the possibility to learn through experimentation and feel the inspiration of learning, I think museum as a learning environment provides children with these possibilities of experimental and inspirational ways of learning. Thus, pre-primary teachers choose whether they use museum as a learning environment in pre-primary education. In chapter 4, I will introduce the views of the interviewed pre-primary teachers concerning the usage of museum as a learning environment.

## *2.2 Learning environment*

Learning happens everywhere. Learning does not require a classroom, rather teachers are using and creating new learning environments all the time in their teaching. Teachers can enhance children's learning by being innovative and exploring as well as creating different ways to learn in versatile learning environments. According to Arthur and colleagues (2018), environments can allure or push away people from different cultural backgrounds. Different environments might attract the people to explore and learn something new, but they can diminish learning opportunities when not made for educational purposes. Learning environments in different educational settings have the ability to make the visitors learn and interact with other people by engaging with the different areas and objects in that learning area. (Arthur et al. 2018, 371)



Goh and Fraser (1998) argue based on their archival research that the concept of learning environment has been in use since 1930's (as cited in Manninen 2007, 15). However, this concept has been a major topic in educational discussion and literature only for the past ten years. It is not a new concept, but it has changed learning, education and studying due to the fact that the student-centred approach to teaching and learning has been promoted in education instead of the traditional teacher centred approach. (Manninen 2007, 9)

The Finnish National Core Curriculum for Pre-primary Education (2014) defines learning environments as "facilities, locations, equipment, communities and practices which support children's growth, learning and interaction." (National Core Curriculum for Pre-primary Education 2014, 33) Learning environments can create an unrushed and relaxed feeling for the learners. A good learning environment enables the children to learn and gain new information jointly with their peers. It also encourages children to interact with each other. (National Core Curriculum for Pre-primary Education 2014, chapter 3.2)

According to different learning theories, Manninen (2007) has described different learning environment features which support people's learning. An environment which supports learning, for example, guides the learner, supports social interaction, takes into account learner's level of development as well as directs attention. (Manninen 2007, 54) The environment can be seen as an "additional teacher" (Arthur et al. 2018, 379). In my opinion, the museum is definitely an "additional teacher" since it provides specifically planned and built environment for educational purposes. Thus, the schools do not need to offer these types of special environments since they can take the students to learn in a museum environment.

Children are known to learn more easily when they actively participate in different activities, when their senses are stimulated, interact with the surrounding people, have direct experiences, observe and discover things as well as join trips (Akamca, Yildirim & Ellez 2017, 689). Thus, giving the children an opportunity to learn in a museum environment is an effective way to provide young children with age-appropriate skills (Dilli & Dumenci as cited in Akamca, Yildirim & Ellez 2017,

689). Colwell et al. (2015) state that children need “enabling environments” to develop and learn (Colwell et al. 2015, 173). In enabling environments, children’s learning is appreciated, every child’s needs are met and there should be a strong collaboration between families and educators (Colwell et al. 2015, 173). These enabling environments offer “stimulating resources” which are related to different communities and cultures (Early Education 2012, as cited in Colwell et al. 2015, 173). They also offer multiple learning opportunities with the help of playful teaching, play itself as well as motivate children to explore and take risks (Early Education 2012, as cited in Colwell et al. 2015, 173).

To sum up, learning environment is a very broad concept and learning environments could be created almost anywhere. Teachers can create their own learning environments at school or take the students to out-of-school learning environments. Museums provide learning environments which offer interactive and stimulating environments. Next, an attempt will be made to introduce museums as learning environment.

### *2.3 Museum as a learning environment*

In this study, I understand the concept of ‘learning environment’ by drawing together the previously definitions. I consider the museum as a learning environment, which is at an out-of-school location and supports children’s learning, growth, interaction and exploration. Museum as learning environment offers opportunities for play as well as interaction with other people, space and materials.

According to Sheppard (2001), museums could be described as “classrooms without walls”, they offer significant learning potential, and museums are considered to be crucial environments for learning purposes (as cited in Akamca, Yildirim and Ellez 2017, 388). According to Paris and Hapgood (2002) teachers increasingly take their students to learn in informal learning environments, such as museums, but still there is little research on how children’s museum experiences contribute to their cognitive as well as social development. They suggest that there are several areas for future research which have the potential

for informing educators and parents about the dynamics of experiential learning together with inquiry-guided learning, object-centered learning, artistic and aesthetics appreciation as well as learning to use technology. The growing experiences in these motivating and unique contexts might shape children's identities, thinking, aspirations, values and group membership over their lives. We can accompany traditional research on children in schools and homes with more studies of children in informal learning environments and, thus, provide a wider variety of everyday contexts to study reasoning, motivation and socialization. (Paris & Hapgood, 2002, 33) Also, Hackett, Holmes and MacRae (2020) state that there is a minimal amount of documentation of theory as well as research and practice related to the growing field of museum education even though museums have recognized their ability to offer unique experiences to nurture growth as well as inspire learning with young children (Hackett, Holmes & MacRae 2020, ii).

Talboys (2011) pays attention to the fact that museums are facing enormous challenges in providing the greatest educational services they can. Museums are repeatedly told what exceptional educational resources they are but still they find it more and more problematic to secure the needed resources and money in order to meet the expectations of being one of the best educational services. One of the biggest obstacles when trying to evolve their educational potential, is the shortage of specialist education staff. In addition, evolving their educational potential takes a lot of time and support. (Talboys 2011, 1)

Museums are available in most of the cities and municipalities in Finland. For example, 68 429 day care, school and student groups visited museums in Tampere in 2019 (Museotilasto). This shows that museums are being used as a learning environment by the educational sector. As stated in this chapter, museums offer significant learning potential, and they are crucial environments for educational purposes. This research aims to find out pre-primary teachers' views of the museum as a learning environment in pre-primary education.

