‘Teaching without Teaching’: Critically Exploring the Involvement of Visual Artists in Children’s Art Classes in Art Museums of New Zealand

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It took me four years to paint like Raphael,

but a lifetime to paint like a child.

Pablo Picasso

Abstract

Scholars in New Zealand have investigated museum education particularly in terms of young children's visiting and learning, primary and intermediate students' learning development, museum educators' practice and challenges, and the policies, practices, and public pedagogy of visual art in art museum and gallery contexts. These scholars have indicated the importance of artists' engagement in children's art classes in art museums broadly speaking, but the specific investigation around this specific aspect was scant. This research aims to attend to this gap by exploring the engagement of visual artists in children's art classes in art museums.

The research acknowledges my position and background as a trained artist and teacher, and the roles I take on throughout the project also reflect this training and practice-based background. This study (including data collection and analysis, the conceptual development and iterative design process, and the forms of literature drawn upon) brings hybrid methodologies and references that span disciplines, including Participatory Action Research, Grounded Theory, Double Diamond design process, and a Co-design Approach. 24 interviews were conducted with visual artists and two workshops were developed with three different roles, including 6 artists, 3 museum educators, and 6 primary school teachers in two different art museums.

The findings indicate a broadly effective collaboration between artists, museum educators, and primary school teachers with respect to complementing professional development, shifting to student-centred learning, expanding the forms of art activities based on students' interests, developing a multisensory learning experience, and drawing theory from their practices. This research contributes to the field of museum education by developing a new form of collaboration between three different roles — artists, museum educators, and primary school teachers — in art museums, and conducting a collaborative reflection between these roles. This collaboration prototype becomes a way to effectively engage artists within children's art museum education, and its benefits and impact can be documented and specified in various respects.

Acknowledgements

I am in self-quarantine while writing these words. I dreamed of writing this part many times as it meant that I would be that much closer to completing my PhD. My parents told me to, *"always be grateful to people you encounter in your life"*. This is because these people enter your world, bringing emotions and experiences and enriching your life. I could not understand this when I was younger. As I grow older, I am slowly realising how meaningful this short piece of advice is!

Flashing back to the first time I met my supervisors at the College of Creative Arts (CoCA), I was timid and lacking confidence. I needed to prepare for such a long time before meetings to make sure that I could express my ideas properly. My supervisors took me to join the PhD students gathering. I was standing there, looking at other people and smiling sheepishly because I was not confident enough to talk to others. They figured out I was nervous, and they welcomed me, talking to me actively to make me feel engaged and comfortable. Now, I am changed, and I'm not that shy, reticent girl any more. I am transformed because of you all.

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Prologue

I have two signets my friend carved and gave me as gifts before I left China. Upon one is engraved “舍得”, and on the other is “舍不得”. It is very difficult to explain the meanings of these two signets, but if we understand them together, it is *“willing to give up or not”*. I keep these two signets with me to remind myself that sometimes I need to have the courage to give up, as giving up does not indicate you let something go; conversely, it means that you would have a new beginning. Life is a journey; a cliché but true. Sometimes you do not know when and where you will begin and end. Everything is in your hands but also out of your hands. I never planned to come to New Zealand, but now I am here and telling you my story.

I majored in Chinese ink painting and art education when I was an undergraduate student. During my Masters studies, my focus was on Chinese landscape ink painting. The quintessence of Chinese landscape ink painting is “lively spirit and vitality”. Chinese landscape ink painting has an intimate connection with the philosophy of Confucianism and Taoism, linking personal emotions and ideas to the rhythm of mountains and rivers. There are three levels within Chinese landscape ink painting. The first level is that you see mountains and rivers as what they are, encouraging you to construct what you see. The second level is that you see mountains and rivers as what they are *not,* implying that you deconstruct and doubt what you see and are keen to explore the nature and essence of everything. The third level is that you see mountains and rivers as they remain, which means that you reconstruct what you recognise, and connect this to experiences and emotions. These three levels are always associated with the realms of nature, life, and morality.

Figure 1: *The nostalgic landscape – 1* [Chinese Ink Painting]

Artist: Chang Xu

Note: Size: 43cm(H)*76cm(W)

Figure 2: *The nostalgic landscape – 2* [Chinese Ink Painting]

Artist: Chang Xu

Note: Size: 43cm(H)*76cm(W)

I love creating Chinese ink painting because within this process I can talk to myself and reflect upon hidden meanings in my works of art, and nobody can fully understand what I intend to express. When I am undertaking the production of these works of art, I do not need them to reveal fully my motivations or the reasons behind the art, as those emotions and experiences are private and belong to me. I am interested in understanding how viewers respond and what feelings the works elicit. Sometimes, people ask me why I changed my practice from Chinese ink painting. There are different factors involved, but the primary motivation was that I started questioning existing models of conventional art education and was concerned that, in many cases, children were not being enabled to express themselves as they wished. I observed that this was, in part, because we often tell them what we expect them to do, before they begin to express their ideas.

I am not a practicing Buddhist but enjoy reading related texts. Zhongxing Zhang (2012), the Chinese philosopher, said, if you are determined to discuss Buddhist philosophy without reservation, then you must stand outside the meditation hall. One interpretation is to avoid punishments, and another positive meaning involves the freedom and clarity of bystanders, saying what you want to say. Considering the latter, I am determined to be an outsider considering different perspectives to better rethink visual art education outside the classroom. I know that many challenges await me but equally, although slow I should not stop.

Chapter One: Introduction

This chapter consists of five sections. The first part touches on my motivations for conducting the research. The second part, inspired by Mayer's (2012) ten myths in museum education, reflects further on my investigation to provide a rationale for this study. The subsequent section discusses the significance of this research. The fourth part defines the scope of the research. The last section is an overview of the organisation of the thesis.

Motivation for the Investigation

As introduced in the prologue, my role was initially uncertain. I am an artist and trained as a teacher as well. I am very familiar with teaching pedagogies, but as an artist, I tend to believe that there are no fixed or prescribed pedagogies for art creation. I undertook an internship as an art teacher in a primary school and was so confident and trusted that I would not be one of "those" art teachers, but after one month, my passion and enthusiasm faded away. The fact is that I was juggling how to complete programmatic teaching goals and how to teach more creatively and responsively. I could not leave my students and give them complete freedom to express themselves as, first, I had to finish my assigned teaching tasks to satisfy my expectations as a teacher; in addition, I needed my students to present a complete work of art to demonstrate both my own value and their learning outcomes.

Nevertheless, after only a limited amount of satisfaction, I began to reflect on myself and my teaching. Why could I not let my students create and express what they want? Why could I not let my students lead the class? What am I worried about? What I am afraid of? I was staying within my own teaching paradox. I wanted students to learn skills, and simultaneously to express themselves artistically. I knew what I did in the class pleased me when receiving the respect and gratitude of students as well as their parents, and the appreciation of peers and authority figures. However, the main impetus of the classes was the students adhering to a prescribed path of learning; one that did not invite their own perspectives, imagination, or reflections on their lived experience. I kept asking myself, is that enough in terms of what creative expression can be and do? Is that what I want to hear from my students? My focus shifted towards investigating children's art education in the art museum context.

In China, I was curious about learning art in art museums and imagined what it looked like, as I had never had this direct experience. I made a number of assumptions, that students must have different, more enriching, experiences in that context, in comparison to learning in the classroom because they could completely let go there and learn along with artists and works of art. I saw this context of learning as a place to solve my teaching paradox. Subsequently, I visited several art museums in New Zealand, following multiple art classes, as I wanted to see first-hand how students reacted and created works of art. However, what I observed there was totally different from what I imagined. I started questioning that if the same teaching procedures in the classroom are repeated in art museums, what is the significance of having an art class in the museum, in terms of students' learning? After some further research into museum education internationally, I began to consider more closely the transformation and innovation of art museum education in New Zealand.

My own learning and teaching experiences and the imagination and curiosity shown by children have provided the drive for me to explore the potential of visual art education with specific emphasis on artists participating in children's art classes in art museums.

Rationale of the Study

Children's visual art education in the art museum and gallery contexts is acknowledged in many countries as an integral part of all well-managed museums and galleries, and in the educational field as an essential and informative subject. The importance of the environment of art museums to students' art learning is not a new topic. Almost all scholars who focus on the research relevant to museum education have noticed the value of art museums for art learning. Although art museum education benefits children's art learning, Mayer (2012) questioned the development of museum education and demystified ten myths[1] that impact

[1] Ten myths of museum education put forward by Melinda Mayer (2012, p. 15-18) originally are:
(1) "SHH! This is a museum. That's like a library times 10!"
(2) Museums are great places for conversation: They're so safe!
(3) You know, the great thing about art is that there are no wrong answers.
(4) But, what did the artist mean?
(5) Our docents are very well trained!
(6) If we could only figure out what is best practice, all tours would be wonderful.
(7) You've got to teach people how to see before they can understand art.
(8) Art is good for people; it humanizes visitors.
(9) Like the Internet, museum learning is free choice.
(10) The average visitor doesn't know anything about art.

teaching and learning in art museums. These myths reflect the paradoxes of teaching and learning in art museums. Inspired by Mayer's ten myths, I concluded and refined five myths that resonate with this research.

Museums are Second Classrooms

Olson (2003) pointed out that schools are complex institutions integrated with rigid structures and bureaucratic frameworks that restrict teachers' teaching in the classroom. The reason for constructing frameworks according to Berliner and Glass (2014) is to achieve goals imposed by powerful policies. The purpose of going to school becomes simply to acquire basic skills for the future. The knowledge students generally acquire in the classroom can help them pass exams, but is unable to be used in actual practice, as schools focus on learning outcomes by test and assessment (Hendy-Ekers, 2019).

Non-formal Education (NFE) incorporates learning settings outside the formal educational system such as museums, galleries, parks, zoos, and botanical gardens (Taylor, 2006). There are six characteristics of NFE: non-formal educators; stress on learner-centred approaches; focus on a hands-on learning experience; and teachers conceptualising their roles as sharers of knowledge. The fifth and sixth features highlight the nature of the development of the knowledge by forms of play in contrast to formal education contexts. Above all else, non-formal, exterior learning settings provide first-hand experience for children (Burnard & Swann, 2010) and cannot be compared to classrooms (Kindler, 1997).

In particular, the art museum, as a non-formal educational setting, provides intimate and direct opportunities and experiences of exploration, play, and interaction with art and artworks for students (Paris, 1997; Black, 2012) and allows them to try more of what they usually are not encouraged to experience in the classroom (Eisner, 1998; Davis, 2005). Nonetheless, the fact is that, in many art museums, students still play the role of passive learners relying on knowledge imparted by museum educators (Freire, 1998; Claxton, 1999; Hooper-Greenhill, 2007). McGee and Rosenberg (2014) examined students' demands in the Museum of Modern Art. After conducting case studies, they concluded that what students want is to spend more time exploring and playing inside the museum rather than having a formal class. In Hendy-Ekers's (2019) doctoral thesis, she pointed out that museums are often regarded as a second

classroom repeating similar teaching routines, and the only difference is that students do not undertake assessments.

The change of the learning environment was intended to complement the formal education system, yet sometimes the shift appears only superficial as it takes advantage of the environment of art museums to cater to the needs of educational policies and reforms. Black (2012) articulated that the focus of innovation should involve moving from formal education systems to external education approaches, as it is very difficult to envision changes occurring within the formal education system over the next twenty years. Art museums can provide a noteworthy opportunity to offset perceived defects of the formal education system. In particular, Black stated that museum learning should not mirror learning in schools and simply consider achieving teaching goals and outcomes as the final purpose.

Our Educators are Well-trained

It is not uncommon that museums or galleries would advertise their well-trained or experienced educators who mostly have worked as primary or secondary school teachers. For most trained and seasoned teachers and educators, it may be hard to transform their teaching patterns once accustomed to them. After teaching for years with repetitive teaching procedures[2], they would naturally understand what teaching goals should achieve, and what teaching results should present, and what skills schools and parents want students to learn (Richert, 1992). Nevanen et al. (2012) argued that many schools and cultural institutions have become formulaic learning environments and that the mechanical teaching mode satisfies managerial requirements but neglects students' ideas and interests. Ironically, some institutions, on the one hand, advertise well-trained museum educators with broad teaching experience, whereas, on the other hand, expect them to teach "creatively". This can present some contradictions.

[2] Repetitive teaching procedures put forward by Richert (1992) were in concert with the notion of "signature pedagogy" defined by Abasa (2014), a New Zealand researcher. These procedures were also identified in this study through the preliminary investigation and analysed as a standard 'tetralogy', presented in detail in Chapter three.

There is Always a Way to Interpret Artworks

Social constructivist teaching models emphasise that new knowledge is incorporated into the existing knowledge structure through the weaving of a concept map that will be gradually re-constructed with the influx of new knowledge (Jeffery-Clay, 1998; Windschitl, 2002). Each map is different, as the experience and knowledge each individual selects, in the light of their own needs to build up new knowledge, is different. With the influence of constructivism and the inspiration of visual perception put forward by American perceptual psychologist James J. Gibson (2002), Abigail Housen and Philip Yenawine collaborated to develop a method for museum education called Visual Thinking Strategies (VTS). VTS recommends museum educators ask open-ended questions to assist students in constructing their knowledge about artwork.

Housen (2001), through the use of case studies, has proposed a few steps to help museum educators guide students' exploration and learning in art museums. The first step involves enabling students to tell stories around artwork. The following question museum educators can ask is if there is anything else? Guiding them to details is the key purpose of the second phase. Museum educators begin from general questions, then based on students' responses, explore learners' interests further and motivate them to expand upon their answers. However, I observed that what museum educators may often do currently is to select some artwork relevant to their designed programmes and ask straightforward questions such as 'What do you notice in these works of art?' and 'What do they have in common?' These sorts of questions, for museum educators, would be useful to maintain the coherence of a class, yet, for students, are forcing them to think about artwork. The individual emotional and intellectual responses of students may not emerge if these questions are dominant at the beginning.

In Hooper-Greenhill's research (2007), they recounted a school visit to the Birmingham Museum and Art Gallery. Information about Pre-Raphaelite painters was given with museum educators' personal views and attitudes prior to the children's exploration. Similarly, at the Heide Museum of Modern Art, museum educators carefully singled out works of art and asked students some open-ended questions, before then analysing and interpreting information about the art to children (Healey & Lemon, 2014). In Mayer's (2012) article, the educator affirmed the girl's answer about an artwork, then offered 'correct' interpretations. The girl asked why

she was corrected if her answer was right. It seems that educators' questions are more a part of formulaic teaching processes rather than focusing on stimulating and engaging students in class. Students are required to provide an answer quickly rather than first pondering before vocalising their own ideas, and educators may rush to the pre-determined correct response instead of allowing the students to enjoy the experiential engagement of delving into the artwork independently.

This is What Artists Mean

In the preliminary investigation, museum educators often have three ways to understand the background of the artwork. They communicate with artists directly if artists are based within the environs of the museum, but upon further investigation with museum educators, I found that this rarely happens as artists are often busy or unavailable. Another way of researching artwork is to read essays and reviews and often educators have access to these resources (which sometimes they collate, or they draw on curatorial research). Recent books on the subject and catalogues (if they are available) get shared around the teams, so there is an expanded field of research available to them. My observation was that there is not necessarily enough time allocated within an already heavy schedule to spend on this research, which can mean a reliance on the curator's perspective. A widely used process by educators is to talk to curators and/or collection managers to develop their knowledge and expertise on art. Then, they will connect the information and knowledge on artwork as a form of story and pass them on to children. There are layers of mediation and interpretation at play here. I pose the question: how does this relate to an exhibiting artist's preferences or aspirations in terms of how they would like to invite engagement and response with viewers?

French artist Marcel Duchamp stated that "in the art language, viewers are essential partners to artists"[3]. Certainly, the first viewer artists encounter is the artist themselves in the process of creation. Artists are involved in critical self-reflection, and constantly evaluate their artwork due to unremittingly updating their own experiences involving other viewers' experiences. Jacob (2014) expressed that there is never a truly completed artwork since the 'completion' of the artwork is the beginning of itself. Inside the atelier, for the artist, there is no stamp of

[3] This is reminiscent of sentiments of artist Marcel Duchamp in his seminal short statement entitled *The Creative Act.* https://www.brainpickings.org/2012/08/23/the-creative-act-marcel-duchamp-1957/

approval to confirm an artwork's accomplishments; this confirmation will come when displayed in art museums or galleries as other viewers, in the light of their own experiences, bring new meanings to them. Everyone's experience is different from that of others; when they consider the same artwork, their reaction to, and evaluation of, the artwork is inherently associated with their own prior experience (Williams, 1984). One of the artists in this study stated:

> I think art experience with artworks is more important than drawing a picture or taking a twenty-minute tour. Students should go to art museums and galleries as often as they can, and even do not need to do anything, just stay in there and chat with each other. The process of interacting and discussing artworks with each other is more valuable than listening to what educators teach. (A12)[4]

Several artists interviewed for this study argued that there are no fixed pedagogies to instruct them in art creation. When they work with children, they put children's interests first, encouraging children to tell their own stories and focusing on what inspires them to create rather than imposing 'creative process and thought' on them. As Janes (2014) articulated, everyone's emotions and experiences are unique and private, not identical to others. It is understandable that our ideas may attune to or may not be congruent to artists' ideas, but our appreciation of artwork is situated within our own cycles of creativity.

"Best Practice" is Repeated Teaching

Mayer (2012) questioned experienced museum educators:

> How often do you find yourself accomplishing a daily task in the exact same way because "that is how it is always been done"? Have you ever limited the possibility of solving a problem, making a change, or innovating a new practice because either the voice inside your head or one from without reminded you that the old way is "the way things are"? You do not change what is and what works; these are the truths of everyday life, which become institutionalised as common, even best practice. Yet, are they really truths or myths that have become accepted as such through repetition over time? (p. 15)

[4] A12 is a code for participants, the explanation about the encoding of the participants in detail will be presented in Chapter two.

She pointed out that teaching has been formed by preconceptions and myths, and that teachers and educators impose knowledge and values from their own perspective on children, and their teaching experience similarly stems from repetitions over time resulting in a cluster of 'experienced teachers and educators' conditioned by schools and many other institutions. This issue was also identified by a New Zealand researcher. Abasa (2014) through her investigation found that many museum educators in New Zealand are not familiar with defined or existing pedagogies. Their teaching pedagogies are mostly the summary of their first-hand teaching experiences, and novices often acquire teaching pedagogies from experienced educators who previously supervised them. Abundant teaching experiences as tacit pedagogies may lead educators to neglect to self-examine and critically reflect on their teaching.

Sassi (2011) concluded that, "teacher-student interaction often follows a discourse pattern that consists of the following turns: 1. teacher initiation (e.g., a question with a pre-determined answer); 2. student response; and 3. teacher evaluation of the student's response" (p. 211). Burwell (2020) named this pattern, "initiation-reply-evaluation (IRE) or initiation-reply-feedback (IRF)" (p. 2). From my preliminary observation, the procedure of an art class in an art museum is similar to the sequence in the classroom. It is a well-structured tetralogy in terms of: the introduction of the art museum's visiting rules; visiting, observing, teaching about artwork on exhibit with open-ended questions; theme-related games in the exhibition hall; hands-on crafts in the educational room.

Inspired by Burwell's summary, this tetralogy could be simplified as visit – initiation – reply – craft (VIRC). Hall et al. (2009) coined these procedures as "default pedagogy"; Abasa (2014) identified the routine teaching as "signature pedagogy", and Thomson et al. (2019) defined it as "dull pedagogy". These pedagogies all prioritise a lesson following a well-organised and prepared teaching procedure to achieve the goals of the curriculum and learning outcomes, without explicitly considering what students may want to learn. In addition, these scholars pointed out that these pedagogies not only stifle students' passion and creativity but also gradually diminish their desire and curiosity to explore and discover.

Routine and crammed teaching methods in art museums have prompted some insightful museum and gallery educators to start rethinking the problem of teaching. Burnham and Kai-Kee (2011) as museum educators of J. Paul Getty Museum in the USA conducted collaborative

research regarding what constitutes the best teaching in art museums and galleries. They said frankly:

> Teaching is at the heart of our work as museum educators, but many of us find we do not have the time to think about and prepare for it properly. As we look around our home museums and museums everywhere, we see teaching that seems to have lost its way, to have become mechanical, rigid, or unsure of its purpose. (p. 8)

To sum up, my reflections on these five myths have led this research investigation to discover, develop, and discuss the engagement of artists in children's art museum education, and specifically the potential of new forms of collaboration between artists, museum educators, and primary school teachers. This prototyped framework has also led to reflection on further innovations in, and the development of, museum education.

Significance of the Research

This research is based in the context of Aotearoa New Zealand and while it engages with literature and established education practices internationally, it is situated here. The museum and gallery observation visits, and the participant artists, museum educators and primary school teachers all come from the Greater Wellington region. The case study organisations where workshops and classes were held are within the same region. The research through conceptual development, and processes of co-design, arrived at a prototype of a triangulated collaborative design process, with participation from artists, museum educators and primary school teachers. The parameters of the study included the focus on primary age learners, and within organisations that routinely ran schools-based education programmes, including delivery of LEOTC (Learning Experiences Outside the Classroom) contracts and Creatives in Schools[5], awarded by the Ministry of Education (Te Tāhuhu o te Mātauranga). The participating schools were state schools, and were not specialist providers with tailored pedagogies e.g. kura kaupapa

[5] The analysis of these two programmes will be unravelled in Chapter three.

Māori[6], Steiner Waldorf schools[7] etc. Additionally, the focus of this research is on the design process and analysis of delivery from the participating artists, museum educators, and primary school teachers' viewpoint rather than from the perspectives of the school children experiencing the classes. This is to enable and support the critical engagement and self-reflection of the adult participants as an integral part of the workshop design process.

This study aims to make four important contributions. Firstly, researchers in New Zealand have investigated the development of art museum education from different positions. These consisted of: young children learning in the art museum to improve their imaginative and artistic abilities (Clarkin-Phillips et al., 2013; Clarkin-Phillips et al., 2018), and using art museums and public art galleries (Terreni, 2017); the intelligent novice as an active cultural transformer in the art gallery to enhance learning and development (McNaughton, 2010); the development of learning and thinking of primary school-aged children through interaction with visual arts in art galleries (McNaughton, 2019); how to improve students' art learning experience in art museums (Bell, 2010); and the policies, practices, and public pedagogies of art education in art museums (Abasa, 2014)[8]. However, within the field of museum education in New Zealand, there was much less existing research regarding the participation of visual artists in children's art classes within art museums. This study sought to close the gap in this area. Moreover, all the archives in this study are first-hand resources gleaned from the Archives New Zealand which provided a certain amount of documentation on the historical development of museum education in New Zealand and the ways that artists were involved in museum education.

Secondly, this study is significant because it is innovative methodologically. It applies a Double Diamond design process in the field of museum education, using an iterative, participatory design process to explore and arrive at the workshop conceptual framework. The

[6] Kura Kaupapa Māori (noun) are Māori-language immersion schools (kura) in New Zealand where the philosophy and practice reflect Māori cultural values with the aim of revitalising Māori language, knowledge and culture.
https://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=Kura+Kaupapa

[7] Steiner Waldorf education draws on the ideas of the early 20th Century philosopher, Rudolf Steiner on how to educate children in a way that enables them to become their true selves, to be good citizens and to contribute to society and be a strong force for good in the world. https://www.steinerwaldorf.org/steiner-education/what-is-steiner-education/

[8] The related literature will be reviewed in detail in Chapter three.

Double Diamond design process is a participant-centred approach valuing the ideas of participants. It is devoted to facilitating participants in their endeavour to discover, define, and solve problems through collaboration. In this study, through the collaboration between artists, museum educators, and primary school teachers, they created a new conceptual framework for art class delivery in art museum settings.

Thirdly, most art education programmes conducted in other countries have examined the collaboration between artists and teachers, or teachers and museum educators in schools or art museums, respectively, but research on the collaboration between three different roles, inclusive of artists, museum educators, and primary school teachers in the context of the art museum was sparse. Therefore, this study explored the collaboration of these *three* roles in delivering the art classes in art museums whilst applying the new conceptual co-designed framework.

Finally, the participants, after the art classes, conducted the practice of reflection-on-action by viewing the videos of their teaching. Although collaborative reflection became prevalent gradually, the form of collaboration primarily focused on peers, specifically the reflection amongst teachers. There has been very little research on collaborative reflection across roles, especially in terms of artists, museum educators, and primary school teachers. This novel form of collaborative reflection was explored in this study, enabling those in each different role to reflect on their practice along with the knowledge and suggestions from those in different fields.

Scope of the Research

This section clarifies on which areas this study has specifically focused in terms of the range of archival materials, the duration of data collection, the age range of students, the constraints of geography, and the choice of art and artists.

Firstly, archives were gleaned from the 1960s to the early 1990s that documented this prosperous period and some important educational reforms of the museum education service (McCredie, 1999 as cited in Abasa, 2014), providing an essential historical background of museum education, in particular, the roles artists played in the museum education service.

Secondly, the data collection of this study concentrated upon the period from August of 2018 to the end of 2020 based on the ongoing LEOTC education programme[9].

Thirdly, this study related to state-funded schools, (not private schools or Māori immersion schools and their kaupapa-led pedagogies) and examined primary school-aged students' art classes in art museums in the Wellington region.

Fourthly, this research investigated contemporary artists' engagement in children's visual art education in art museums, as most contemporary artists, through their practices, reflect various perspectives and voices of current political, social, and cultural concerns (Villalobos, 2015; Anila, 2017; Mitchell, 2017; Hendy-Ekers, 2019). In addition, Marshall and Donahue (2014) stated that, regardless of skills and abilities, all learners are able to engage with and practise contemporary art. More importantly, forms and languages of contemporary art are flexible so that people from different backgrounds can imagine, express, and interact with their own approaches (Page et al., 2006).

Finally, the focus on working with a multicultural community in a bi-cultural country such as New Zealand with its particular set of settler-colonial histories, indigenous histories (pre-contact and during colonialism) and the more recently evolving make-up of Tangata Tiriti[10] and new migrant peoples, is specific and will differ to other geopolitical contexts.

Navigating the Thesis

This research consists of six chapters. Each chapter builds upon the preceding one.

Chapter one gives a brief overview of the research, providing personal motivation for the investigation and rationale of the study, identifying the contributions of the research, and clarifying the scope of the study.

[9] The new contract of LEOTC in the field of Arts, Health & Physical Education started from November 2018 to 2021. https://eotc.tki.org.nz/ELC-home

[10] Tangata Tiriti – Treaty People is an education programme on the Te Tiriti o Waitangi: The Treaty of Waitangi. Its key aim is to build relationships between tangata tiriti – people of the Treaty (non-Māori), and tangata whenua – people of the land (Māori). http://www.treatypeople.org/about/

Chapter two explains the methodologies and methods adopted in this research. Firstly, it breaks down the main research questions into a number of specifically-detailed questions and describes how these questions will be addressed in three different research phases. Then, it outlines the research design including methodologies and methods used at different stages, as well as the role(s) of the researcher, ethical considerations, and research limitations. Subsequently, it explains the data collection, process, and analysis of its three respective phases.

Chapter three unravels the findings of Phase one by reviewing and analysing related literature investigating museum education by New Zealand scholars. It identifies a gap in this initial research in relation to artists' engagement in children's art classes. Based on the literature available, a preliminary investigation was conducted to understand the current situation of museum education and the degree to which artists were engaging in children's art classes in art museums. Subsequently, a review and analysis of official archives and documents provide a historical background of the position of artists in museum education. Finally, it analyses and compares visual art education programmes featuring the engagement of artists in children's art classes and activities domestically and internationally to reflect on the future development of visual art education programmes in art museums of New Zealand.

Chapter four discusses the findings of Phase two with five recurring themes emerging from the interviews and workshops. These five themes are: the rediscovery of museum learning, the engagement with artwork, the benefits for the children of direct contact with the artist, the effectiveness of teaching pedagogies, and the possibility of students feeling free to draw.

Chapter five presents the findings of Phase three regarding the discussions related to workshop and art class delivery. Initially it examines collaborative partnerships internationally, then expounds the new form of collaboration between artists, museum educators, and primary school teachers as explored in this study. Finally, it dissects the development and delivery of art classes in two different art museums by comparing and contrasting the processes of the two different groups' collaboration.

Chapter six comprises four sections. The first section discusses how the findings of the three phases are related to pertinent theory and other research. The following section explains how the new form of collaboration makes a unique contribution to art museum education in New

Zealand. Based on the findings of this study, some considerations and suggestions for the further development of the collaboration are proposed in the third section. The last section summarises the key findings of each phase, reiterating the research questions, stating the research contributions to the field of museum education, and suggesting directions for future research.

Chapter Two: Methodology

This chapter first presents the primary research question, along with some sub-questions associated with each different phase of the research which assisted in the completion of the investigation. In accordance with the research questions, the second section provides an overview of research design including: methodology and research methods, the role of the researcher, and ethical considerations. Explanations of methodologies, data collection methods, research participants, and the data process and analysis of the three phases are related separately in the sections of Phase one, two, and three. The sixth part unpacks the specific analytic tools used for data analysis, and the last part describes the interrater reliability of data coding.

Research Questions

Prior to unpacking the research methodologies and methods, it is essential to understand the questions this research explores. “Qualitative research involves a series of questions, and there is a need to be clear about the relationship between these different questions” (Braun & Clarke, 2006, p. 85). The primary research question is followed by a set of expanded questions that inform the issues investigated. These expanded questions were generated from the literature review to assist in exploring and discussing the main research question.

The primary research question of this study is:

How can artists effectively engage in children’s art education within art museums?

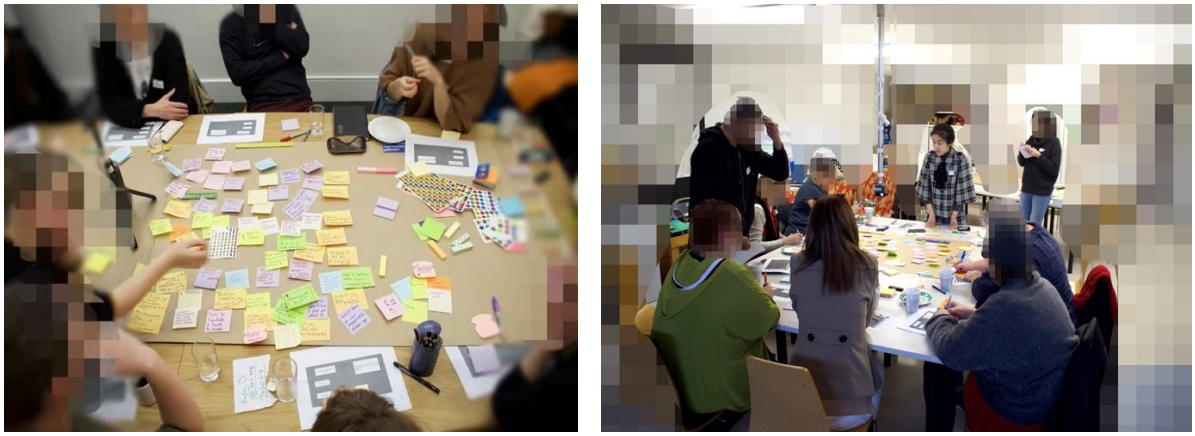
A number of expanded questions, in concert with the themes I formally identified and categorised, and the stage of art classes’ development and delivery in order to accomplish this inquiry, are connected to the data collection methods and they are presented here in table form.

Research Process	Research Questions	Data Collection Methods
Phase one Understanding the current situation and historical development of museum education in New Zealand	RQ1. How were artists involved in children's art museum education currently and historically?	● Observation ● Document analysis
Phase two Understanding artists' ideas on the current art museum education, the environment of art museums and artworks for children's art learning, and teaching pedagogies used in art museum education	RQ2. How do museum educators and artists consider the function of artworks in children's art museum education? RQ3. What can artists bring to museum education for children? RQ4. How are teaching pedagogies reflected in museum education?	● Semi-structured interview
Phase three Discovering the advantages and disadvantages of current museum education Defining the challenge of collaboration between three different roles Developing a new conceptual framework of an art class Delivering two art classes at two different art museums	RQ5. In which ways do artists, museum educators, and primary school teachers expect to collaborate in order to experience artworks together with children in art museums? RQ6. What are the potential benefits of collaboration among artists, museum educators, and primary school teachers?	● Observation ● Workshop ● Reflective practice

Table 1: *Research Questions and Data Collection Methods of Three Phases*

RQ: Research Question

Research Design



Figures 3 & 4: *Collaborative Workshops in Two Art Museums*

These two figures reflect the core idea of the design of this study. This was a three-phase qualitative study that encouraged practitioners, through collaboration, to create and transform their ideas into practice, and discover and define the theory emerging from their own practices.

Methodology and Research Methods

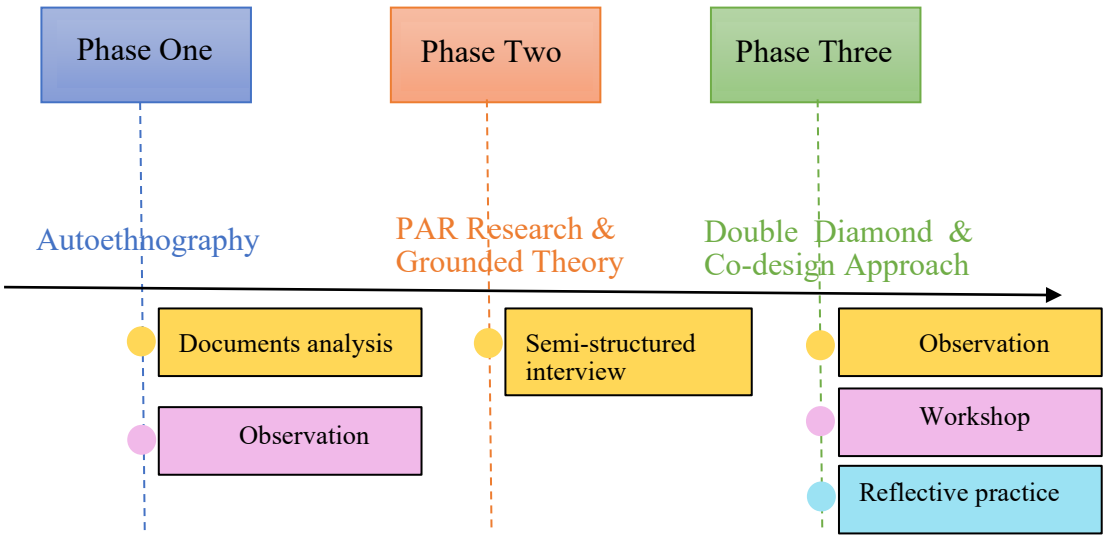


Figure 5: *Methodologies and Methods of Three Phases*

This simplified diagram helps to understand the application of methodologies and methods at different stages. This research did not follow a single methodological approach. In line with the research questions, different methodologies and methods were designed and employed in three different phases, but the method of observation was applied in Phases one and three with different purposes, which will be explained in those two sections respectively.

Holliday (2016) stated:

> The methods of collecting and analysing data are smaller things that we do to carry out our investigation, such as interviewing, observing, describing, interpreting documents, conversation analysis, content analysis, discourse analysis, semiotic analysis, creative nonfiction, personal narrative, and so on. (p. 13)

With the suggestion of Holliday, and to try to avoid overly involving my own interpretations in this process, this project adopted multiple ways of collecting data in terms of semi-structured interviews, observation, workshops, and reflective practice to ensure the relative objectivity of the data. Details of methodologies and methods and how they were used to collect the data are going to be described in the specific discussions of each phase. However, considering the close connection and consistency between the delivery and reflection-on-action of art classes in art museums, the application and results of the method of reflective practice will be further expounded upon in Chapter five.