# 3 METHODOLOGY AND METHOD

## 3.1 *Semi-structured interviews*

Interview is described as a procedure in which questions are being asked from individuals or collection of individuals with the supposition of gaining replies to a specific inquiry or an illustration of individuals opinions on specific themes (Mukherji & Albon 2018, 238). Hohenstein (2018) views semi-structured interviews as a more flexible interview type than structured interview. Semi-structured interview maintains some format to be followed but allows a more natural conversation to occur. This type of interview is usable with almost any type of methodology or approach to research. (Hohenstein 2018, 40-41) Hohenstein (2018) mentions some interview tools for conducting interviews, such as guiding questions or interview schedules. The main interview tool that I use in my study is guiding questions. In addition, there has been development in technology, thus, it is possible to conduct interviews through video-conversation, such as zoom. But with great technological involvement, it might be more difficult to hold clear and easily interpretable conversations. (Hohenstein 2018, 41-42) Due to the Corona pandemic situation, I took into account the technological involvement by using video-conversations via zoom, which were recorded to enable data analysis and to minimize the effects on the interview by trying to hold clear and easily interpretable conversations with the teachers.

## 3.2 *Content analysis*

After the interviews, I will analyze the interview transcripts by using a content analysis. Coffey (1999) reminds that it is important to consider in qualitative studies that the researcher might have an impact on gathered and documented data and in the way this data might be understood and analyzed. (as cited in Mukherji & Albon 2018, 355) Denscombe (2014) suggests that the researcher can avoid the impact on the data by attempting to recognize how their intentions,

perspectives and opinions might influence their research and avoid it as well as possible (Denscombe, 2014 as cited in Mukherji & Albon 2018, 355). I will take into account my opinions, intentions and perspectives and be cautious of them affecting my data documentation and research findings. Content analysis method is used for representing “the meaning of qualitative material in a systematic way” (Schreier 2012, 1). According to Weber (1990), a central aspect of human interaction is communication. Thus, he describes content-analytic methods being primarily used for mapping human-to-human interactions via textual means. (Weber 1990, 2)

According to Tuomi and Sarajärvi (2018), the intention of content analysis is to get a representation of certain phenomena, in a clear and concise way. There is a basic frame for conducting content analysis. First, the researcher has to choose a phenomenon which cannot be too wide for the research. The research question has to be in line with the main interest of the analysis. Second, the data has to be transcribed. Third, the researcher needs to classify or code the themes. Coding the themes is very similar to classifying but it emphasizes more of what has been said of each theme. The researcher looks for different themes in the data. The idea is to find different views and conceptions that describe the different themes. (Tuomi & Sarajärvi 2018, 4.1)

### *3.3 Ethical considerations*

It is very important to consider ethics in early childhood research. Aubrey and colleagues (2000) describe the notion of ethics as “The moral philosophy or set of moral principles underpinning a project” (as cited in Mukherji & Albon 2018,107). When interviewing, we need to be aware of the issue of ‘informed consent’. According to Mukherji and Albon (2018), “informed consent” is one of the key terms in research ethics and it means that the person participating in research needs to give his/her approval to the research (Mukherji & Albon 2018,110). In addition, Mukherji and Albon (2018) state that participants should understand: a) the intention of the research; b) why their participation in the research matters; c) what are they required to do; d) how their involvement is relevant to the research; e) their right for information throughout the research; f)

the possibility to pull back from the research at any point of time; g) how the researcher documents and saves the data as well as h) who will see the data and what it will be used for. (Mukherji & Albon 2018, 110-111) Byrne also reminds of potential harms. As researchers we must make sure that people attending our research should not be subject to harm except the potential harm has been explained to and that the people have given informed consent to their participation. (Byrne 2017a)

When talking about ethical issues, Byrne also mentions confidentiality as one of the main issues. Thus, the principle of anonymity states that we need to ensure that people who are taking part in our interview/survey that they will not be identified from the material used in our research. (Byrne 2017b) In addition, researchers' bias might occur while conducting research and generating a description or even a conclusion that is not accurate. A researcher might intentionally set up particular result and thus, creates researchers bias, researchers bias might also be unconscious. In this latter case, the researcher unintentionally works in a certain way that creates certain research outcome. To avoid this, the researcher needs to reflect on what extent his/her own values, beliefs, background as well as social position might contribute to the way the researcher conducts research. (Byrne 2017c) These are all issues that I need to be aware of when conducting my own research and semi-structured interviews.

Mukherji and Albon (2018) also remind that researchers need to consider ethics throughout every stage of their research process. (Mukherji & Albon 2018, 117) Since early childhood research tends to involve human interactions, it is not easy for the researcher to predict and sort out all possible misunderstandings and errors. Thus, the paradigm which the researcher chooses influences his/her ethics. (Aubrey et al. as cited in Mukherji & Albon 2018, 117) Data gathering always raises certain ethical issues. When conducting an interview, the researcher should think about where (face-to-face, online) and when the interviews are taking place as well as the general comfort of the interviewee. In addition, the researcher should put the interviewee at ease with the help of the questions asked as well as the structure of the interview. (Mukherji & Albon 2018, 119) Ethics need to be considered also when analyzing and writing up the data.

As researchers, we need to consider following questions in relation to ethics. Do the participants of research share the researcher's thoughts of the analysis of the gathered data? Are participants' interpretations of the data the same as the researchers? Is it possible for the participants to be involved in the data analysis in any way? Who will be able to see the research when finished? Is the research written in a respectful manner? (Mukherji & Albon 2018,120)

This research has considered ethics throughout every stage of it. First, I have asked for the participants approval for the interview as well as recording it. Second, I have ensured that the participants are not subject to any potential harm when participating in my research. Third, confidentiality has been secured by not identifying the participants. Fourth, conclusions have been drawn by paying attention to possible researcher's bias. Fifth, I respected one of the participants' busy schedule by accommodating her request to participate in written form instead of a zoom interview.