The Role of the Researcher

> Qualitative research is done through establishing relationships with people, places, and performances. The best qualitative researchers do not separate their lives from their research, as if people could be understood through distancing ourselves from them. Qualitative research, and qualitative data analysis, involves working out how things that people do make sense from their perspective…. Qualitative observation, and data analysis, is best done when the observer becomes part of the dance. Conducting qualitative research is about participating in other people's lives and writing about that participation. (Ezzy, 2013, p. xii)

Similarly, Marx et al. (2017) have suggested that, to conduct a strong investigation, researchers must immerse themselves within the research and interact with participants in a social and cultural context. Romo (2005) also emphasised the importance of building up a rapport with

participants. Sharing information or resources pertaining to the research, from a researcher's individual experience, is a useful way to close the distance with participants. It is indeed helpful if researchers start a conversation with participants as friends, talking about life and work casually. When I talked to participants, rather than immediately beginning with the research questions, I began with some casual topics, before then moving onto the focus of the research. In this way, I gained more unexpected information. The participants talked with me about their own educational and work experience in different institutions, the present status of museum and gallery education in New Zealand, the educational system and reform in New Zealand, and their own home countries' art education in art museums as compared to New Zealand's. Such information might initially appear trivial, but it is valuable, because all these pieces of information involve participants' beliefs, that they might not have initially noticed, but which emerge when later reflecting on their teaching.

Bourdieu (1992) recommended researchers reflect on themselves and their relationships with participants while conducting the research. Also, Participatory Action Research (PAR) suggested that researchers should give control to participants (Sense, 2006) and stand aside; taking on the role of a facilitator rather than a director (Cameron & Gibson, 2005), whereas in the light of Kindon et al.'s (2007) definition of PAR, the role of a researcher assuming the part of participant is likely more suitable. Haney (2002) and Stuttaford and Coe (2007) partly agreed with them and added that researchers sometimes become participants in PAR. However, in the Co-design Approach, Ko Awatea (2015-2016) suggested that the researcher plays multiple roles. The role of the researcher: as an organiser, provides the opportunity for participants to collaborate and find solutions together; as a moderator, encourages participants to engage in the processes step by step; and as an observer, observes and analyses participants' actions and language during the processes. It encourages the engagement of the researcher within the research process to explore and find solutions with participants.

With the suggestions of scholars and three different phases of this study, I would argue that my roles in this project were multiple, and shifted depending on the phases of the research. In Phase one, I played the role of an observer observing art classes to understand the fundamental situation of museum education in New Zealand. Then, while I was interviewing artists at Phase two, I reflected on my own status as a fellow artist to share experiences of art creation and teaching as well as to discuss the development of museum education. In Phase three, I

considered myself as both facilitator and moderator in the workshop, as either too much control or relinquishment thereof were inappropriate. Beyond that, reflection on my role as a participant was important to provide ideas about how to address problems of museum education, how to enhance students' art learning experiences in art museums, and how to create a new form of collaboration to engage different roles in art museums.

I enacted the role of an observer at the delivery of art classes, observing the three differing roles' (artists, museum educators, and primary school teachers) specific actions and language during the teaching process. In the reflection sessions, I was also a reflective practitioner; but in contrast to the participants reflecting on their own teaching, I reflected on these processes of collaboration amongst the three roles to identify strengths and weaknesses. During the data coding and analysis, I attempted to be an "outsider", allowing the data to organically emerge from the unexpected information. All in all, I played multiple roles in this project, moving amongst them dependent on each situation. Sometimes I was immersed in the research and experienced things along with the participants; and sometimes I stood back to view the larger picture of the project and to refresh myself.

Analytically, I used academic language to express methodologies and methods I employed and changes of roles in this project, whereas, emotionally, I would say that the experiences of my participants and myself were interwoven throughout this study; I am telling a story that happened over these three years about the people I encountered and the life I experienced.

Ethical Considerations

This project was implemented in three phases via: the observation of art classes, interviews, and workshops as well as art class delivery. Ethics applications relating to each stage were all approved by the Massey University Human Ethics Committee[11]. All participants were willing to participate in the project, and informed consent forms for each phase were provided prior to the sessions.

[11] Appendix A-Figure A1: Approved Massey Human Ethics Applications

According to the ethics process for observations, interviews, and workshops, the information sheets were sent to the participants before starting interviews and workshops. The information sheets included researcher introduction, project description and invitation, participant identification and recruitment, participant's rights, project procedures, data management, and project contacts. They were given the opportunity to ask questions about the research, to ask for the recorders to be turned off at any time, to decline to answer any particular question, and/or withdraw at any time. Participants were clearly informed of the amount of time they might expect to spend in the interview or workshop and their contribution to the project was acknowledged. Sound and video recordings were permitted by all participants. To protect the identity of participants, their responses remain anonymous and confidential.

For the delivery of art classes, a list of requisite materials was prepared for adult participants, the directors of each institution, caregivers of students, the video technicians, and the assistant observer. As with the workshops, the fundamental information was provided by means of information sheets supplied to adult participants and caregivers of students. In the information sheets, it particularly clarified that the art classes were to be filmed with non-intrusive equipment. The focus of the filming was on the team of adults presenting the art classes. If, by chance, children appeared in this material, their faces were to be blurred to protect their identity. In addition, all participants were also granted the choice to have their faces blurred in some images used in the final thesis. The permission to film the art classes was given by all adult participants and students. A letter detailing the use of each institution as a research site was sent to the directors prior to the art classes. Two video technicians and one assistant observer also signed consent forms to assist in filming and observing the art classes.

Phase One

Phase one focused on foundations of the research inquiry and aimed to understand the current situation of art museum education for primary school-aged children and historical development of museum education, and to review, analyse, and compare art education programmes of New Zealand with that of other countries. In line with the purpose of Phase one, I first conducted fieldwork in Archives New Zealand, and observed nine art classes in two different art museums. The resulting data will be unpacked in greater detail within this exegesis, and the findings of this stage will be presented in Chapter three.

Methodology

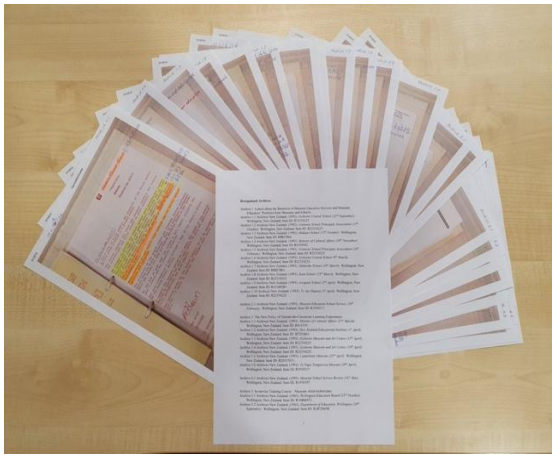
Autoethnography. Autoethnography belongs to a wide family of qualitative research that includes ethnography, narrative inquiry, and self-study (Hughes & Pennington, 2017). Generally, each approach examines "how people understand relationships between humans and their sociocultural" (Hughes & Pennington, 2017, p. 3). Simply, autoethnography refers to "the author's presentation of critical reflections and interpretations of personal experience" (Rallis & Rossman, 2012, p. 94). Autoethnography opens the door for researchers to express their emotions and thoughts rather than assuming that subjectivity is not involved in the research (Ellis et al., 2011). The first-person voice and experience are reflected in the research (Romo, 2005) to interpret particular conditions and contexts that researchers encounter when conducting the research (Denzin & Lincoln, 2018).

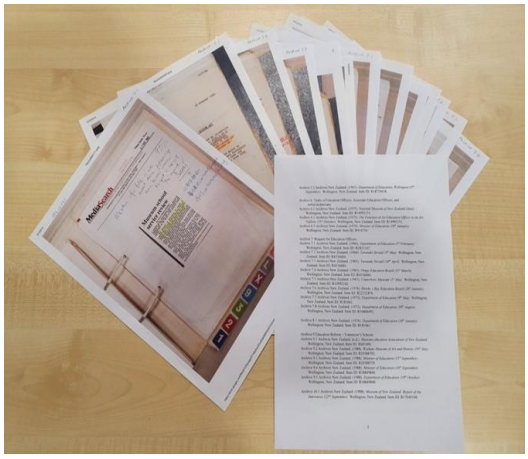
Although the focus of the entire research was not about myself, as an outsider conducting a project on museum education in New Zealand, I have reflected on my own personal experiences and specific cultural background in this study. The influence of the autoethnographic approach on my study was embodied in three primary aspects. I majored in Chinese ink painting and art education, and also undertook an internship as an art teacher in a Chinese primary school. My experience as an artist affected my teaching, and later the routine of teaching made me reflect on both my teaching and on creativity. In addition, as a researcher from another country, my personal experiences helped me understand and perceive art museum education in New Zealand in certain ways. Furthermore, as I immersed myself more and more in the project and communicated with participants, the ways that my own beliefs, culture, and philosophy are reflected in the development of the research as our ideologies and lives are affected by "multiple cultural dimensions and relationships" (Boylorn & Orbe, 2020, p. 17) became more apparent. In this research, other than reflecting my culture, beliefs, and philosophy in the thesis, I also have shared my journey through vignettes to reflect certain of my more subjective responses during the research.

Data Collection Methods

Document Analysis. Documents such as archives, educational policies, and online official materials help researchers to understand how institutions and organisations implement, and what practices and values impact upon, educational reforms and decision making (Ehiyazaryan & Fitzgerald, 2012). As a researcher from another country, understanding the historical development of museum education and, whether there were some artists engaging in museum education historically, became essential. Due to the limitations of current literature on the engagement of artists in children's art education in art museums of New Zealand, I went to Archives New Zealand (Te Rua Mahara o te Kāwanatanga), searching for all documents relevant to the development of museum education.

I gleaned almost 400 documents on the entire development of museum education service in New Zealand from the 1960s to the 1990s and reorganised them according to their historical periods. After reviewing all the documents, I could broadly outline the historical development of museum education in New Zealand, and highlight important turning points in terms of the employment of artist-technicians, museum educational reforms, and the development of the LEOTC educational programme. I subsequently sifted out documents relevant to my study and reorganised them based on the dates of each archive. Archives were re-coded as Archive 1.1, 1.2, 1.3, … 10.1.





Figures 6 & 7: *Reorganised Archives*

Documents after the 1990s on educational policies and reforms were researched through the official websites of governmental and cultural institutions. Even though searching for

documents in the Archives is time-consuming, it proves very helpful and can be particularly useful for international researchers like myself finding sparse information within the current literature.

Observation. Observation, as an independent method as well as a complementary method, is frequently used in educational research (Scott, 2012). This project applied an observation method in two phases. In Phase one, observation was employed as an independent method. Prior to my interviews, I observed nine art classes in two different art museums to assist my understanding of the current situation of museum education in New Zealand.

Phase Two

Phase two involved exploring artists' viewpoints on the current situation and proposed development of museum education. In Phase two, I conducted interviews with 24 visual artists. I will present data obtained from these interviews in this section, and the themes emerging from the data will be further expounded upon Chapter four.

Methodology

Participatory Action Research (PAR). Participatory action research evolved from the term Action Research coined by Kurt Lewin (1946) in the post-war period to describe theories developed into actions. PAR emphasises the collaboration and sharing between researchers and participants to solve a real-life problem and change it for the better (Kindon et al., 2007), and the development of the skills and knowledge of participants after participation (Cornwall & Jewkes, 1995). It values participants' opinions and helps them to identify and solve problems through collaborative practice (McTaggart, 1997). Researchers need to spend more time in conducting the fieldwork to understand the background and development of the problem historically (this was undertaken in Phase one); then connect with participants, to understand their ideas and needs in order to transfer them into actions (Baum et al., 2006). In line with the philosophy of PAR, I interviewed artists to better understand their opinions on museum education.

Grounded Theory Approach. This approach was created and introduced to researchers by Glaser et al. (1968). It is a method of qualitative data analysis, and the key point of this method is that the theory produced is grounded in the data. It emphasises the organic emergence of the theory. In 1990, the dispute between its co-founders led to the emergence of two distinct strands – the Glaserian and Straussian. The core of this dispute addressed what Grounded Theory Approach actually consists of and what it does. Strauss and Corbin (1990) suggested breaking down the coding process into four procedures: open coding, axial coding, selective coding, and theoretical coding. However, Glaser (1992) disagreed with using a coding paradigm and the conditional matrix, and felt that the procedure of one paradigm or one matrix destroyed the emergent nature of grounded theory. Thus, he supported just three coding steps: open coding, selective coding, and theoretical coding. Ultimately, both versions remained and, which one to adopt, depends on each researcher's preference.

This research has adopted the Glaserian strand as it provides more flexibility and is closer to the original formulation of Grounded Theory proposed in 1967. Even though this study employed thematic analysis at the stage of interviews, and multimodal interactional analysis at the workshop phase, the ways of coding were both inspired and influenced by the Grounded Theory approach. Braun and Clarke (2006) have noted that the ways of coding in thematic analysis are very similar to the ways of coding in Grounded Theory; both respect the emergent nature of the data to develop one's own codes creatively (Glaser, 2005) and suggest that researchers remain faithful to what the data offers, instead of shoehorning the data into predetermined frameworks (Urquhart, 2012). With these suggestions, I combined these two coding approaches in this project, allowing the themes to emerge from the data more naturally.

Data Collection Methods

Semi-structured Interview. The purpose of a good interview is, according to Ezzy (2013), to obtain interviewees' stories. As a qualitative researcher, getting stories from interviewees is the basic rule of collecting data. Researchers sharing their pertinent experience on the topics with interviewees is also crucial and does not necessarily indicate that interviews are digressing. On the contrary, similar experiences and feelings have the potential to encourage participants to recount more details and express more opinions. In addition, it is helpful to establish a close rapport with interviewees. The interview, rather than merely a

simple exchange of questions and answers, can become a more informal conversation. The nature of such a conversation can make some ideas appear to drop out of the blue, but researchers need to guide interviews to a moderate degree, to avoid missing some important points. The semi-structured interview is a not uncommon method in qualitative research. It often includes a few major questions and sub-questions. Researchers use primary questions to prompt the conversation and sub-questions to dig into more detail (Briggs et al., 2012). More importantly, semi-structured interviews provide opportunities for interviewees to offer critique (Bauer & Gaskell, 2000). The researcher lists some questions for the interview, but interviewees are allowed to discuss some spontaneous questions and express personal views related to the research. In this project, the interview method was employed after reviewing the literature. The interview questions originating from the literature and preliminary fieldwork (Dimmock & Lam, 2012) were affiliated with the research questions.

Interview Participants Selection. This project is about the engagement of visual artists in children's art education in art museums. Thus, visual artists, who have the experience of working with children either in schools or in some public institutions, were selected as interviewees. The interviewees are from different countries, including: New Zealand, the Pacific Islands, the USA, the UK, Germany, Croatia, Argentina, and South Africa. Prior to the interviews, the questions were tested by two artists who were not included in the formal interviews to ensure that the interview questions were understandable. Regarding the quantity of participants, Dimmock and Lam (2012) suggested that the number of participants is sufficient when between 10 and 25 for a doctoral study, because it provides a satisfactory compromise between achieving data saturation and management. Data saturation can be noticed when there are no new themes emerging from data (Urquhart, 2012; Corbin & Strauss, 2014). With these scholars' suggestions, I interviewed 24 artists. Whilst constantly analysing and comparing data (Strauss & Corbin, 1990), I found that there were no new ideas emerging when the number of interviewees reached 22. However, I interviewed two more artists to ensure data saturation. 17 interviews were conducted face-to-face. Briggs et al. (2012) suggested that a face-to-face interview provides an opportunity for researchers to observe visual clues and the body language of interviewees. Due to the lockdown in New Zealand during the early COVID-19 period (April 2020), an additional 7 interviews were conducted by videoconferencing.

Data Process and Analysis

Data Transcription. Transcription was time-consuming, but it afforded me the opportunity to become familiar with the data at an early stage (Lapadat & Lindsay, 1999; Braun & Clarke, 2006), as well as offering an overview of the data from which I took reflective notes. I transcribed all the interviews; each one immediately after the interview. After each transcription, Goodwin (2000) and Urquhart (2012) suggested reading the entire transcription and understanding its meaning as the first step. I went through the transcription and simultaneously revised any errors. The second step involved describing every paragraph in my own words (Urquhart, 2012). The description had to be concise; some phrases from participants' transcripts were excerpted if they highlighted their core ideas.

Data Coding Approach. "Coding, in short, is the process of defining what the data are all about" (Charmaz, 2006, p. 37). Coding is often from general to specific, and each step of coding is towards a higher level of abstraction (Dimmock & Lam, 2012). The core purpose of coding this study was to develop themes. With this aim, the data of this study were coded inductively. The purposes of adopting an inductive approach are: to summarise raw data into a brief; to build up clear relations between research objectives and findings; and to develop models, themes, or concepts through dealing with raw data (Patton, 1990; Creswell, 2015). Thomas (2006) concluded, "the general inductive approach provides an easily used and systematic set of procedures for analysing qualitative data that can produce reliable and valid findings" (p. 237). Thus, this project generally complied with the principles of the inductive approach, whilst also being influenced to a small degree by the analytical approaches. Taking into consideration that the data of this qualitative research was collected through forms of communication and interaction, I decided to code the data manually. It helped me enhance my understanding of the data. In addition, I could write notes in the margins. More importantly, I could recollect the details of participants' non-verbal communication. This data coding approach was applied in both Phases two and three.

Data Analysis Approach. Kervin et al. (2006) suggested that exploring and selecting different analytic approaches help to ensure that the analysis is balanced. Thus, in this project, I employed two different analytical approaches at different stages, and the data were analysed iteratively. At the interview phase, I used thematic analysis. Themes often emerged from the

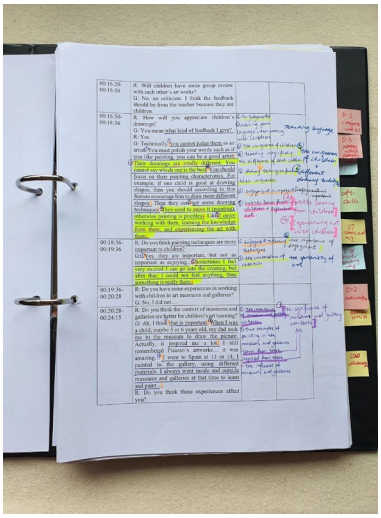
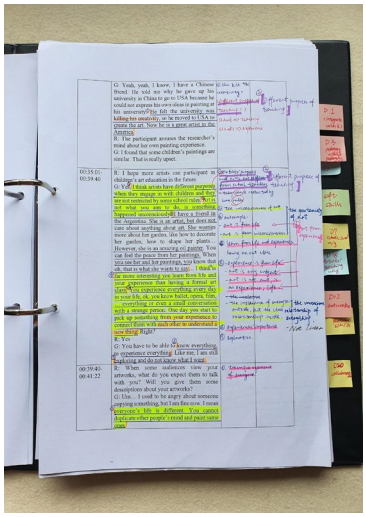
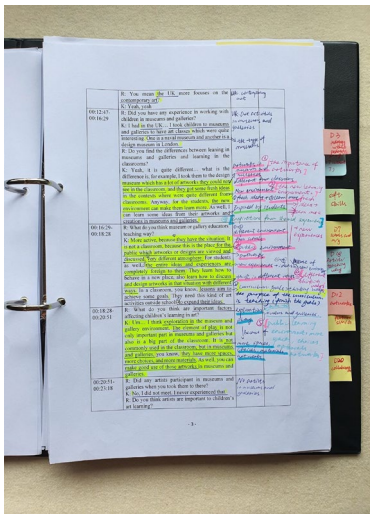
data; relevant to the literature (Braun & Clarke, 2006) but not restricted by the literature. Patton (1990) and Braun and Clarke (2006) specified that a theme comprises many data items that frequently emerge with similar elements and relate to the main research question. It indicates that the theme must be data-driven and attract researchers' considerable attention.