# 4 DATA AND ANALYSIS

## *4.1 Research question*

In this study, I aim to find out whether and how museums are used as learning environments in pre-primary teachers' views in pre-primary education. In addition, by interviewing teachers, I aim to find out more about their views of museums in general.

Research question is:

- 1) How do pre-primary teachers understand the museum as a learning environment?

## *4.2 Research data*

The study is conducted as a qualitative research. The research data is collected through Zoom semi-structured interviews individually on the theme with only one exception. One of the teachers' was not able to find any time during her busy days so she asked to fill in the interview questions by writing. I agreed to that since she was very eager to participate in this research. The data in content analysis can be a transcribed interview, observation or other form of document (Tuomi & Sarajärvi 2018, 4.4.3). Interview transcripts were analyzed by using a qualitative content analysis. I contacted different daycares in Pirkanmaa region and found three pre-primary teachers who were willing to participate in my research. The interviews were conducted in March 2021.

The interviews were recorded on the permission of the teachers. The duration of the interviews varied from 20 minutes to 40 minutes. I followed Tuomi and Sarajärvi's (2018) steps of content analysis. First, I listened to the interviews and then transcribed the interviews. Then I read the interviews a couple more times to familiarize myself further with the content. Then I looked for plain expressions



and underlined them. After this, I created a list of the plain expressions. Next, I looked for similarities and differences and grouped them in order to create subclasses. Then, I combined the subclasses and I continued by forming unifying concepts and wrote analysis of the data. (Tuomi & Sarajärvi 2018, 4.4.3)

### *4.3 Data management plan*

It is also important for a researcher to have a proper data management plan. According to the Finnish Social Science Data Archive (FSD), an essential part of a research plan is a data management plan. The course of action should be clear for the researcher before starting the research and collecting data, but the plan can be expanded as well as reviewed throughout the whole research. The main goals of the data management plan are to guarantee that the research follows a good scientific practice, data ought to be protected throughout all stages of research. In addition, distributing the data should be achievable even when the initial research comes to an end. Also, the need for possible ethical review needs to be considered at the planning stage of the research. (Data Management Guidelines 09.03.2021) I looked into the ethical considerations at the planning stage of the research. These considerations can be seen in the chapter 3.3. In addition, I considered ethics throughout the analysis as well as writing up the data.

In my research, the data was collected with semi-structured theme interviews and analyzed by using content analysis. According to the FSD's guidelines in dmptuuli, in my research the data format for saving the data (recorded interviews via Zoom) was MP3 as well as textual data (interview transcripts). I ensured data quality by testing zoom operations and recording options before data collection. I used consistent and systematic naming of data files during research as well as in data archiving, I was consistent and systematic in transcribing data even if I needed only parts of it. During my research project, I was responsible for the storage and usability of the data. I paid attention to naming and managing files as well as backup and recovery of the files in addition to keeping in mind data security. Accidental deletion of data needs to be prevented and I ensured this with backup files. On the other hand, dispensable data files will be deleted when

they are no longer needed after the research project has come to an end. (Data Management Guidelines 09.03.2021)

#### *4.4 Analysis of the data*

The aim of the research is to find out how pre-primary teachers' view the museum as a learning environment. The following analytical questions arose from the data during the research process which will be discussed thoroughly in this data analysis chapter. I will also link the theoretical background to these findings of the teachers' views.

- 1) How do teachers' personal views about museums seem to affect the choices of using museum as a learning environment?
- 2) How does the social environment impact on the pre-primary teachers to visit the museum?
- 3) How do pre-primary teachers talk about the museum environment? Do they link these observations to learning?
- 4) How do the pre-primary teachers consider children's views of the museum?

Next, I will analyze the collected data by using content analysis. I will examine the data by answering each of the above analytical questions and link it with the theoretical frame and earlier literature.

##### 4.4.1 How do the teachers' notions of the museum experience seem to affect the choices of using museum as a learning environment?

First, I will have a look at the teachers' notion of museum experience and how it might affect the choices of using museum as a learning environment in their pedagogical activities. In order for the museum to be popular and to continue to exist, it must make sure that the visitors are able to experience and have good experiences at museums. (Antón et al. 2018, 1407). Anton and colleagues (2018) describe experience as giving people something extraordinary apart from their

ordinary lives. Thus, it gives the person something new to remember and the experience might lead to individual development. (Antón et al. 2018, 1407) Bowsijk and colleagues continue that experience might be defined as significant occasion. In addition, the “value” of the experience matters since it helps to recognize the feelings, sensations and thoughts inspired by the experience. (Bowsijk et al. 2007 as cited in Antón et al. 2018, 1407). Two of the teachers visited museums with their parents very often as a child. Kaija has the following memory from her childhood. All of the teachers remember going to museums on school trips when they were younger. All of the teachers also had previous experiences from taking a group of children to museums as pre-primary educators. Kaija, describes her experience the following way:

I used to go with my parents to art museums, they taught me that there are different ways to see the life, to see people, to see places, it is not black and white everything. This has allowed me to broaden my knowledge and be open minded. Kaija (Transcript, 2)

It has been shown that most research connected with how visitors experience museums mostly deals with learning opportunities in the museum. Previous research has discussed a lot about how the learning experience could be even more beneficial for the visitors, but it has ignored other possible experiences gained at the museum visit. (Vom Lehn 2006, as cited in Antón, Camarero & Garrido 2018, 1407) All of the interviewed teachers expressed their desire of trying to get the experience of learning something new when visiting a museum. (Transcript 1-2) Helena discusses her experiences in the following way:

I would like to learn more about the theme, aah, so that’s what I kind of expect to. Just to learn more. Just to get like another kind of a viewpoint on the subject or whatever it is about. Helena (Transcript, 2)

Thus, the educational role is highly important for the teachers themselves. As Vom Lehm mentioned previously, there are other kinds of museum learning experiences. Minna told in her interview that sometimes she has no expectations when entering a museum, but she purely wants to get the experience of surprise. (Transcript, 1) Minna and Kaija also mentioned that sometimes they are seeking to explore different sensations when visiting the museum. They want to feel new things. Many museums offer physical environments to feel with one’s senses. In

addition, they also mentioned emotional feelings, such as fun, peacefulness and inspiration. (Transcript 1-2). Minna illustrates her thoughts in these words:

I expect to have like fun time and like try to experiment and try to feel and observe, um, new things. Minna (Transcript, 1)

Anton and colleagues (2018) state us that if the museum visitors have some background information and are interested in the theme, it helps them to be more connected and take part in the museum activities. It helps the visitors to gain more from the experience especially in those parts of the museum which offer opportunities for taking part. Being more connected and taking part in the museum activities also encourages the visitors to take part in the after-visit activities, such as being active on social media connected with the museum, look for more knowledge of the theme as well as going back to the museum later on. (Antón et al. 2018, 1406) Helena states in her interview that she tries to get another kind of viewpoint on the theme or subject of the museum. Thus, she has preceding interest and knowledge and wants to be able to participate more deeply in the museum by building a more exquisite experience for herself. (Transcript, 2)

Nowadays, museums offer their visitors a broad display of "aesthetic", "sensorial", "educational", "recreational", "social" and even "amusement experiences" (Kotler & Kotler 2001, as cited in Antón, Camarero & Garrido 2018, 1406). In the teachers' interview answers a broad display of experiences comes to view. Aesthetic experiences in 'seeing the beauty in life' (Kaija, transcript, 2), sensorial experiences in 'trying to experiment and trying to feel' (Minna, transcript, 2), educational experiences in 'learning something new' (Minna, Helena, Kaija, 1-2), recreational experiences in 'seeing the world in diverse ways' (Kaija, transcript, 2) social experiences in 'going with parents as a child' (Minna & Kaija, transcript, 2) and 'school trips' (Helena & Kaija, transcript, 2) as well as amusement experiences in 'having fun' and 'loving it' (Minna & Kaija, transcript, 1).

Two of the teachers visit museums with their students regularly. Both of the teachers' value the museum as a learning environment and they have multiple

museum services situated near their schools. One of the teachers used to take her students to museum once a month when she worked in a city where there were lots of options to choose from. In her recent workplace, there are no museums within a walking distance, thus she cannot take her students to museums as often as she would like to. Minna specifies how often and for what purposes her group uses museum services with the following words:

I try that at least once per month we go to a museum. We'll have topics during the year so I try to make a somekind of a research and try to find a museum or an exhibiton or..um.. open area that is related to the topic in preschool. Minna (Transcript, 2)

Kaija explains why it is important for her to use museum as a learning environment in these words:

Yes, I think a student must have opportunities for learning in different ways and places. Kaija (Transcript, 2)

The analysis reveals that all of the interviewed teachers´ have a very broad notion of experience in museums and it seems to affect their choices of using museums as a learning environment. All of teachers value the educational role of museums and they visit museums regularly in order to learn something new and broaden their existing knowledge. Since the teachers value the educational sides of the museums themselves, they want to give the children the possibility to learn new things in a museum environment regularly if possible. The teachers expect a broad display of experiences from a museum visit, such as aesthetic, sensorial, educational, recreational social as well as amusement experiences. Thus, all of the interviewed teachers value museums as a learning environment and have used them and want to continue using them as an additional learning environment in pre-primary teaching.

#### 4.4.2 How does the social environment impact on the pre-primary teachers to visit the museum?

It has been suggested that museums might not be as valued in the community as they could be due to their underemphasized role in the society. Museums could, at the best, reveal more goals and topics related to the current times in order to serve local community´s needs. Luckily, the educational side of the museum is often used by the locals, thus, revitalizing the culture and economy in

the area. (Talboys, 2016, 18-19) Minna and Kaija (transcript, 2-3) use museum as a learning environment regularly due to the fact that their school is located near multiple museum services. Helena, on the other hand, used to work in a city where museum and other cultural services were more available to be used monthly. In her recent work location, there are no museum services available nearby, thus, she cannot use the museum as a learning environment as much as she would want to. (Transcript, 2) Minna highlighted especially that she is responsible for taking the children to museums to ensure the equality of children. She mentions that not all of the children have the possibility to visit museums with their families. Thus, she can ensure that all of the children have equal chances to visit museums if she uses it as a learning environment in pre-primary education. (Transcript, 4). Minna reports her responsibility in this way:

So, I feel that it's part of like my pedagogical responsibility to make the kids be able to enjoy also that, not only the parks and forest but the museums and exhibitions as much as I can to offer them. Minna (transcript, 4)

Talboys (2016) states that schools and educators have high expectations from museums. In order for the educator to take their students to museums, they require assistance from the museum and its staff rather than figuring out everything on their own. Receiving museum services for free is always a beneficial thing for the educators and schools. In addition, museums need to keep up with the developments in education, pedagogy and curriculum since the educational role is every museum's greatest asset and brings them crowds of users. (Talboys, 2016, 14) All of the interviewed teachers were happy that most of the museum services are free of charge for pre-primary groups (including the teacher and assistants). Minna and Helena mentioned that the parents are usually very encouraging when it comes to taking the children to museum. Parents have mentioned their gratitude to the teachers since many parents do not have the time to take their children to museums or they might lack financial resources for taking the whole family to the museum. All of the interviewed teachers had also used museum guides and most of the time they have had good experiences with the guides. Kaija reports her experiences of using the museum guides in these words:

Yes, well, some guides are great, they know how to talk to the children and in what to focus to maintain their attention but other times if the guides do not

have experience or have not prepared the tour for a specific age range, it is quite hard for both, children and guide. Kaija (Transcript, 3)

Helena also pointed out that guides are very useful in those situations when the teacher has not had enough time to visit the museum in advance and to get to know the theme and to collect some background information. (Transcript, 3) Minna, believes that all museums are suitable for pre-primary aged children. If the museum is mainly for adults and not so interactive, then the teacher needs to prepare the children to act in a way that is expected from them in different environments. (Transcript, 4-6) Minna represents her thoughts in such a way:

It's not the same as to go to a park or to go to a forest. Like it's more..um.. you need to behave in a certain way. Minna (Transcript, 6)

Visitors' well-being in terms of their security is also an important consideration. Museums must secure the health and well-being, and safety of the visitors (Talboys, 2016, 51) Kaija also brought up the discussion of safety on field trips. The teachers need to be aware of the needed safety issues when taking the children to out-of-school learning environments. (Transcript, 2) Kaija states that her school wants to ensure the safety of the children when visiting museums with the following words:

Yes, we visit museums provided that the safety of the children is ensured. Kaija (Transcript, 2)

It is encouraged that the museums know the demands and the needs of the educational sector in their surrounding community. Museums can promote themselves by letting the educational sector know what the museum has to offer for every school's educational needs. Without promoting, the educators might miss a great chance of using museum as a learning environment. (Talboys, 2016, 87) This was an important issue for the interviewed teachers as well. Minna and Kaija usually look for information about suitable museums for their learning purposes, but still the interviewed teachers wish that the museums would promote more their services aimed at pre-primary aged children and to know whether their learning environments are adapted for younger children if necessary. Minna expresses her wishes in the following words:

I think that Tampere has many options. I think it could be more organized for pedagogical use.. um.. I think it could be clearer or it could be more explicit

that they can also offer it to preschoolers and it can be adapted. Minna (Transcript, 4)

Helena hopes for a more active part from the museums in saying:

I remember that I would always do a lot of research to see what was happening in Tampere city, what was coming up, events and so on and exhibitions that were coming up, uh, they (museums) didn't really promote and that, I must say, is something they should work on because it would be very important for them to promote themselves because we don't necessarily have the time to start googling and looking up what's coming up and so on. Helena (Transcript, 4)

The museum educators ought to get to know the educators and to expand their relationship with the educational sector. Museum educators can find out the needs of the educational sector and create appropriate learning environments for the schools and daycares to be used habitually. (Talboys, 2016, 71) None of the interviewed teachers mentioned any formed relationship with the museum sector. Building this type of relationship between the museum sector and educational sector would most likely benefit both sectors. Helena has an excellent point as well that the museum should not just find out the needs of the teachers but also the needs of children in order to create attractive and active learning environments. (Transcript, 5) Helena specifies her hopes for the museums in these words:

And I think that museums if they want like to be more attractive for the kids for example, they should take their point of views also into consideration how they could promote it for the children." Helena (Transcript, 5)

The teachers should encourage children to explore and get to know their local community when they are growing up to become active participants in their society. Libraries very often start their cooperation with educational sector already from pre-primary education. Thus, such cooperation with museums would enable the children to get to know museum and their purpose in the community and secure the long-lasting relationship throughout the educational stages in children's lives. (Talboys, 2016, 72) In addition, Tampere is a diverse locality where different cultures, ideologies and languages mix. Thus, providing children with capability to be part of the community, to interact with people as well as to be able to recognize and accept different cultures should be also an aim of museums as well. Ideally, the children learn to see and appreciate different points of views and to actively consider their own viewpoints. When the children learn



to interact, it helps them to communicate their point of view and acknowledge other people's perspectives. The child's individuality, health and happiness gain from good "interaction skills" and "cultural competence" (National Core Curriculum for Early Childhood Education and Care, 2018, 2.7). The National Curriculum for Pre-primary Education (2014) encourages the teachers to enhance children's learning by acting in different environments for example nature, schools, different out-of-school environments. This also includes the important security aspect of moving around by foot in the local surroundings. (The National Core Curriculum for Pre-primary Education, 2014, 4.3) Kaija describes her responsibilities as a teacher in the following way:

We need to grow and teach children as citizens, they need to see themselves as a part of the society. They can realize what their interests are, their curiosity, their imagination, understanding of things, inspired them, braveness and courage to make questions. Kaija (Transcript, 3)

Helena tells an example from the parents' point of view:

I remember one of the parents was saying that she was so happy that we were taking the kids all over the city anyway and to different museums and different cultural centers that the children learn how to navigate themselves around the city, because kids are nowadays .. parents drive them from place A to B. They don't really walk anywhere so already from an early age they learn to know where different locations are and how to walk around the city and so on. Helena (Transcript, 6-7)

According to the interviews with the teachers, the social environment is a very broad concept which deals with different areas, such as the local community, museum's cooperation with the educational system and promotion of services, administrative and parental approval, support by the curriculum and safety issues. The social environment seems to have an impact on whether the teachers visit museums with their students. I was happy to hear that all of the interviewed teachers feel supported to visit museums by the local community, directors of the daycares and parents. Their responses also reveal the connection to the curriculum and their pedagogical aims with museum visits are in line with the aims of the curriculum. Surprisingly, the teachers did not feel that the museum sector attempts to promote themselves nor create a relationship with the local educational sector in order to point out their educational services aimed at pre-primary education. The lack of promoting the museum services might affect whether teachers visit museums with their students or not. If the teachers do not

have the time to look up for the information of the suitable exhibitions, they might not be aware of the museum services nearby. Two of the teachers actually mentioned that there is a very popular cultural center in Tampere but most of the times the teachers have no opportunity even to book a time for their group to visit there since this center is always fully booked. These findings suggest that museum services should be more active in promoting suitable learning environments and creating relationships with teachers if they want to keep attracting the educational sector towards their services.

#### 4.4.3 How do pre-primary teachers talk about the museum environment? Do they link these observations to learning?

Learning environments can at their best create an unrushed and relaxed feeling for the learners. A good learning environment enables the children to learn and gain new information jointly with their peers. It also encourages children to interact with each other. (National Core Curriculum for Pre-primary Education 2014, chapter 3.2) Kaija and her work colleagues value museum as a learning environment due to the quiet and comfortable space where effective teaching and learning can take place. She also mentions museums' wide and clean spaces as a benefit of a learning environment. (Transcript, 3) Kaija illustrates her views of the museum environment in these words:

The teachers and principal believe that museums give us a tool to create a quiet and comfortable environment making possible an effective way to teach and learn. Kaija (Transcript, 3)

Learning environments in different educational settings have the ability to make students learn and interact with peers and other people, the space and objects in that learning area. But it is also important to remember that a learning environment which is not created according to the needs of the educational sector might also impede learning and interaction at the worst case. (Arthur et al. 2018, 371) The interviews reveal that all of the teachers have excellent learning experiences in interactive and versatile museum environments. The teachers mention the importance of exploration as well as interaction with the area and objects as one of the main things in museum. In addition, they value the activities/projects designed for the children in order to enhance their learning. The

teachers appreciate museum environment for letting the children to be active in their learning. (Transcript, 4-5) Helena shares a memory from an interactive exhibition in such way:

It really depended on where we were. For example, Rulla which is very interactive with the kids, so they were actually able to be part of the exhibition. There was always a story line and there were some activities that they could take part of. It was always very exciting for the kids and they always loved it a lot. Helena (Transcript, 5)

Helena continues to express the importance of an active environment in these words:

They are kids and they should have the ability to be active and explore the museums according to their terms. Helena (Transcript, 5)

Based on the Australian Museum Audience Research Centre's (AMARC, 2003) research, suitable exhibitions for children include the following: a) children are able to learn in a pleasurable way; b) children are able to interact, to touch as well as to experiment; c) objects are at an accessible height for the children to reach; d) exhibitions provides something for all range of ages and capabilities (as cited in Black, 2005, 25). Hackett and colleagues (2016) also explain how children experiment through 'movement' in the museum (as cited in Hackett et al. 2020, 4) Learning happens when the children perceive and explore the environment. They move, play, and explore in order to develop their skills and knowledge. (National Core Curriculum for Early Childhood Education and Care, 2018, 2.5) Kaija expresses her viewpoint in the following way:

In many ways, it is active learning. Kaija (Transcript, 4)

Minna reminds us that it is important for the teacher to have good group management skills when going to museum with a group of children since the learning environment is so different to their daily classroom. (Transcript, 6) Kaija also mentions that it is good for the teacher to know the children and their expectations well in order to maintain their attention and excitement throughout the visit in the new learning environment (Transcript, 3). Minna states her point of view in such a way:

So, your classroom to go to a museums is to go to a completely new and different environment and...uuh.. things can get very crazy and you know what kind of museum it is so you need to be very sure you're going to handle

your group and.. um.. what kind of dynamic you have in your group. Minna (Transcript, 6)

Children are known to learn more easily when they actively participate in different activities, when their senses are stimulated, interact with surrounding people, have direct experiences, observe and discover things as well as join trips. (Akamca, Yildirim & Ellez 2017, 689) Helena states that it is important for all the senses to be activated in a learning environment since every child has their unique way to learn. Also, she reminds that all of the artifacts should be visible and accessible for the children due to their small size. (Transcript, 5) Minna also pays attention to the uniqueness of the learning environment which has been planned and set up by many professionals. Teachers are not able to provide the children with this type of learning environment at school. (Transcript, 5) Minna appreciates the museum environment by saying:

...the museum, for how itself the environment is constructed is even more of a learning environment that can be at school because in the classroom I prepare the materials but for every museum, there are a lot of professions behind and it's so well prepared so absolutely the smallest part of information is going to be very interesting (for the kids). Minna (Transcript, 5)

As Helena suggests, sometimes the learning environment is not planned for the children to be interactive and experimental in their learning, thus, the group might not revisit the exhibition, but they choose a more interactive museum one for the next field trip. Helena describes a learning environment which was not that interesting for the children in the following way:

we walk in, the kids get easily bored, there's pictures and then of course they are children, you can't force them to be quiet. They are kids and they should have the ability to be active and explore the museums according to their terms. And that is something that was missing from some museums." Helena (Transcript, 5)

To sum up, teachers talk about the museum environment excitedly and they think very highly of museums as learning environments. Teachers link their observations to learning since they appreciate the interactive and versatile museum environments which have been planned for educational purposes by many professionals. Museum as a learning environment offers a unique and relaxed area for learning with such physical matters which are not accessible in a normal classroom. Also, the advantage of using different senses while exploring the environment is mentioned by one of the teachers. However, teachers are

aware that not every museum is an ideal learning environment for pre-primary aged children if children's point of view has not been taken into consideration when planning the environment. Based on the interviews, it is possible to conclude that if museums want to attract groups of children to visit their exhibitions, they should set up an environment which promotes active and stimulating learning as well as interactive spaces. In addition, different projects and activities connected with the exhibitions are appreciated by the teachers and children.