Data Coding Process. Coding can feel like you are solving puzzles. Researchers continually seek meanings concealed behind participants' words. It has been articulated as a researcher's internal dialogue (Strauss, 1987; Corbin & Strauss, 2014). The coding process is a part of data analysis (Miles & Huberman, 1994) as the researcher is organising the data into meaningful themes (Tuckett, 2005). Thus, data coding processes of interviews and workshops will be explicated along with data analysis.

The Encoding of the Participants. Each participant was encoded anonymously as Artist 1, Artist 2, Artist 3, Artist 4, Artist 5, … and Artist 24, and presented in the thesis as A1, A2, A3, A4, A5, … and A24.

The Processes of Coding Interviews. As mentioned, I coded each interview manually and adopted a constant comparative method (Strauss & Corbin, 1990) to analyse transcribed interviews. After coding, I input and saved the data in NVivo software[12]. Because of the similar coding methods between thematic analysis and Grounded Theory (Clarke & Braun, 2013), I partly retained the coding approach of Grounded Theory and named the processes as open coding and selective coding[13].

[12] Appendix B-Figure B1: Saved Data in NVivo
[13] Some excerpts in Appendix C-Table C1 provide an overview of the process of coding and analysis.

Figures 8, 9 & 10: *Interviews with Manual Coding Processes*

There are four steps of coding the data. Writing down initial ideas is the fundamental step. Ideas in the form of sentences or phrases should be broad and inclusive. One paragraph could be condensed into one sentence or one to two phrases. This step resembles the open coding of the Grounded Theory. It helps to promote the content of the conversation from a descriptive paragraph to a highly summarised sentence with essential points. This is a sample excerpt from an interview:

> Art museum and gallery educators merely can answer basic questions such as the fundamental information of the artist, what are elements in the artwork, what are materials used in the artwork. However, I do not believe they could answer some personal questions such as why the artist created this artwork, where did the artist get the inspiration to create this artwork, what did the artist feel when he or she made this artwork. I think it would be better if we engage in children's art class to share these private experiences directly, rather than (children) learning from the second person. (A2)

This paragraph was generalised into a sentence, as follows, *"artists, compared with art museum educators, provide and share more real experiences with children directly and emotionally"*.

The second stage is to condense codes into potential general themes. At this step, Braun and Clarke (2006) suggested having as many potential themes as possible because "you never know what might be interesting later" (p. 89). This process is not in concert with selective coding which is the second process of the Grounded Theory. Urquhart (2012), rather than moving directly to a general theme, specified that the features of selective coding are, firstly to

condense a sentence into an appropriate word or phrase, and secondly, to consider if one selective code is subordinate to another. To ensure the precision of the coding, I used selective coding at the second phase. In the light of these two basic principles, the summarised sentence could be condensed into the phrase, *"direct learning experience with artists"*, to note a possible theme for further comparative analysis. Gibbs (2007) suggested that colourful pens and highlighters, if coding manually, can assist you in distinguishing various elements, thus I used different coloured pens to distinguish different items.

There is another coding form suggested by Strauss (1987) at the selective coding stage. He named it as the "in vivo code", which means the code is drawn directly from participants' words, but it must use shorthand and innovative terms. These words could derive from participants' experiences (Charmaz, 2006). An "in vivo code" captured from one of the interviews follows:

> The strategy of my teaching is to connect some ideas beyond the art. In New Zealand education, they have the key competencies for children's development in terms of creativity, innovation, resilience. I think children can learn these competencies through the process of making art. I realised it is not trying to turn everyone into an artist. It is about enriching their experience through art. All the children can be flexible and spontaneous, and come up with solutions to a problem very easily in the future. I defined these key competencies as soft skills because they are transformable. (A5)

In this paragraph, *"soft skills"* was extracted as an "in vivo code". There were few "in vivo codes" identified during this phase.

The next step aims to examine whether the themes are relevant to the data and entire research. Inspired by the suggestion of building up a relation map between each theme to analyse potential relations (Bryman, 2016), I adopted this approach, which will be discussed in the next section, as relation maps need to be constructed through analytical tools.

The last phase involves integrating similar codes and refining a representative name, as in the following example:

> I suppose I bring my own experience as an artist and think from different angles. I focus more on children's creative process, rather than the result. (A2)

These two sentences are summarised into one sentence: *"Artists bring different experiences and ideas from museum educators and pay more attention to children's creative process"*. Then, this sentence was condensed into the phrase: *"different thinking and experience"* and the hyphenated word: *"process-oriented"*. These three selective codes simultaneously implied what artists bring for children in art education is different from art museum educators, thus the temporary emergent theme could be: *"artists' different ways of experiencing the art with children"*. What is notable is that this is just an excerpt of the coding; the name of the theme could be refined again as the data and codes are compared and integrated continually until there are no new themes emerging (Creswell & Poth, 2017). There are codes Braun and Clarke (2006) referred to that may not belong anywhere and it is acceptable to "create a theme called 'miscellaneous' to house the codes" (p. 90) temporarily until they fit into other themes. Some small themes such as: "breaking conservative thinking" or "practice-based" can be merged into a core theme (Rivas, 2012). Braun and Clarke (2006) suggested that it is time to stop coding "when your refinements are not adding anything substantial" (p. 92) or when similar themes appear repeatedly (Corbin & Strauss, 2014). Based on these suggestions, I stopped coding when the similar themes were recurring, and would integrate the emerging themes of interviews with the themes from the workshops later.

Phase Three

Phase three sought to first discover and define certain problems in current art museum education, and then to suggest how to potentially improve art museum education through the discussions of artists, museum educators, and primary school teachers. With the ideas and suggestions that they put forward together, they developed a new conceptual framework of an art class and delivered two art classes in two different art museums. The data from the two workshops will be analysed shortly, and I will explicate the results of this phase with the delivery and reflection of the art classes in Chapter five.

Methodology

The Double Diamond Design Process. When considering the most appropriate and effective way to engage with artists, museum educators, and primary school teachers, I

initially considered following a focus-group approach which would have aligned more typically with processes of data collation and analysis commonly used within research within the broad areas of Humanities and Social Sciences. I became aware of another process: participatory iterative design, which would enable collaborative conceptual development, progressing through to testing, and critical reflection on a prototyped workshop. Engaging in this way felt most fitting for research that sought not only to question existing practices, but to imagine and test other ways of delivery in this space.

The Double Diamond design process was introduced to me by Toi Āria[14] which is a public engagement centre, located within the College of Creative Arts (Toi Rauwhārangi), Massey University which creates designs for the public good. I had specialist advice from them during the planning and implementation of workshops.

Akama et al. (2019) stated:

> Designing among Indigenous and non-Indigenous people is turbulent because we are all working within differing legacies of colonialism and entrenched systems of "othering." When design enters this space through widely popular methods like the Double Diamond or Human-Centred Design (HCD) toolkits, … These origins emphasise problem-solving, replicable methods and outcomes, pursue simplicity and efficiency, and detach knowledge, people, and relationality from the sites of design's embodiment. This risks perpetuating acts of colonialism, inadvertently displacing Indigenous practices, knowledge, and world views. Instead, we propose respectful, reciprocal, and relational approaches as an ontology of co-designing social innovation. (p. 59)

The Double Diamond process, launched in 2004, is devoted to supporting and encouraging the public to innovate and transfer their ideas into practice, and highlights a visual, comprehensive, and clear description of the design process. The figure below represents the Double Diamond design process framework applied in this study.

[14] https://www.toiaria.org/

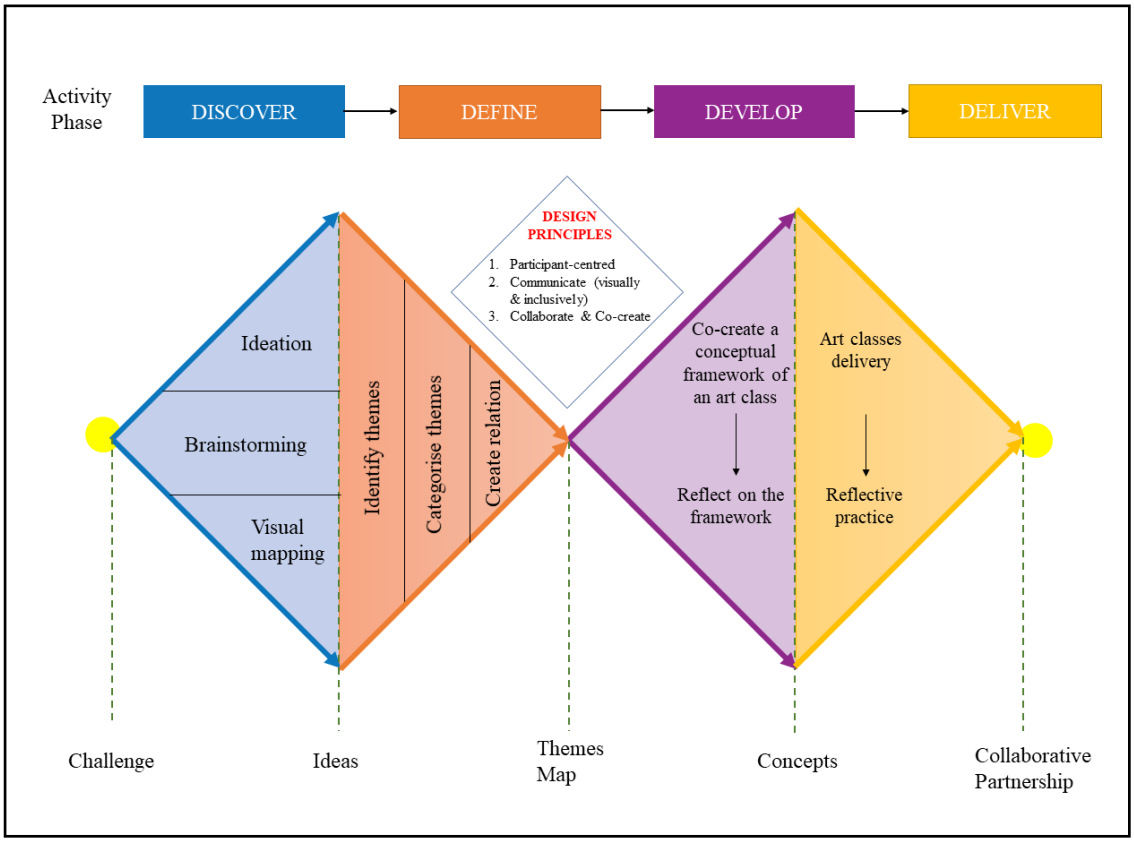


Figure 11: *The Double Diamond Design Process Applied in This Study*

As clearly shown in the image, "the two diamonds represent a process of exploring an issue more widely or deeply (divergent thinking) and then taking focused action (convergent thinking)"[15]. In the first diamond, the primary focus is on exploring and finding the problem through brainstorming and visual mapping, identifying and categorising themes, and then building up relations between themes. In the second diamond, participants will co-create a conceptual framework of an art class and reflect on the framework. Testing out the framework and conducting reflection-on-action will occur at the last stage of delivery. In concert with this design, I first invited primary school teachers, artists, and museum educators to participate in two workshops at two different institutions, to consider the strengths and weaknesses of current museum education, and to discuss how to enhance museum education, before then identifying and categorising the themes they discovered. Secondly, the participants, in the light of their ideas on the further development of museum education, co-created a new

[15] https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond

conceptual framework of an art class. Finally, two primary school teachers, two artists, and two museum educators were selected from the participants to join in the delivery of art classes at two different institutions and reflect on their practices.

Co-design Approach. The Co-design approach aims to develop innovative practices based on principles learned from indigenous peoples' and communities' features and needs. Respect, collaboration, and reciprocity are fundamental ideas of this approach. Co-design connects people who are influenced by policy or services, such as frontline staff, stakeholders, communities, and so forth (Mark & Hagen, 2020). The core motivations of co-design and collaborative programmes are: to achieve a partnership between participants and the researcher; to emphasise experiences rather than opinions; and, to employ a narrative for presenting experiences (Ko Awatea, 2015-16). Such an approach highlights the engagement and collaboration of participants in the research. Furthermore, the Co-design approach facilitates the establishing of a platform to hear the "voices of the unheard" (Mark & Hagen, 2020, p. 19), enabling the sharing of ideas and resources as well as the opportunity to reflect upon actions and thoughts. More importantly, it takes advantage of participants' experiences to help them solve problems. Co-design has the potential to make a change or develop a new prototype or framework (Boyd et al., 2012).

Goodyear-Smith et al. (2015) have referred to co-design as the best way to enable local people to engage with research. The value of co-design programmes is to provide support for participants in sharing and spreading new ideas, concepts, modalities, or theories to other colleagues (Ko Awatea, 2015-16). There are four stages: "framing the context, exploring, imaging, and testing" (p. 9) involved in this approach (Mark & Hagen, 2020), which are similar to those found in the Double Diamond design process. Specifically, framing the context aims to understand the present information, literature, or documents. Exploration means to develop in-depth understanding from participants' perspectives. These two phases are parallel with the first diamond with respect to discovery and definition. Brainstorming, employed at the imaging phase, aims to develop ideas which are equal to the stage of development in the second diamond. Prototyping and refining ideas occur at the testing stage and the last stage of delivery. In accordance with these two approaches, this project involved primary school teachers, artists, and museum educators participating in workshops to co-design a new conceptual framework of an art class in art museums. Then, they delivered art classes based on the co-designed

conceptual framework in two different art museums. The co-designed conceptual framework is illustrated in Chapter five.

Co-design approaches that have focused on developing and promoting indigenous practices have had many achievements: facilitating conceptual redevelopments and refinements in museum education; encouraging the engagement of artists; and promoting a new form of collaboration amongst primary school teachers, artists, and museum educators. Beyond that, Mark and Hagen (2020) appraised the Co-design approach as, not only creating new opportunities for frontline staff and whānau[16], but also providing suggestions for policy makers and further learning and development. Although this approach is committed to helping develop local practices, this innovative and creative practice could spread to other countries if such collaboration benefits the development and innovation of museum education.

Data Collection Methods

Observation. Different from Phase one, observation in Phase three was used as a complementary method, at the stage of delivering developmental workshops, to observe the interactions, actions, and languages between participants. I tried to be a "fly on the wall" during the observation, to avoid influencing the behaviour and language of participants in class. I adopted this stance in the hope of providing a more comprehensive and potentially more objective perspective on what was being observed and examined (Gillham, 2008). Additionally, Bourdieu (1992) noted that it is not uncommon that some participants' behaviours could not be observed properly whilst conducting research on a large scale because of the interweaving and overlapping of such behaviours. In this study, interactions such as talking in low voices, that naturally happened between participants, could not be observed.

Workshop. Due to the employment of collaborative approaches in this project, the workshop became a very important method by which participants could be assisted in the process of engaging and collaborating. Two workshops were conducted in two different institutions. Each workshop included three different roles: artists, primary school teachers, and

[16] Whānau (noun) is a Māori-language word for extended family. It is also used in everyday New Zealand English, as well as in official publications.
https://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=wh%C4%81nau

museum educators. The workshop had three aims: firstly, to discuss the merits and demerits of contemporary museum education in New Zealand; secondly, to explore the ways in which primary school teachers, artists, and museum educators expected to experience the art with children, together, in art museums; and finally, to co-create a new conceptual framework of an art class. With these purposes, I began recruiting participants.

Workshop Participant Selection. Stewart and Shamdasani (2014) suggested that individual characteristics impact on another individual's or a group's behaviour. In the light of their suggestion, participants in the workshops of this research who were approachable, optimistic, conscientious, talkative, and open to experience were considered good prospects. Other than that, close relations such as spouses, good friends, or relatives could not appear in a group (Tynan & Drayton, 1988). Deliberating these principles, I recruited primary school teachers by posting an announcement online[17] and selected artists from the interviews. Museum educators were chosen at the stage of the art class observation prior to the interviews. Finally, 15 participants were selected including 6 artists, 3 museum educators, and 6 primary school teachers. Participants were not very familiar with each other; although they might have worked with each other once or twice due to the small size of the field.

The Size of a Workshop. A workshop may typically comprise 6 to 10 participants (Van Boeijen et al., 2014), but the minimal size can be 4 people, which is called a mini workshop. The maximum can reach 12 people. In this study, one group had 7 participants; another group had 8 participants. The groups consisted of participants self-identifying as Pākehā[18], Māori, Tokelauan, Niuean, American, and South African. Litosseliti (2003) has referred to the benefits of conducting a small-sized workshop. A small group is more appropriate when exploring complicated and insightful, personally-held views. Additionally, discussions on topics can go deeper in a small group and more detailed information can be elicited. Furthermore, the observer can capture more details of the participants' body language. More importantly, with the deliberations regarding the uncertain emergence of COVID-19, the size of each workshop conformed to the New Zealand Government's policies during Level 1[19]. To adhere to the

[17] Appendix D-Figure D1: A Poster of Primary School Teacher Recruitment
[18] Pākehā (noun) is generally a Māori-language term for New Zealanders primarily of European descent. https://maoridictionary.co.nz/search?keywords=pakeha
[19] There is no limit on the number of people who can attend a social gathering or event or enter a public facility at Alert Level 1.

government's safety guidelines, hand sanitisers, face masks, and disinfectant spray were all prepared prior to the sessions.

Location Selection. A non-threatening environment is an essential condition for a workshop. Cafés, restaurants, and pubs are not ideal environments for conducting a workshop. First, participants cannot concentrate on the discussion in these environments. Secondly, a noisy environment is not suitable for video recording. In view of the context of this research: the art museum, it became the obvious, effective setting for the workshops. All the participants in the workshop were acquainted with the environment of art museums so, it was decided that the familiar atmosphere would help them move into the discussion stage quickly. Through negotiation with the directors of the two art museums, the workshops were arranged in the two museum educators' workplaces.

Equipment Selection and Setup. To ensure that the entire process is recorded properly, the researcher needs to prepare two recording set-ups (Barbour, 2008; Stewart & Shamdasani, 2014). This project used four pieces of wireless equipment, including: two audio-recorders; one 360° GoPro camera; and one Nikon DSLR camera. Two audio-recorders were set up at two different angles on a table to guarantee that all participants' voices could be included. The GoPro camera was hung from the ceiling in a position horizontal to the participants' eyes. Visual evidence was captured without interruption and the camera itself did not distract participants. One technician remotely operated the GoPro camera through an app; another technician took charge of the Nikon DSLR camera along with a tripod to capture some video clips and photos.

https://covid19.govt.nz/everyday-life/gatherings-and-events/#social-gatherings,-events-and-public-facilities-at-alert-level-1

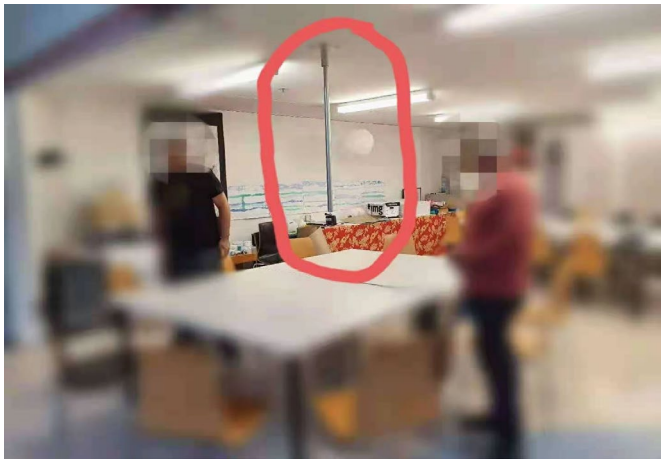
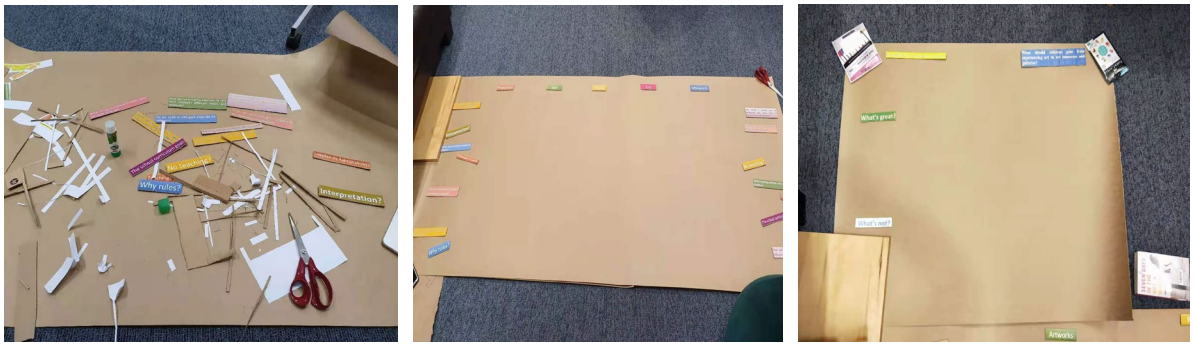


Figure 12: *The 360° GoPro Camera Position*

Time Schedule. An invitation was sent to the participants three weeks in advance. The specific time was negotiated with all participants. Taking into consideration the anticipated degree of concentration required of the participants, a workshop was planned for 90 minutes. The timings were slightly altered according to each situation on the day.

The Design of Questions for the Workshops. The questions designed for the workshop related to their purposes. To avoid involving more editorial statements which might impact the views of the participants, I designed open-ended questions along with some prompts. This idea was inspired by the Double Diamond design process, motivating participants via prompts to begin collaboratively brainstorming. The prompts were designed in the light of the themes derived from the interviews and were core points that the researcher expected participants to critique and contemplate when they co-created a new art class. The figures below demonstrate how the prompts were prepared.



Figures 13, 14 & 15: *Prompts Preparation*

The workshops began with a warm-up prompt addressing art experiences outside the classroom. What is great and, what is not? This warm-up question aimed to make participants become more familiar with each other, and to engage their thinking and discussion. The next question was, “What should children gain from experiencing art in art museums?” After collecting all the ideas from participants, they were challenged to transfer their ideas into the planning of an art class together. The art class was assumed to happen in the art museum in which the workshop was being held. The participants were encouraged to break up the normal processes of an art class into stages.

Workshops Method. Kindon et al. (2007) and Bergold and Thomas (2012) have suggested a list of methods used in participatory research. They include visual mapping, diagramming, storytelling, dialogue, learning by doing, participant observation, survey, educational camps, and so forth. Considering that the essential qualities of workshops are discussion, exploration, and co-creation, I adopted the method of visual mapping to collect the data. Participants, by brainstorming, co-constructed a visual map to devise a new conceptual framework of an art class.

Workshops Processes. The workshops began with the greeting and brief introduction of the research and team members (including one designer from Toi Āria, working with me, to conduct the workshop, one assistant observer, whose research field is discourse analysis, to document both verbal and non-verbal communications between participants, along with the researcher, and two video technicians). Prior to beginning the workshops, the participants were informed of the positions of the restroom and emergency exit. I clarified again that the video recordings and photos of the workshops would be used for data analysis, and some photos with blurred participants’ faces would be used in the final thesis publication. The clarification was to make certain again that the participants were willing to be filmed. Without any objections from the participants, I moved on to introduce what they were expected to do with sticky notes, marker pens, and stickers. The participants picked one coloured pen to represent their ideas, to reduce difficulty for the researcher in integrating and distinguishing participants’ ideas at the stage of data analysis. They were expected to construct two visual maps with two big pieces of paper. They could write down or draw their ideas on the notes, then stick them on the paper, and add some ideas or use stickers to support others’ ideas. Participants, also, could build up

relationships between each note, by drawing lines with arrows. After this preliminary explanation, the participants began brainstorming.

Figures 16 & 17: *Participants Brainstorming During the Workshops*

Data Process and Analysis

Data Transcription. Because the data analysis of workshops used the approach of multimodal interactional analysis, data transcriptions were done multimodally (Norris, 2019). This corresponds to Norris's (2004) suggestion that the transcription of multimodal interaction must be step-by-step, from general to specific, and from spoken language to body language. As mentioned in the paragraph discussing workshop implementation, I had an assistant observer to document participants' communications and interactions in case I was unable to observe comprehensively, especially as I, simultaneously, played the role of moderator in the workshops to guide participants. Prior to transcribing the data, I spent a considerable amount of time with the assistant observer to review field notes and seek out discrepancies. The discrepancies were resolved through viewing the videos repeatedly together.

I watched the video more than once to notice turning points, particularly with respect to when participants began their discussion and interaction, and the changes of topics, and wrote them down in order to deal with a big chunk of data. Data transcription, after viewing the video, was separated into two parts in terms of verbal and non-verbal language included in lower-level, mediated action. There are two important concepts in the multimodal interactional analysis approach. Lower-level mediated actions originate from participants' interactions, such as spoken language, body language, gaze shifts, and so forth. Higher-level mediated actions are

produced from lower-level mediated actions. Higher-level mediated actions are the overview of lower-level mediated actions (Norris, 2019). A high-level mediated action and a lower-level mediated action interact and influence each other (Norris, 2019). Based on these principles, I completed data transcriptions of the two workshops.

Data Analysis Approach. Norris (2004) has stated, "all interactions are multimodal" (p. 1). In this project, due to three different roles engaging and interacting with each other, I adopted multimodal interactional analysis at both workshops. Multimodal interactional analysis focuses on verbal and non-verbal interactions between people. It concerns what one person is expressing and what others are reacting to (Norris, 2004). Norris (2004) emphasised that multimodal interactional analysis merely considers current interactions between participants. Researchers only analyse what is going on in a specific situation, rather than participants' thinking, feeling, and perceiving outside the situation, all of which are more complicated than what they express. It is doubtless that participants will change their language and behaviour in front of the camera. Participants would feel a little bit unnatural at the beginning of filming, but they can gradually become more at ease when responding to questions from the researcher.

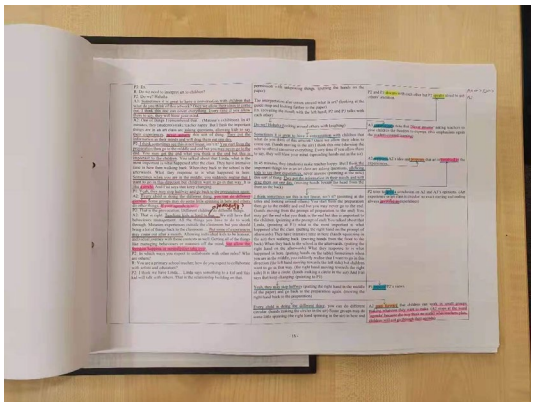
Norris (2019) noted that participants could not conceal their actions and language for the entire session unless he or she were an actor. Although participants are performing, "they still behave in their very own ways" (Norris, 2019, p. 68). Their actions and behaviour still reflect their personalities. Norris (2019) noted that anything could happen when working with people, even when completely prepared. A camera may not capture everything. A room may not be big enough to set up different types of cameras. Participants may suddenly feel uncomfortable when being filmed. Norris (2019) suggested that it is always helpful to have some post-visits with certain participants, when you want to clarify some opinions or investigate further. Attentive to Norris's advice, I shared the co-designed conceptual framework of an art class with the participants, explained every core theme, and discussed some points that they had not expressed explicitly in the workshops.

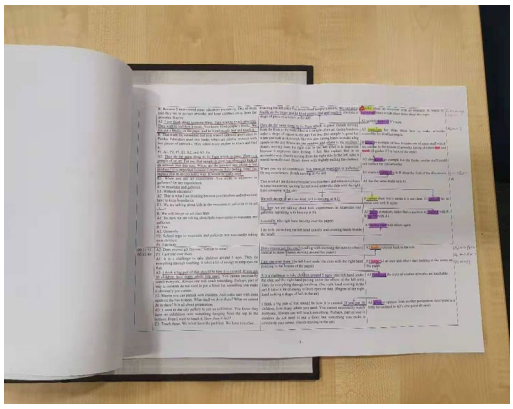
Data Coding Process.

The Encoding of the Participants. Because of the participation in the workshops of people from three different areas, the participants were encoded based on their professions. P1, 2, 3, etc. indicated primary school teachers 1, 2, 3, etc. Aw1, Aw2, Aw3, etc. represented artists from workshops ("A" refers to artist and "w" stands for workshop), as distinguished from artists who attended interviews. E1, 2, and 3 denoted museum educators 1, 2, and 3. They were finally presented as the form Aw1, P1 and E1 in the thesis.

The Processes of Coding Workshops. In accordance with the processes of workshops, data coding and analysis were divided into two phases regarding the coding and analysis of videos and visual maps. The processing of data from both workshops aimed to efficiently analyse, compare and integrate data around the themes emerging from the interviews.

The coding processes were done manually and then digitally recorded. The coding progressed from lower-level mediated actions to high-level mediated actions. Due to interactive relations between actions, the coding is inseparable. However, at which points researchers start to analyse data depends on the focus of the researcher (Norris, 2019). Researchers only focus on what is necessary and important to the research rather than being distracted by irrelevant data. I used different coloured arrows to distinguish different topics. Here are two excerpts with their accompanying descriptions to help explain the process of coding and analysis.





Figures 18 & 19: *Workshops with Manual Coding Processes*

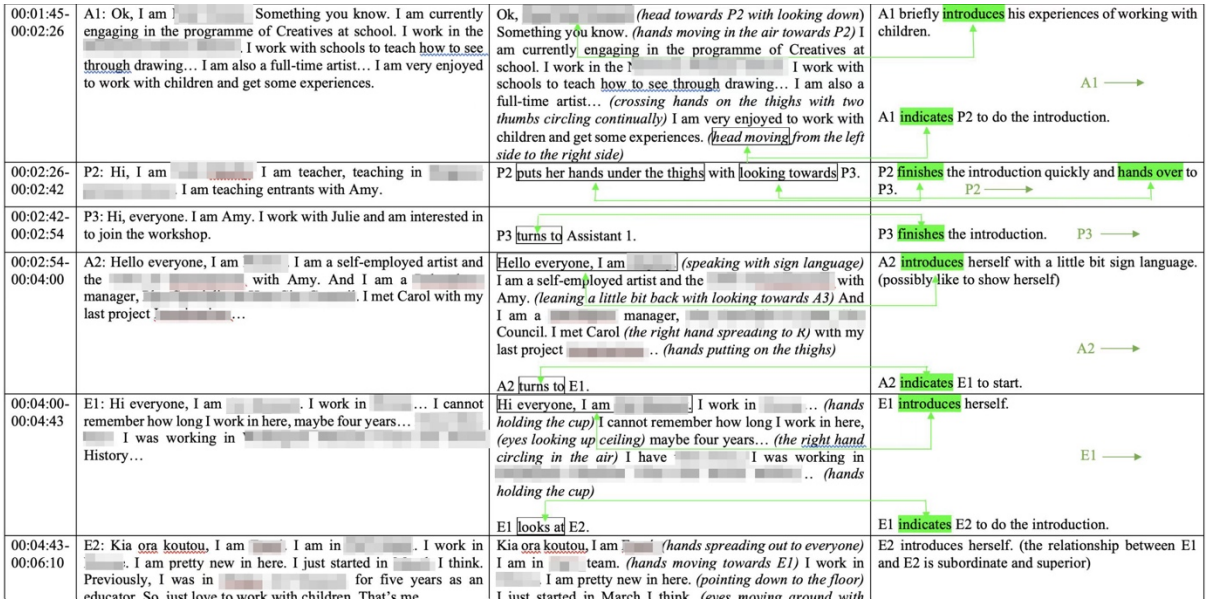


Figure 20: *Workshop 1 Coding and Analysis Process*

Lower-level mediated actions included participants' verbal language, along with their actions and interactions. In the lower-level mediated actions, the participants' original words, squared in a box, were connected to marked verbs with double-arrow lines, and their non-verbal language was bracketed and italicised. Lower-level mediated actions can be narrowed down to a high-level mediated action that helped highly summarise a series of lower-level mediated actions (Norris, 2019). Norris (2019) recommended that "examining and colour-coding your higher-level mediated action allows you to find topics". Following Norris' suggestion, I categorised data in the light of open-ended questions given on two big pieces of paper and adopted colour-coding to distinguish diverse themes. This is an example excerpted from P2's brief introduction. "Hi, I am XX. I am a teacher *(putting her hands under her thighs),* teaching in XX school *(looking towards P3)*". This action can be condensed into one sentence as, *"P2 finishes the introduction and hands over to P3"*. "Putting her hands under her thighs" was considered as a sign of completing her contribution, thus this sign was narrowed down to a verb of *"finish"*. "Looking towards" indicated that the next person should begin their introduction. It indicated that P2 handed over to P3, and P3 started the introduction. The symbol of P2 with a single arrow denoted that the interaction between P2 and P3 was completed non-verbally.

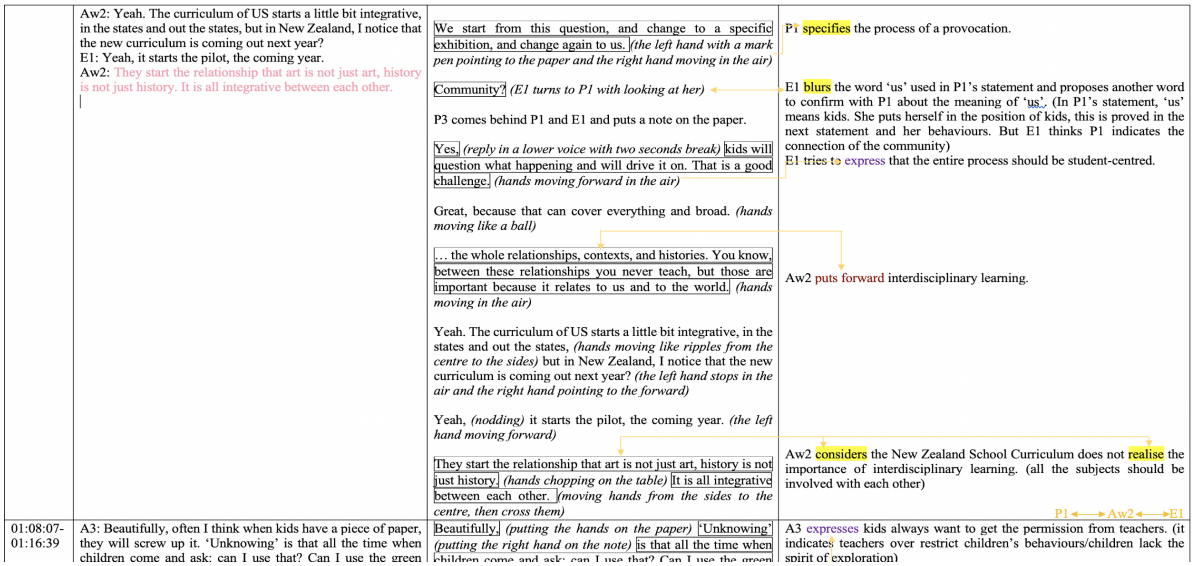


Figure 21: *Workshop 2 Coding and Analysis Process*

The example presented here illustrates the interactions between multiple roles. This excerpt happened in the context of discussing the New Zealand School Curriculum. "They should state the relationship that art is not just art, history is not just history *(hands pounding the table)*. It is all integrative *(moving hands from the sides to the centre, then crossing them)"*. This action can be summarised to *"Aw2 considers the New Zealand School Curriculum does not realise the importance of interdisciplinary learning"* or *"all the subjects should be connected with each other"*. The sentence, "art is not just art, and history is not just history" was Aw2's consideration of the school curriculum, thus it was refined into a verb – *"consider"*. Aw2 by stating, "it is all integrative" intimated that the school curriculum has not realised the importance of connecting all subjects. Combining Aw2's verbal language (integrative) and the non-verbal language (moving and crossing fingers), a phrase of *"interdisciplinary learning"* was identified. The double-arrow lines between P1, Aw2, and E1 illustrated the interaction occurring between three roles.