#### 4.4.4 How do the pre-primary teachers experience children's views of the museum as a learning environment?

When young children go to a museum it might be an adventure that they have not experienced before. The premises of the museum might be unusual and a bit overwhelming with open and wide spaces and the children might not have seen anything like the artifacts portrayed in the museum. Children reaction are often unknown in this type of new learning environment. Children most likely are eager to explore the new area but it should be secure for them to get familiar with this new learning environment and learn to enjoy museum visits. (Hackett, Holmes & MacRae, 2020, 6-7; Talboys, 2016, 70) Helena mentions that children are usually happy just to go and do something extraordinary outside the school environment. (Transcripts, 6) Thus, museum could be considered as an interesting destination for a field trip, since the interviewed teachers believe that children benefit from the educational side of the museum in addition to just having fun outside their classroom. Next, Helena expresses her views of field trips in such a way:

The experience itself when you go on a field trip. That's already something for the kids." Helena (Transcript, 6)

All of the interviewed teachers see the museum as an environment which enhances children's learning. Children's excitement can be seen in the way they talk about their museum experience and all the new things they have learned after the museum visit in their classroom. Children are usually eager to tell their parents about their museum experience as well. Kaija tells how the children know that they have some new knowledge after a museum visit in the following words:

Definitely, they (children) say “I have learnt...”, they recognize that they know now something that they did not know before the visit--- Children are excited and tell parents about it. Kaija (Transcript, 6)

Minna and her students had a successful visit to a museum. This is how she expresses her happy memory:

---they were making slime and they had these lab jackets, and they were talking for weeks about it. Minna (Transcript, 5)

Semper (1990) has described museum as “an educational country fair” (as cited in Zollinger & Atencio, 2007, 247). This would suggest that museum is an exciting and thriving place for children to explore, interact and learn while having a good time. Zollinger and Atencio (2007) suggest that children should be able to take part in different activities and learn more about the themes connected with the local curriculum by taking into consideration children’s different learning styles, preceding knowledge as well as their interests in different subjects. (Zollinger & Atencio, 2007, 247) Helena shares a memory from a museum visit which was linked to a theme taught in classroom. Helena describes it in such way:

I remember once we had this theme that was called around the world, so we were pretending we were travelling around the world and going around different countries. And we went to a museum. It gave them so much more and the whole theme became like something that gave them a lot. They were talking about it at home and then we could continue with different projects now related to this. Helena (Transcript, 6)

To conclude, the pre-primary teachers experience children’s views of the museum as a learning environment the following ways: First, the teachers reported that children seem to enjoy museums. In their views, children eagerly explored the new learning environments they were introduced to, and they seemed to enjoy visits to the museum as these visits offered new possibilities to learn as well as interact with their peers in spacious and exciting environments. Second, as further evidence on the same theme, museum visits were excitedly discussed and reminisced by the children in the classroom even weeks after the visit. On these occasions, Minna, Helena and Kaija linked the museum visits to the themes which they taught in the classroom. Further, they developed projects connected with the common theme and continued working on the subject after the museum visit. A commonality in the teachers’ views was that these types of learning sessions after the visit to the museum enhanced the children’s positive experiences of the visit.

The analysis of the data has been divided into 4 parts based on the analytical questions. In the first part I discussed how the teachers' notions of the museum experience seem to affect the choices of using museum as a learning environment. The teachers have visited museums in their own free time and all of them have also taken student groups to the museum to enjoy the additional learning environment besides their own classroom. The teachers expect a broad display of experiences from a museum visit, such as aesthetic, sensorial, educational, recreational social as well as amusement experiences. The second part looked into the impact of the social environment. The common themes of the social environment revealed through the interviews are: local community, museum's cooperation with the educational system and promotion of services, administrative and parental approval, support by the curriculum as well as safety issues. Generally, the social environment it seems to encourage museum visits in pre-primary education. The only challenge seemed to be the lack of promoting age-appropriate museum services directly to the teachers.

The third part of analysis shows how the teachers talk about the museum environment excitedly and think very highly of museums as learning environments. Teachers link their observations to children's learning in a unique, relaxed and interactive environment. The last part of analysis shows how the interviewed teachers experience children's views of the museum as a learning environment. The teachers see the enjoyment of the children when they are facing a new and exciting environment in which they can explore and interact with their peers and the educational environment. The interviewed teachers view very positively the use of museum as a learning environment in pre-primary education and there was nothing that would suggest that the teachers would not continue teaching their students with the help of this additional learning environment.

## 5 CONCLUSIONS

Teachers have the possibility to be creative in ways that they teach students. Today, out-of-school learning environments create amazing opportunities to take teaching to exciting levels, especially when it comes to museums.

Learning environments which have been built for educational purposes can be set up in schools or out-of-school locations (Akyol &Akyol, 2015, 102). Museum is a good example of a learning environment which helps children to establish knowledge of “perception” and “space”. (Fazlıođlu & Fazlıođlu, 2009 as cited in Akyol &Akyol, 2015, 102) With the help of museums, children become more aware of what people have created in this world and it helps them to communicate interculturally (Akyol &Akyol, 2015, 102). In addition, museum environments enable children to think imaginatively (Buyurgan & Mercin, 2005 as cited in Akyol &Akyol, 2015, 102). Museum as a learning environment is not only interesting for the children but it also teaches the children to appreciate their own individuality, the present-day life as well as the history of the world (Akyol &Akyol, 2015, 102). It has been shown that using museum as a learning environment enhances children’s curiosity, imagination and their capability to reason. Children also learn to link historical events to present-day life. (Fazlıođlu & Fazlıođlu, 2009 as cited in Akyol &Akyol, 2015, 102)

The aim of this research was to find out teachers’ views of using the museum as a learning environment in pre-primary education. The individual theme interviews revealed that all of the three teachers value museums as a learning environment and want to use those as an additional learning environment in pre-primary teaching. The only challenge with using the museum as a learning environment seemed to be the location of the day care and whether there were museum services available in the municipality.