After addressing the data of videos, I coded visual maps from two workshops at the same time. A few images are selected here to help represent the processes of coding and analysing visual maps.

Figures 22, 23 & 24: *An Overview of Visual Maps*

Data Analysis and Comparison – Visual Maps

Workshop 1		Workshop 2	
Ideas	**Themes**	**Ideas**	**Themes**
Part 1: Art experiences outside the classroom (art museums and public art galleries)			
What's great?			
○Give students different opportunities that they might not experience (+1) ○Children are able to participate and express (+1) ○New sensory experience ○Chance to see art as part of society ○Alive ○Interactive (+1) ○Collaborate with community (+1) ○Boosts Kaiako experience added passion and excitement ○Authentic experiences (+1) ○Inspiration ○To view art from other cultures (+1) ○Meet artists ○Working on site ○Great for reflective work ○Social skills and life skills enrichment ○Encourage critical thinking ○Visual language learnt (+1) ○Bringing diversity of mediums that may not be able to see in the class – i.e.: installation ○Chance for art-marking (+2) ○New environment (+1)	Different experience and environment Participation and expression Interactive and collaborative learning Multicultural learning Hands-on activity Diversity of mediums Art in society	○Activity to see original art (+1) ○Understand artworks ○The ability to establish a conversation around art ○Interactive activities (+1) ○Stories & some interpretive and engaging hook to capture children ○Participation ○Visual experience ○Demystify art ○Authentic/real experience ○Art around public space ○Exploring art with friends ○Broader – introduction artists mediums styles concepts ○High lights (+1) ○Community of learning ○Hands-on ○Art as priority ○Real life connection ○Chance for teachers to see students in different ways ○Building relationships with cultural spaces ○Every student can share/connect ○Understanding art can happen outside the classroom	Real artworks Interactive and collaborative learning Participation and expression Different environment and experience Diversity of art Special space Hands-on activity Multicultural learning
What's not?			

Figure 25: *Visual Maps Coding and Analysis Process*

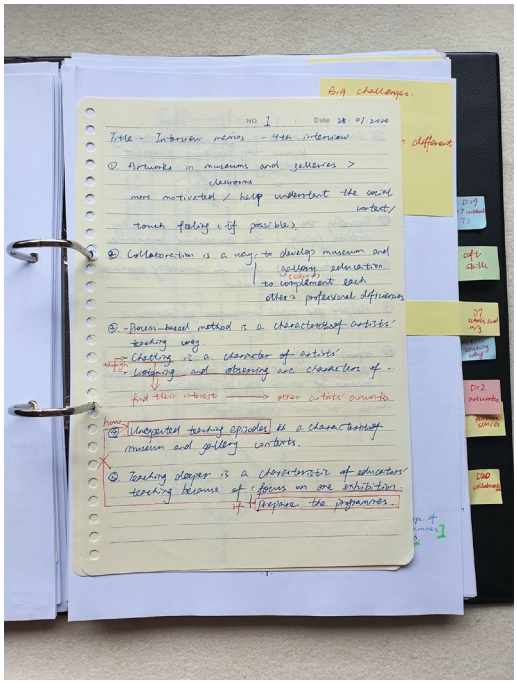
Prior to coding the data, I first read all the notes carefully, and then, collated some unclear ones by reviewing the videos. After making sure that all the information was correct and decipherable, I started coding. The first step was to arrange and write down all original ideas from participants' notes. The signs "+1" or "+2" indicated that similar ideas were proposed by one or two more participants. Merging and condensing similar ideas into a phrase were the second stage. "Activity to see original art", "understand artworks", and "demystify art" were integrated and defined as *"real artworks"*, and this small theme could be combined into a big theme later. In the columns of themes, circled themes highlighted that they never emerged in either the interviews or the video-recorded workshops' analysis. With the principle that small themes can be discarded or merged into big themes as sub-themes (Braun & Clarke, 2006; Rivas, 2012), depending on whether they are relevant to research objectives, the next step was to merge and integrate themes. The orientation of single-arrow lines represented big themes. As mentioned, data in this research was analysed iteratively. Thus, I finally amalgamated and

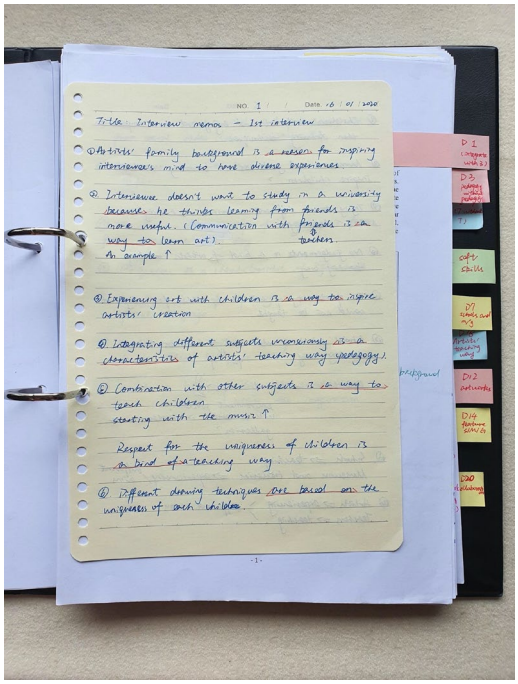
narrowed down themes emerging from interviews and workshops into five big themes, with the assistance of two important analytic tools.

Data Analysis Tools

Memos and diagrams are considered as two key analytic tools to facilitate data analysis (Corbin & Strauss, 2014). Urquhart (2012) stressed and specified the importance of memos and diagrams while examining and comparing data, along with analysing potential relationships between concepts or themes. These two tools were employed in this project during data analysis.

Memos





Figures 26 & 27: *Interview Memos*

I used memos at the third phase of coding interview data, to analyse semantic relationships between different codes, as well as codes and themes. Key phrases that represent the relation between two items are: a reason to, a way to, a characteristic of, a stage of, a part of, is used for, … and so forth (Urquhart, 2012). Two excerpts helped better understand this function.

> "I suppose I bring my own experience as an artist and think from different angles. I focus more on children's creative process, rather than the result". (A2)

The relationship between the temporary code and theme could be written as, *"focusing on children's creative process is a characteristic of artists' experiencing the art with children"*.

> The strategy of my teaching is to connect some ideas beyond the art. In New Zealand education, they have the key competencies for children's development in terms of creativity, innovation, resilience. I think children can learn these competencies through the process of making the art. I realised it is not trying to turn everyone into an artist. It is about enriching their experience through art. All the children can be flexible and spontaneous, and come up with solutions to a problem very easily in the future. I defined these key competencies as soft skills because they are transformable. (A5)

In this extract, the relationship could be paraphrased as, *"learning through art experience is a way to enhance children's soft skills for their further development"*.

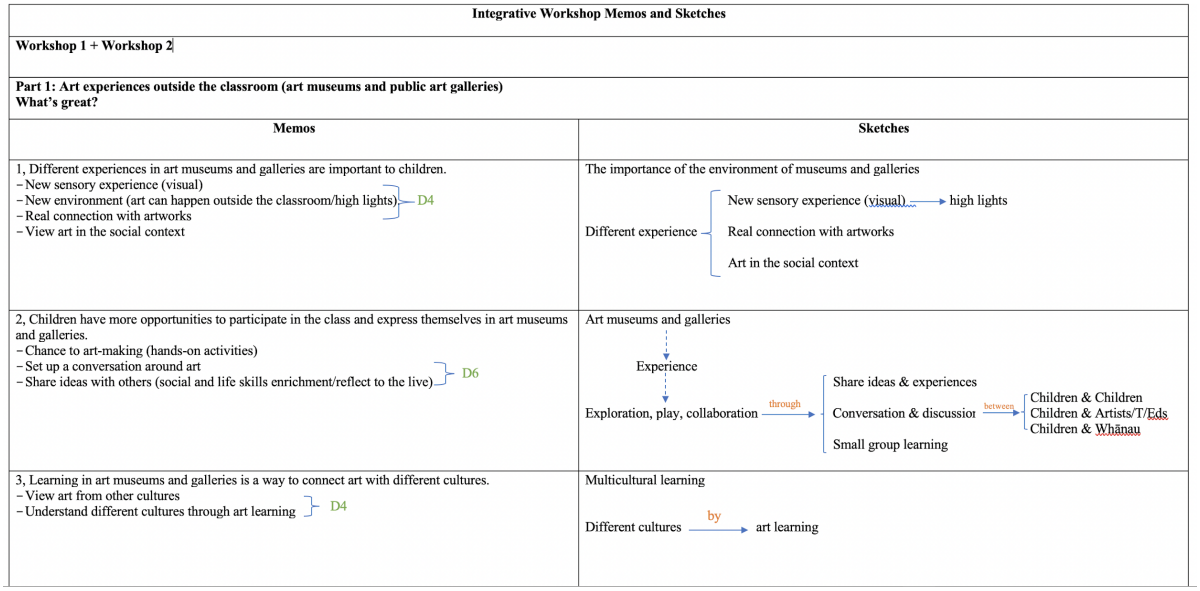
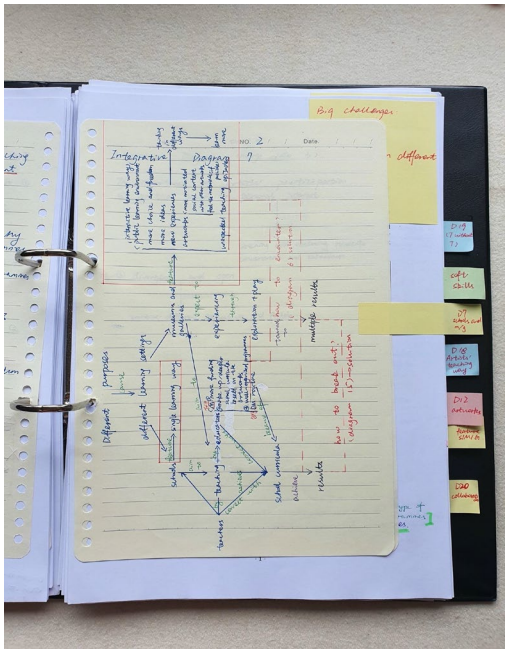
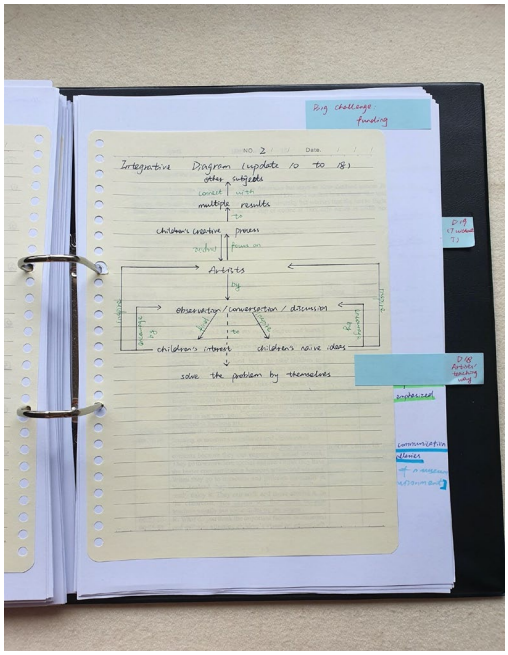


Figure 28: *Workshop Memos*

I adopted memos during data analysis of workshops as well. Due to the iterative data analysis method, workshops' memos were recurrently integrated into the final themes. Using memos to look for relationships between codes, as an essential stage, paves the way for the next move to build up relational diagrams under each theme.

Diagrams





Figures 29 & 30: *Integrative Diagrams*

Integrative diagrams facilitate the construction of associations among scattered materials (Strauss, 1987). Alexander et al. (2007) stated that diagramming is more inclusive. It condenses and includes important points researchers want to express. Additionally, diagramming is more visual. Diagrams break up conventional means of reporting, making dissertations more visual. Other than that, diagramming is more participatory. Diagrams, in contrast to textual information, facilitate readers to more understand and engage in the research. More importantly to data analysis, Urquhart (2012) emphasised that "something interesting happens when we put categories into a diagram" (p. 114). I applied this analytic tool to the data analysis of both the interviews and workshops, but slightly altered the form of the diagrams, changing them into sketches. These sketches during the data analysis were very important in developing the final diagrams, and more inspiration and ideas evolved during their creation. On the basis of these memos, each integrative diagram visually presented the relationship between each code in a theme. I constantly modified and refined the integrative diagrams with integrating emerging themes from interviews and workshops[20].

[20] These integrative diagrams were presented in Chapter four (Image 1, Image 2 and Image 3), Chapter five (Image 4), and Chapter six (Image 5 and Image 6). The original documents of these diagrams with high quality can be

Interrater Reliability

With regard to the reliability and consistency of coding, McDonald et al. (2019) noted that qualitative researchers have frequently asked the question of whether they should calculate interrater reliability (IRR). This is because "IRR is a statistical measure of agreement between two or more coders of data" (McDonald et al., 2019, p. 2), and it is often considered in quantitative research. There are three primary software programmes: Cohen's Kappa, Krippendorff's alpha, and Fleiss' Kappa, assisting in measuring the consensus of coding for quantitative research (Viera & Garrett, 2005; Hallgren, 2012), but they are not compatible with qualitative research (McDonald et al., 2019).

For the reliability and consistency of qualitative data, Campbell et al. (2013) and Krippendorff (2018) suggested two ways: coding part of the data using another coder and coding by a single coder repeatedly. In this project, the assistant observer, who majors in linguistics, particularly focused on discourse analysis, evaluated the reliability of my coding and checked the coding protocol. She independently coded 25% of interview reports and the two workshops' reports. The interview reports were selected randomly. After coding had been done by another coder, we spent plenty of time in meetings to iteratively discuss and revise the discrepancies and overall results until we reached a consensus. Finally, I rechecked the results by selecting high frequency markers from each theme. I recoded them and compared two sets of results, and then discussed minor inconsistencies with the assistant observer until agreement was achieved.

In this chapter, I have outlined the research design, and explicated the methodologies and processes adopted to carry out the research at three different phases of the project. I then dissected the procedures of data collection, process, and analysis. In the next chapter, I will describe the findings of Phase one.

accessed through the hyperlinks attached to image captions.

Chapter Three: Related Literature Review

This chapter presents the findings of Phase one in five sections. The first part consists of the historical background and the current development of museum education in New Zealand, through the review of literature, official archives and documents. In the light of these materials, the second section describes how I, from an outside researcher's perspective, conducted the investigation to better understand the current situation of museum education. The third and fourth sections explain the emergence of the artist-teacher in a historical context and of the artist-teacher role in museum education and art education programmes in New Zealand. The last section compares and reflects featured visual art education programmes abroad and nationally to better develop visual art education in art museums, with the engagement of visual artists in New Zealand.

The Related Literature on Museum Education in New Zealand

Researchers from different occupations, such as: educationalists, art curators, and museum or gallery educators, and those with different disciplinary backgrounds, with respect to art education, museology, and curation in New Zealand, have investigated the development of visual art education in art museums and made major contributions to this field. Mason and McCarthy's (2006) investigation started by examining the relationship between museums and their potential audiences, particularly on young visitors; they then found that young people often did not choose to visit museums as they felt excluded, and that museums failed to represent their identities and values. Thus, they advocated museums as learning spaces retaining a position for young visitors and their culture.

After their initiative, further researchers considered museum education for young visitors. Clarkin-Phillips et al. (2013) conducted research in a kindergarten at Te Papa Tongarewa, the national museum of New Zealand, and discussed how young children, as museum visitors and exhibitors, construct their own knowledge with teachers' guidance. Their study aimed to encourage preschool teachers to foster children's abilities to appreciate art and construct knowledge relevant to art by visiting art museums. Later, Clarkin-Phillips et al. (2018) followed up their investigation, examining how to strengthen one child's artistic and imaginative capacities, in the art museum environment, in a case study. They found that

dialogue-based teaching in museums helped children's imaginations and artistic abilities to expand.

Lisa Terreni (2017) conducted the first complete and in-depth research on pre-schoolers' approaches to, and use of, art museums in New Zealand. By employing mixed methods to analyse the data, she found that there were both benefits and impediments for young children visiting art museums. Some obstacles were: limitations in funding, teachers' fear of utilising the environment of art museums to teach young children, and a deficiency in teachers' professional training, leading to their inability to decipher artworks to the level of young children's understanding. There are three benefits: art museums and galleries as the learning settings for enriching and improving young children's visual art education; their art learning supported through some visual art education programmes; and the collaboration between museum educators and early childhood centres (ECE)[21].

In summary, the exploration of museum education for young visitors began with Mason and McCarthy's (2006) preliminary investigation on the relationship between museums and young visitors. Subsequently, Clarkin-Phillips et al. (2013) and Clarkin-Phillips et al. (2018) embarked on a case study, based in a kindergarten, with the young children visiting the Te Papa art museum, and encouraged teachers to make good use of art museums as learning settings, cultivating children's abilities to construct knowledge related to art, and applying the dialogue-based teaching method in museums to not only enhance children's capability to produce art, but also to broaden their imagination. Terreni (2017) specifically explored the benefits of young children's access to, and use of, art museums to enhance their visual art learning experiences and concluded there were both strengths and weaknesses.

In Esther McNaughton's (2010) master's thesis, she addressed a gap regarding primary and intermediate students' sense of habitus in art galleries. Inspired by Bruer's concept of the intelligent novice (1993), she explored, by means of a case study at The Suter Art Gallery (Te Aratoi o Whakatū), how the art gallery environment facilitates students becoming intelligent novices. In her thesis, she noted the importance of the intelligent novice as an active cultural transformer in the art gallery, and put forward the argument that, learning in an art gallery

[21] The scope of Terreni's project was focused on ECE (up to 5 years old), not on primary age learning, where there are different developmental and pedagogical considerations in place.

context, through socially shared cognition, enables students to deal with multifarious and fluid ideas. She summarised three interrelated factors: the individual initiative, the art gallery's physical aspects, and the development of practice in relation to class visits, and suggested that they are essential to the enhancement of students' learning and the development of intelligent novices. Later, McNaughton (2019), in her PhD thesis, continued from a gallery educator's perspective to examine how gallery educators, who work in "cultural complexes" (p. 88)[22], facilitate the development of primary school-aged children's thinking and learning by interacting with visual arts. She divided her research into three parts. First, she conducted an online survey with 37 gallery educators, "which was almost the complete field in New Zealand at the time" (p. 14), to gain an initial overview of the programmes and practices being conducted in art galleries, and the attitudes of art gallery educators relating to museum and gallery education.

Among all the survey questions, there were two questions specifically addressing the qualifications of art gallery educators and their roles in art galleries. She found that:

> Most respondents had at least a Bachelor's degree, with only approximately a fifth having Master's degrees. They were either in fine arts or museum studies. Notably, only a little over a third of respondents had both teaching and art credentials. Qualifications were spread between the disciplines of education, arts/social sciences, and fine arts. (p. 85)

According to her data, almost a quarter of gallery educators had no teaching experience before working as a gallery educator. Approximately half of the participants, prior to becoming a gallery educator, had experience working as primary or secondary school teachers. Regarding the role of gallery educators, she wrote that:

> Although respondents answered the survey as art gallery educators, they had a broad range of job titles. Five of the thirty-five respondents did not have specific education roles in their gallery. Over half did not have art mentioned in their stated job titles. (p. 84)

It implied that the position of educators in galleries is ambiguous. These two essential survey questions in McNaughton's dissertation paved the way for the in-depth discussion in my study,

[22] "In New Zealand, given our low population and proliferation of small cities, it is common for cultural institutions to combine to form cultural complexes" (McNaughton, 2019, p. 88).

with respect to the impact of museum or gallery educators' educational background on their teaching pedagogies and ambiguous roles.

Based on the online survey, McNaughton, in the second part of her research, selected six gallery educators and employed an in-depth case study to examine the themes emerging from the survey. Nine particular themes were identified in terms of: developing ideas in art; students' engagement; artmaking; flexibility of the gallery environment; collaboration between schools and galleries; communication between educators and students; mediation by gallery educators; the development of professionalism; and belonging and ownership involving the community. These nine themes were recurring at the preliminary survey phase, and were subsequently validated by two focus groups which were organised at the final stage of her research. She discussed the nine recurring themes with the participants who are gallery educators, to test the robustness of the themes and her research findings. McNaughton's exhaustive work has made a distinct research contribution to museum and gallery education studies in New Zealand.

Rachel Bolstad (2011) conducted research for the Ministry for Culture and Heritage (Manatū Taonga) about possible intentions for art learning in New Zealand. She noted the following six themes: cultural identity and value, wellbeing for citizens, equity for citizens, creativity and innovation, prosperity as a result of economic development, and New Zealanders' identification as international citizens on the world stage. She outlined the importance of art education in the development of education, the economy, culture, and society. Bolstad said that art education "promotes the insights and perspectives, the creativity and initiative, and the critical reflection and occupational capacities which are so necessary for life in the new century" (p. 14). She considered art learning as a comprehensive development, in preference to skill-oriented learning, and emphasised an international perspective with regard to the further development of museum education in New Zealand. In agreement with Bolstad's point of view, I am going to review, critique, and compare selected art education programmes between New Zealand and other countries to better address the development of museum education in New Zealand.

David Bell (2010), a New Zealand academic educationalist, encouraged school students to explore art in art museums because it nurtured students' capacity for independent inquiry in art, and they acquired knowledge by sharing individual experiences with others. Bell (2011),

using research methods of semi-structured interviews and observation, investigated five New Zealand cultural institutions. The purposes of the examination were: firstly, to explore general characteristics of best practices within museum education; in addition, to analyse the challenges museum educators face when they work with students; and moreover, to develop a better way to enhance students' learning experiences in art museums. With the conclusion of his research, he noted five expectations for visual art education in art museum contexts, drawn from ten museum educators: hands-on learning experiences, the exploration of students' cultures and places, 'authentic' learning experiences, collaboration with other cultural institutions, and the benefits gained from the expertise and knowledge of art specialists. The expectations of museum educators noted in Bell's research often overlapped with the themes emerging from McNaughton's (2019) research. A hands-on art-making experience was advocated by most gallery educators in the online survey and was considered as the most important component in museum and gallery learning (McNaughton, 2019). She further noted that hands-on activities are, not only required by the LEOTC funding contracts, but, were also preferred by museum or gallery educators as their most common activity within art learning.

Additionally, Bell (2011) emphasised the collaboration between different cultural institutions such as historic parks, zoos, and science centres. The notion of collaboration was also put forward by McNaughton (2019), but her suggestion was largely between schools and galleries. More importantly, both researchers realised the importance of professional development for museum and gallery educators. Bell (2011) suggested museum educators develop professional knowledge from art specialists, and McNaughton (2019) encouraged more connection and conversations amongst peers to nuture the profession. These similarities and differences are reflected in the current situation of museum and gallery education, and both researchers pondered over themes and expectations in the dissertation and article. They discussed many aspects of museum education, yet did not touch on teaching pedagogies used in art museums and galleries.

The first in-depth study in New Zealand on the policies, practices, and public pedagogy of visual art in art museum and gallery contexts was conducted by Susan Abasa (2014). She, in her study, pointed out that "New Zealand had not developed research-based frameworks for pedagogies conducted in art galleries" (p. 229). After indicating such issues, she employed the Grounded Theory approach and examined which teaching pedagogies were applied by

educators in their teaching at the Auckland Art Gallery (Toi o Tāmaki) and the Christchurch Art Gallery (Te Puna o Waiwhetū). By coding and analysing the data, she found an overwhelming prevalence of signature pedagogy in gallery education, and a rare incidence of critical pedagogy, and indigenous pedagogy, adopted by most educators.

She defined and critiqued these three pedagogies. Signature pedagogy is a mechanical pattern, developed by structured routines. Abasa believes that this approach can lead to the teaching becoming stereotyped and routine; and make it difficult to consider the "unexpected and emergent nature of teaching" (p. 44). Critical pedagogy is related to critical thinking, participatory education, and social participation. In particular, it integrates constructivist learning theories with experiential learning methods, which are commonly employed in many contemporary museum or gallery educational programmes. Indigenous pedagogy, especially for Māori teaching and learning practices, is suggested considering some points, with respect to the heritage of the culture, self-determination, and autonomy. She suggested that "art museums and their educators have yet to create a framework for practice that can appropriately address and improve outcomes for Māori and other cultural minorities" (p. 310). Her suggestions on cultural diversity will be discussed further in Chapter four and five of this study.

Even though Abasa questioned whether gallery educators and managers are satisfied with the current signature pedagogy used in teaching, simultaneously, she acknowledged that these pedagogies would be valuable if they had "possibilities to reform, improve, and expand [how] art museum education exists" (p. 363). Beyond that, she suggested:

> Employing public pedagogy in the art museum which is a dialectic space that keeps signature, critical, and indigenous pedagogies in a series of dynamic relationships where transformation can be contemplated and, eventually, enacted. It is the creative tensions between the dominant discourses of deep cultural power and the marginal discourses of critical consciousness that pave the way for a critical examination of art museum practices. (p. 365)

She explained that this type of public pedagogy associates both the theoretical model, and the practice method, enabling museum and gallery educators to critically engage in art classes, and, at the same time, providing new ways to consider artworks involved in students' learning. Abasa's investigation explicitly pointed out that educators were ambiguous about teaching pedagogies and unconsciously applied them in their daily teaching. Then, she dissected the

teaching pedagogies prevailing in museum and gallery education and proposed a public pedagogy to help museum and gallery educators gradually achieve the transformation from routine teaching to critical teaching, and more importantly to connect theory and practice in museum education.

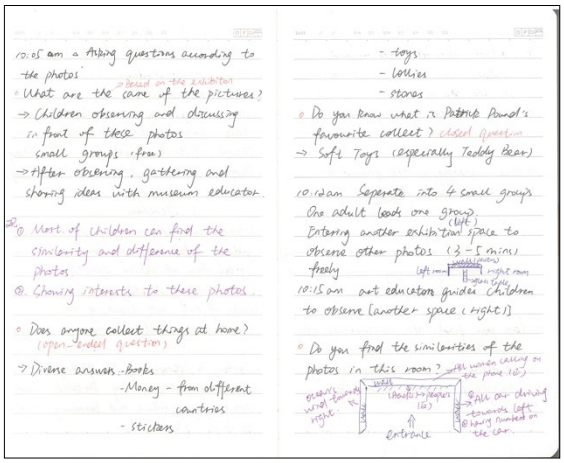
Abasa's specific and in-depth examination reflected deficiencies in the understanding and use of teaching pedagogies in art museums and galleries. Her research set up a very strong foundation for the further development of my study regarding how stereotypical practices are reflected in museum educators' teaching, and whether they could change the routine patterns of teaching if different pedagogies are supported.

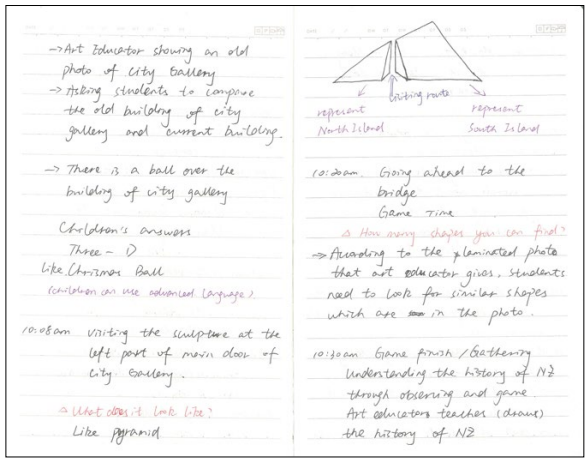
All in all, aspects of these researchers' findings provided the fundamental reference points in my research. In New Zealand, there was less research discussing the application of teaching pedagogies in art museums and galleries (Abasa, 2014). The issue of the lack of professional development for museum and gallery educators was also noted by researchers (Bell, 2011; McNaughton, 2019), and both suggested different ways to promote museum and gallery educators' professional knowledge of art. In particular, Bell (2011) mentioned that museum educators could benefit from artists' expertise, but he did not specify how museum educators could acquire such professional knowledge from artists. Also, McNaughton (2019) implied that artists should engage in further museum and gallery educational programmes. While the importance of artists' engagement in children's art classes was gradually being realised by researchers in New Zealand, wider investigation into this specific aspect was sparse. Building upon the previous scholars' findings as discussed above, my own research more specifically explores the engagement of visual artists in children's art classes in art museums, to potentially address this gap in the field.

Preliminary Investigation

As a researcher new to New Zealand, understanding New Zealand's museum education from the literature, and archival sources was not enough. It became important for me to also understand the current situation of museum education, e.g., how museum educators design educational programmes, how they interact with children in art museums, and what they teach in class. With these questions, I conducted a preliminary survey in two institutions.

I acted as a participant-observer, following nine art classes at two different institutions in Wellington. Both institutions have a contract with the LEOTC educational programme. I noted the processes of each art class and recorded them in detail[23]. There were clear consistencies. The art class often lasts 90 minutes. The class usually starts with a greeting and an explanation of the museum's rules, after which educators guide the students to the exhibition that they will explore together. Students are asked some questions related to the exhibition. Following that, a theme-related game within the exhibition or some sketching based on the artworks is next. Finally, educators instruct the students to do "hands-on" art activities in the educational room, (separate to the exhibition space). Each class obeys a standard 'tetralogy'[24]. Visiting, observing, and teaching around the artworks on exhibition, with open-ended questions; theme-related games in the exhibition hall; and hands-on crafts in the educational room were all identified as comprising signature pedagogy in Abasa's (2014) research. She pointed out that "each teaching episode may have aspects that are routine" (p. 272).





Figures 31 & 32: *Observation Notes*

To better understand the teaching pedagogies used, the purpose(s) of the art class, and the engagement of the artists, I had a conversation with each educator after the class. When we addressed teaching pedagogies, educators frequently used phrases such as step-by-step teaching. The common answer for the purpose of the art class was to stimulate creativity and

[23] Two art classes were selected from my observation notes and are presented in detail in Appendix E-Table E1 & E2.

[24] 'Tetralogy' in the context of this paragraph metaphorically indicates the general form of the art classes in art museums in terms of introduction – visiting – theme-related game – hands-on activity.

critical thinking. When I asked whether any artists joined the art classes, the answer was "No". There were two reasons for this given by educators; firstly, that most artists do not have time and secondly, that most of them may not be interested in the museum's educational programmes. These two reasons were offered from the perspective of the museum educators. I also sought suggestions and information from artists.

In summary, considering my earlier literature review about museum education and my preliminary participant-observer survey about the current situation of museum education, it appears that there is a comparative lack of literature on artists engaging with children's art education in New Zealand art museums. The current literature I have reviewed implied the engagement of artists, but seldom explored this field in depth. New Zealand has recognised the importance of museum education early, and developed the LEOTC educational programme to provide learning experience outside the classroom for students. As mentioned, the two institutions I visited both have contracts with the LEOTC programme. Although currently the LEOTC programme does not specify the engagement of artists in children's visual art education in art museums, it does not indicate that there were no artists involved in museum education in the past. Thus, I began to source and research documents on the development of museum education from Archives New Zealand to try to understand historical precedents and the national context.

The Emergence of the Artist-teacher in the Historical Context

Prior to analysing this archival information on the engagement of artists in museum education in New Zealand, it was helpful to briefly review the origin and development of the artist-teacher/artist-educator, to assist with understanding the change of the role of artists in historical, and present, art educational programmes. This includes consideration of examples in Great Britain and Germany.

The "artist-teacher" role defines a person who plays dual identities, and the hyphenation between artist and teacher implies that this person was trained as a teacher, but simultaneously could work as an artist (Lund, 1993). Some academics think that the embryonic model of the artist-teacher could be traced back to the classical apprentice model of the Greeks. There were no special instructional methods or pedagogies to train an artist or an art teacher in ancient

Greece. The only way that people could be close to 'art' was through connection to a family workshop. Although the major goal was to inherit the family trade, those craftsmen's artistic thoughts, in the teaching process, influenced their students (Daichendt, 2010).

In 1841, the Council of the Government School of Design announced its intention of preparing teachers for the British School of Design (Hanson, 1971). Prior to this, art and design schools aimed to produce quality designers, craftsmen, or artists. The foundation of the School of Design signalled the advent of the artist-teacher. George Wallis[25] who was a prospective graduate of the course, but who left halfway during his second year having procured a teaching position, was the first person naming himself as an artist-teacher (Daichendt, 2009). Using the term "artist-teacher" indicates that he considered himself as taking on two roles: artist and teacher, rather than restricting himself solely to the role of a teacher, because he had been trained as an artist. Beyond this, in the early 20th Century, Walter Gropius[26], the founder of the Bauhaus, was referred to as one of the most important artist-teachers in history (Daichendt, 2010). Along with Gropius, Johannes Itten[27], Josef Albers[28], and Anni Albers[29] were among the most important artist-teachers teaching in the Bauhaus. Graduates developed a wide range of roles in terms of teachers, artists, designers, or artist-teachers, and the subject of art education was progressively forming its own specific features with the appearance of the artist-teacher (Efland, 1990; Lund, 1993; Daichendt, 2010).

To sum up, this brief overview of the emergence and development of the artist-teacher provides an additional historical context to aid the understanding of the difference between the historical notion of the artist-teacher, and the contemporary artist-teachers or artist-educators involved in diverse art educational programmes and learning environments. Historically, the artist-teachers often made effective use of their dual roles, reflecting their artistic expertise and experience within their teaching practices. With the formalisation of art education, this role remained and was extended into museums and galleries, but their roles and work became completely different.

[25] George Wallis (1811-1891)
[26] Walter Gropius (1883-1969)
[27] Johannes Itten (1888-1967)
[28] Josef Albers (1888-1976)
[29] Anni Albers (1899-1994)

The Historical Development of the Artist-technician and Related Art Education Programmes of New Zealand

This section focuses on reviewing and analysing historical documents and archival information regarding museum education in New Zealand. It is valuable to analyse such documents as this study, firstly, elucidates some important turning points within museum education contextually, and aims, secondly, to examine how visual artists engaged in children's art classes in art museums historically.

A Review and Analysis of Official Archival Documents on the Historical Engagement of Artist-technicians in New Zealand Museum Education

With the historical role of artist-teacher gradually being expanded to the field of museum and gallery education, this role was often called "artist-educator" within museum education. However, in New Zealand, another term was applied: that of artist-technician.

The Artist-technician ≠ The Artist-technician. Artist-technicians, (some museums or galleries used the term "art-technicians"), have been appointed in museums and galleries since 1949[30]. Even though artist-technicians had special skills, few of them had experience in display case work[31]. A conference was organised by the Department of Education Wellington, (later known as Ministry of Education Te Tāhuhu o te Mātauranga), and hosted by the Canterbury Museum, from November 4th to 9th, 1963[32] to provide in-service training courses for museum artist-technicians. The conference aimed to develop techniques used by museum artist-technicians, based on recent advances in display. Mr. R. Riccalton, the chief art-technician of the Canterbury Museum, had returned from studying display methods overseas, and discussed his professional knowledge with peers.

Although artist-technicians were appointed in some museums and galleries, and trained by the colleagues who had studied abroad, their work was not directly related to teaching. The person who was responsible for speaking directly with artists, to understand their painting process,

[30] Archive 5.1, 5.2, 5.3
[31] Archive 5.2
[32] Archive 5.3

was the Education Officer[33]. There was evidence of another position called the Associate Education Officer[34]. His or her specific tasks involved preparing materials, communicating with schools and voluntary museum workers, and understanding museum teaching if required[35]. The work of the artist-technician was different from what was recognised historically. The execution of displays, the preparation of tactile teaching aids, the distribution of loan materials, the labelling of the paintings, along with helping education officers with practical work if demanded, were the artist-technician's primary tasks[36].