First, the research aimed to find out what is the teachers' notion of experience in museums and does this individual notion of experience have an impact on whether the teachers take their students to museums. All of the teachers visit museums regularly in order to learn something new and broaden their existing knowledge, experience different feelings (emotional, visual, sensorial), socialize and amuse themselves. According to the interviews, it is possible to draw the conclusion that the notion of museum experience, and their own experience in museum seem to affect the teachers' choices of using the museum as a learning environment. This claim is based on the fact that all interviewed teachers use museum services regularly due to the broad experiences they get from these visits, all of them have been introduced to museums already in childhood and they have also been to museums on school trips.

Second, I wanted to find out whether the social contexts of museums encourage or discourage the teachers to take their students to museum. Data analysis revealed that the social environment is a very broad concept which deals with different areas, such as the local community, museum's cooperation with the educational system and promotion of services, administrative and parental approval, support by the curriculum and safety issues. Interviewed teachers felt supported by the local community, directors of the daycares and parents. Their responses also revealed the connection to the curriculum and their pedagogical aims with museum visits were in line with the aims of the curriculum. Surprisingly, the teachers did not feel that the museum sector attempts to promote themselves nor to create a relationship with the local educational sector in order to point out their educational services aimed at pre-primary education. These findings suggest that museum services should be more active in promoting suitable learning environments and creating relationships with teachers if they want to keep attracting the educational sector towards their services.

Third, the data analysis concentrated on the teachers' way of talking about the museum as a learning environment. It also aimed to find out whether teachers link their observations on children's learning in a museum setting. The interviewed pre-primary teachers thought very highly of the museum as a learning environment. They appreciated the interactive and versatile museum

environments which had been planned for educational purposes by many professionals. In their opinion, the museum as a learning environment offers a unique and relaxed area for learning with such physical matters which are not accessible in a normal classroom, such as pictures, objects, materials and story lines. Also, the advantage of using different senses while exploring the environment is mentioned by one of the teachers. However, teachers are aware that not every museum is an ideal learning environment for pre-primary aged children if children's point of views have not been taken into consideration when planning the environment. Based on the interviews, it was possible to conclude that if the museums want to attract groups of children to visit their exhibitions, they should set up an environment which promotes active and stimulating learning as well as interaction. In addition, different projects, activities and workshops connected with the exhibitions were appreciated by the teachers and children.

Fourth, the research sought to found out how teachers experience children's views of the museum as a learning environment. The teachers reported that children seem to enjoy museum as a learning environment. These visits were excitedly discussed and reminisced by the children in the classroom even weeks after the visit. Teachers see the happiness in students when exploring a new learning environment with their peers. All of the interviewed teachers linked the museum visits to the curriculum as well as the themes taught in their classrooms in order to enhance children's learning. All things considered the museum is a useful additional learning environment for the interviewed pre-primary teachers.

Further research could be done on how teachers integrate play and learning in museum learning environments. Surprisingly, play did not come up even once in the teachers' interviews although play has an important role in the early childhood education and care. Suggested further research could look into the views of teachers about the museum as an environment for playing and the importance of play in museum settings.

I encountered some challenges during the research project. The study took place during Covid19 restrictions and many of the museums were closed at the time.

Thus, the teachers did not have very recent experiences from museum visits. Luckily, all of the teachers had visited museums multiple times with pre-primary education groups thus being able to reflect on their previous experiences and knowledge. This changed the planned research in a way that the interview questions were set up so that the teachers could reply to the questions based on their general views and previous experiences of the museum as a learning environment. The effects of this change were only minor, and I was able to collect comprehensive data for my research. Further I decided to conduct the interviews in Zoom due to the epidemic. The planned research did not change dramatically since the interview questions would have been the same for a face-to-face interview. Although, as an effect of the Zoom interview, I feel that certain feeling of intimacy would have been easier to create in face-to-face interviews. I aimed to create a feeling of intimacy at the beginning of the Zoom-meeting by means of introducing myself and chatting to the teachers before starting the interview. I believe that the teachers were relaxed and felt the atmosphere of openness and closeness. In addition, the interviews of 3 teachers do not represent pre-primary teachers' views in general, therefore in order to create a more general view on teachers' understandings about and use of museums as learning environments in Tampere, follow up studies are needed.

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# APPENDIX 1

## Interview questions

Do you visit museum often yourself? If not, why?  
What do you expect from museum visit?  
How do museums promote your own learning?  
Childhood experiences

Are museum visits supported by your workplace/director?  
Are museum visits supported by parents?  
Are museum visits supported by you?

How are museums used as learning environment in your school?  
Do you think children learn in museum? How?  
Have you used museum guides/tours? What is your experience?  
Do you feel comfortable leading a museum visit yourself?  
How does a museum promote children's learning in your view?  
(Why not)  
How do museum visits support the aims of Vasu?

Are there museum services available in your municipal/city?  
Do you feel museum services promote themselves enough for schools? How  
are they promoted?  
Are you aware of museum services targeted for pre-primary aged children?  
What are those?

In your experience, how do children engage during museum visits with the  
environment?  
Do children find museum as a resource of learning?  
Do children talk about their experiences after a visit to a museum?