The fundamental teaching work was often undertaken by education officers. Competencies of artist-technicians were not taken advantage of, even if some of them had been trained in art or design[37]. Based on the archives consulted, I found that some education officers, associate education officers, and artist-technicians, simultaneously, worked for more than one institution, and were continually employed for approximately five years. The demand for education officers was higher than for artist-technicians, because most museums and galleries requested hiring another education officer to assist their staff[38]. The years between the 1970s and early 80s were a prosperous period for museums and galleries (McCredie, 1999 as cited in Abasa, 2014). New galleries were set up and older ones were re-developed owing to governmental support. The policy of "Going Public" was disseminated to capture people's attention to the galleries' emerging educational function[39]. Any increased demand for the artist-technician, however, did not synchronise with the rapid development of the museum education service. Conversely, this position eventually disappeared because of the next educational reform – Tomorrow's Schools[40]. The new policy of Tomorrow's Schools was supported by the Museum of New Zealand[41]. In the report, the Museum of New Zealand highlighted the need for

[33] Archive 6.1 & 6.2
[34] Archive 6.3
[35] Archive 6.3
[36] Archive 6.1
[37] List of positions employed in museums and public art galleries between 1960s and 1980s was summarised and presented in Appendix F-Table F1; they were summarised during this period from archives gleaned from the 1960s.
[38] Archive 7.1-8
[39] Galleries started to consider employing other museum staff such as education officers and artist-technicians to improve the education service (Archive 8.1).
[40] The education reform-Tomorrow's Schools. There were some important implications elicited in the document of Tomorrow's Schools. The funding for these museum officers would be offered directly to their institutions, and the institution had the right to select education officers. Moreover, education officers were unable to work for more than one institution at the same time. Furthermore, artist-technicians who were hired by the Education Boards would not be retained in museums and art galleries (Archive 9.1-5).
[41] Archive 10.1

educational activity, involving an artist-in-residence working in the exhibition hall, but more details about how to implement this plan were not stated.

In brief, the artists designated artist-technicians were working in museum and gallery contexts, but were not being drawn into the education space. Education officers undertook the responsibility for teaching, which was similar to the current work of museum educators. Previously, education officers could acquire professional knowledge on the exhibited artworks directly from artists, but getting the information on artworks from online resources or curators became the process that museum educators often adopted. Within the educational reform, the engagement of artists was officially proposed by Te Papa Tongarewa; this reform set the stage for the emergence of a new educational programme: LEOTC (Learning Experiences Outside the Classroom).

A Review and Analysis of Official Archives and Documents on the LEOTC Educational Programme Development in New Zealand

The development of the museum education service in New Zealand has experienced a long gestation, stemming from the early colonial museums during the 1860s, to the 1920s (McCarthy & Cobley, 2009). It expanded the range of museum lessons offered and invited collaboration with schools and teachers' colleges to educational reforms from the 1960s to the 1990s. Then, it developed the LEOTC educational programme.

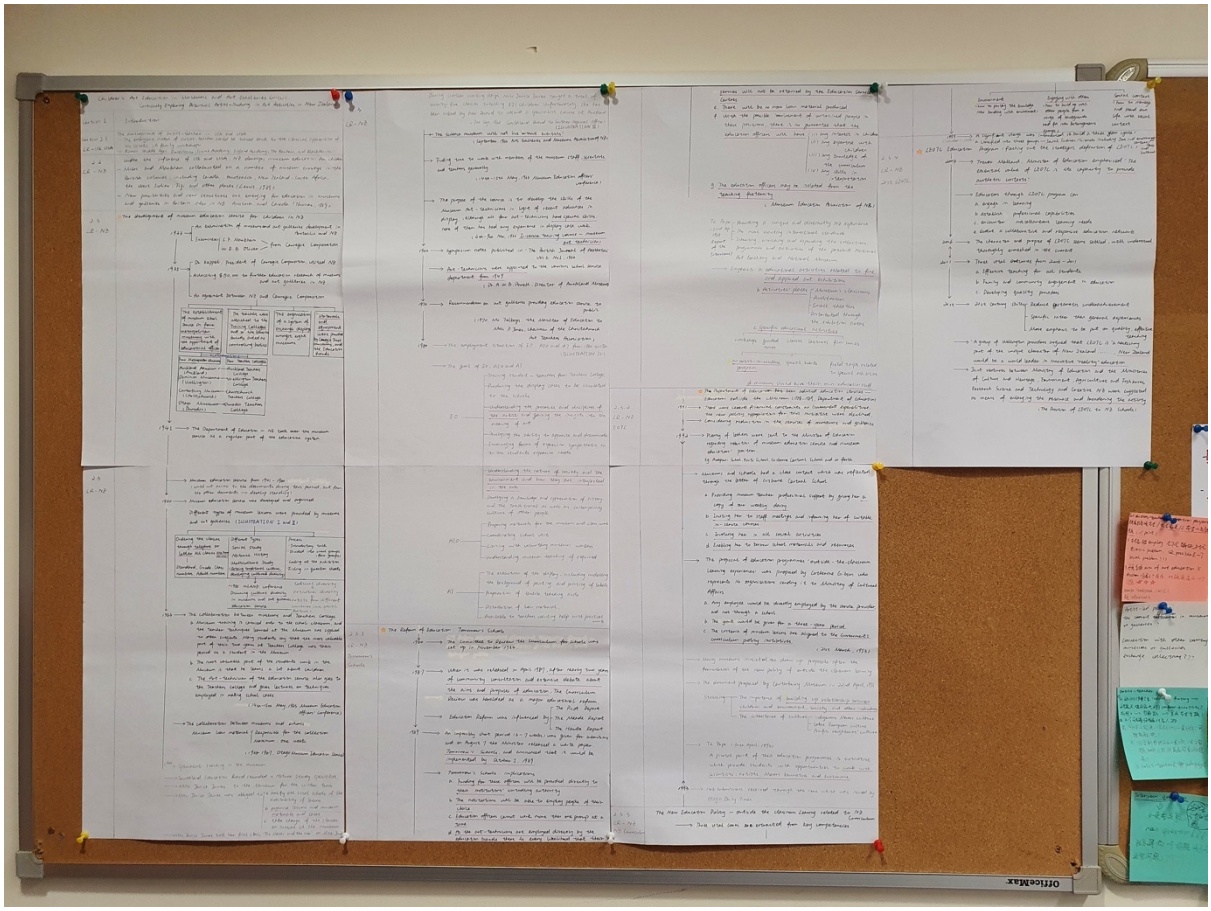


Figure 33: *A Summarised Manuscript of Museum Education Development in New Zealand*

The Gestation of the LEOTC. Learning Experiences Outside the Classroom (LEOTC) is an ongoing educational programme in New Zealand, and it advocates for children's learning experiences in an "authentic context" (Deaker, 2004). Such contexts include: art museums, art galleries, historic sites, zoos, and science centres. The extent and prevalence of the LEOTC programme currently is due to its long-term gestation. The educational reform of "Tomorrow's Schools" in 1989 paved the way for the advent of the LEOTC educational programme. Between 1988 and 1989, the Department of Education announced they would decline funding for the initiative: Education Outside the Classroom, especially targeting a reduction in the service of museums and galleries for schools (Codd et al., 1990; G. Butterworth & S. Butterworth, 1998). The following 12 months, from mid 1992 to mid 1993, were of significance in the formation of the LEOTC.

Many letters[42] were sent to the Ministry of Education regarding the retention of museum education services and museum educators' positions. Services offered to children at the Gisborne Museum and Arts Centre, (later known as Tairawhiti Museum), received highly supportive testimonies from local schools in the wider Gisborne district, including: Gisborne Central School[43], Awapuni School[44], Kaiti School[45], and others[46] which were relayed to the Ministry of Education. Don Niven, then secretary of the Gisborne School Principals' Association, wrote a letter on October 15, 1992[47] expressing unequivocal support for the retention of the position of Viv Bell who was one of the museum teachers at the Gisborne Museum and Arts Centre. In addition, a letter to Lockwood Smith, the Minister of Education, concerning the retention of her position as a museum educator, was written on February 24, 1993[48] by Monica Ratcliffe, who used to work in the Gisborne Centre as a museum educator. The benefits to schools in the Gisborne District from museum education service can be recognised by these letters. Museums and schools had a close contact, which was reflected in the letter written by Gisborne Central School.

> We attempt to provide our museum teacher with professional support by giving her a copy of our weekly diary, inviting her to staff meetings and informing her of suitable in-service courses. We also provide her with collegial support, enabling her to discuss with teachers matters relating to education. We try to involve her in all social activities so that she has a sense of belonging to school staff. Being attached to our school also enables her to borrow school materials and resources. (Archive 1.1)

The issue of retaining the museum education service was deliberated by the Ministry of Education on account of these request letters. Lockwood Smith, the Minister of Education, attended the meeting on February 26, 1993[49] with Evan, Judi, and Joanna Beresford (NZEI[50] representatives) discussing the retention of the position of museum teachers. They also referred to the extension of the educational programme to outside the classroom. Later, on March 21,

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[42] Archive 1.1-1.10
[43] Archive 1.1 and Archive 1.6
[44] Archive 1.9
[45] Archive 1.8
[46] Archive 1.3, 1.7, and 1.10
[47] Archive 1.2
[48] Archive 1.5
[49] Archive 2.1
[50] NZEI (Te Riu Roa): The New Zealand Educational Institute founded in 1883 is the largest education union in New Zealand. This is not an omission due to lack of research by stating when using their names Evan (surname not on record) and Judi (surname not on record).

1993, the proposal for a "resourcing policy for outside-the-classroom learning experiences"[51] was proposed by Catherine Gibson, who was the Group Manager representing 14 organisations, and it was sent to the Ministry of Cultural Affairs, (later known as the Ministry for Culture and Heritage Manatū Taonga)[52]. The proposal was divided into six parts: background, reasons for change, intention, criteria, the process of change, and personal response. Among these items, three primary points were important to the further development of the LEOTC:

> To introduce contestability would mean the disestablishment of the teacher positions now attached to schools. Any employee would be directly employed by the service provider, and not through a school. (Archive 2.1)
>
> Instead, each service provider seeking Government support would apply for a cash grant-in-aid. The services which were awarded grants-in-aid would employ staff directly. The grant would be given for a three-year period before any further application would be necessary. (Archive 2.1)

The funding to museum educators would be directly provided by museums and galleries and a contractual arrangement would be reviewed and endorsed every three years.

> Criteria for the allocation of the resource would be carefully developed so that the services to be funded focus on the needs of pupils, teachers, and schools. There is also the need to ensure that the criteria are aligned to the government's curriculum policy initiatives. (Archive 2.1)

The stress on the criteria of such programmes and activities for students in the museums or galleries reflects the New Zealand Curriculum Policy. Many museums began to draw up proposals, in relation to museum education service for students, after the formulation of the new policy. A proposal was drafted by the Gisborne Museum and Arts Centre[53] introducing the museum education service for pre-schools, primary schools, and secondary schools.

Also, Canterbury Museum produced a document, presenting evidence of how museum education had provided for students since 1938, and highlighting how the museum education service had an impact on children's future, "not only about natural environment in which they

[51] Archive 3.1
[52] The Ministry of Cultural Affairs was founded in 1991, and then merged into the Ministry for Culture & Heritage (Manatū Taonga) that was created in 1999.
[53] Archive 3.4

live – but also about the different people who are a part of that environment"[54]. The significance of building up the relationship between children and the environment, society, and other individuals was emphasised, and the inheritance of culture, simultaneously, was considered.

> At the Museum, they can begin with an understanding of New Zealand's own indigenous Māori culture, and later European culture, the culture of our Pacific neighbours, as well as that of peoples of the past who built the world those children will inherit. Nowhere can they learn such things better. (Archive 3.5)

Te Papa Tongarewa submitted a proposal, expanding on the development of the museum education service in Te Papa as well as emphasising the fact that "the Museum of New Zealand Te Papa Tongarewa was the first museum in the country to integrate a school-based education service within an existing service"[55]. In addition, a crucial point considered as one of special features of their programme was "activities which provide students with opportunities to work with scientists, artists, Māori kaumātua[56] and historians"[57]. This idea operated in conjunction with one of the New Zealand Curriculum's objectives. In the New Zealand Curriculum (2007), enabling students to "investigate, analyse, and evaluate ideas and interpret artists' intentions in artworks"[58] is one of the purposes of learning visual arts. Although Te Papa proposed this idea, there were no accessible archives or documents that recorded the implementation of this plan. A similar idea was presented in the New Zealand Curriculum but how teachers and educators would conduct this in practice, and who would be the ideal person to interpret the intention of artists in artworks, was not clarified.

The New Education Policy, Outside the Classroom Learning, attracted numerous applications from museums and galleries. The Otago Daily Times[59] reported that there were 146 submissions. Some museums such as the Canterbury Museum and Te Papa Tongarewa highlighted their singular plans for the future development of museum education service. Due to the New Zealand Curriculum being privileged within the policy, all proposals concentrated on connecting art activities to the New Zealand Curriculum.

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[54] Archive 3.5
[55] Archive 3.6
[56]kaumātua (noun) adult, elder, elderly man, elderly woman, old man – a person of status within the *whānau*. https://maoridictionary.co.nz/search?keywords=kaumatua
[57] Archive 3.6
[58] The New Zealand Curriculum (published by the Ministry of Education). https://nzcurriculum.tki.org.nz/
[59] Archive 4.1

LEOTC Related to Visual Arts in the New Zealand Curriculum. The New Zealand Curriculum played an important role in the new education policy: Outside the Classroom Learning. By 2000, most art classes in art museums and galleries were closely aligned with the New Zealand Art Syllabus (Abasa, 2014). In line with the New Zealand Art Syllabus, nurturing students' key competencies was proposed in the DeSeCo[60] project. "The concept of key competencies originated in a project completed by the Organisation for Economic Development (OECD)" (McDowall & Hipkins, 2018, p. 3) and aimed to test how well students could adapt and apply the knowledge they learn from mathematics, literacy, science, or other subjects in their work and life. To create a more visible conceptual framework, this project evolved into the DeSeCo project. There are three general core themes: environment, engaging with others, and social context[61], which were extracted through the DeSeCo project's conceptual framework and which acted in concert with the New Zealand Curriculum. In New Zealand, visual art education is a significant part of children's learning in both primary and secondary sectors (Terreni, 2017). The New Zealand Curriculum, in its reference to the arts, stated:

> The arts enable individuals and groups to create ideas and images that reflect, communicate, and change their view of the world. The arts stimulate imagination, thinking, and understanding. They challenge our perceptions, uplift and entertain us, and enrich our emotional and spiritual lives. As experiences of culture, the arts pass on and renew our heritage and traditions and help shape our sense of identity. (p. 9)

The purpose of art education, through child-centred teaching and learning, is to comprehensively nurture children's key competencies. The New Zealand curriculum also noted the significance of creating a supportive learning environment for students' art learning. Correspondingly, Trevor Mallard, former Minister of Education, commented that "the essential value of the LEOTC is its capacity to provide authentic contexts" (Deaker, 2004). Awareness of the importance of the learning environment for the arts directly relates to the status of art museums. Child-centred experiential learning within museums and galleries, results in better

[60] DeSeCo: Definition and Selection Competencies

[61] The specific explanations are: environment – how to parlay the knowledge into bonding with the environment; engaging with others – how to establish a relationship with other people from a range of backgrounds and fit into heterogeneous groups; social context – how to manage and blend one's own life with the surrounding social context.

outcomes for learners, because it embeds the child in a specific cultural context, and consequently, influences children's perspectives by providing opportunities for connecting with different perspectives and ideas. Therefore, it could be assumed that art museums can provide a context for authentic learning experiences, however I would argue that this is heavily reliant upon how teaching pedagogies are applied, and what delivery design is implemented.

Educators, through the LEOTC programme, have the potential to engage in learning, establishing professional capabilities, encountering miscellaneous learning needs, and evolving a collaborative and responsive educational network. Developing professional capacities through peer-to-peer connections has been put forward and supported by McNaughton (2019). More importantly, museum learning experiences facilitate the strengthening of students' cultural identity, especially in this bicultural nation. Similarly, Carr et al. (2012) believe, that in New Zealand, children and teachers, through the experiences of learning in art museums and galleries, can develop bi-cultural understandings. Bell (2010) reinforced their view and stated that art museums offer opportunities for children to experience diverse cultures. With the support of these materials, it becomes clear that the benefits of learning in art museums, in many different aspects, have been previously acknowledged by both institutions and researchers.

The Influence and Expectation of the LEOTC. The LEOTC, as an educational programme, has been nurtured for many years with the development of museum education services for children. In the 21st century, many organisations benefit from the LEOTC educational framework, and educators through this programme have built up collaborative and responsive educational networks and promoted their professional abilities. Educators and policy-makers have asserted that ''New Zealand would be a world leader in innovative 'reality' education, enlarging the resource and broadening the activity" (Deaker, 2004, p. 12). In summary, within these official archives and documents, the learning environment presented repeatedly indicates that New Zealand has contemplated the benefits of the context of art museums on children's art education. However, I question whether the notion of an "authentic learning environment" has been interpreted as venturing out of the classroom to feel the ambiance of art museums or galleries, or whether it has, in reality, simply achieved the transference of the art class from a limited space into a public area. Although the goal of learning in art museums, in relation to enhancing students' art learning experience, has been

clear, and the learning environment has been relocated from schools into art museums, this transformation probably did not challenge the position of traditional teaching patterns or lead to significant innovations in pedagogical design and delivery. In the light of the current literature and preliminary surveys, the reflection of routine teaching may remain in each teaching episode (Abasa, 2014). More importantly, the engagement of artists was highlighted at every turning point of the educational reforms and noted by researchers. Nevertheless, it appears that artists are seldom engaged, (as artists), in children's visual art education in art museums. They had participated in the role of artist-technician in museum education, historically, albeit in doing tasks frequently irrelevant to art teaching. The aspiration of educators and policy-makers, regarding the LEOTC educational programme, was for NZ to become a world leader in the innovation of educational programmes. This research questions to what extent this has been realised. Recently other mechanisms of engaging artists in children's learning have been trialled. Owing, in part, to the frequent reiteration of the importance of artists engaging in children's art education in research and proposals, the Ministry of Education in partnership with the Ministry for Culture and Heritage and Creativity in New Zealand instituted a new educational programme: Creatives in Schools.

Creatives in Schools

This recent programme began in 2020, aiming to make the connection between professional artists and creative practitioners, (Creatives), with schools to "foster new learning experiences for students"[62] and "develop their knowledge and skills in communication, collaboration, and creative thinking and practice"[63]. It not only includes art disciplines as listed in the New Zealand Curriculum, such as: visual arts, dance, music, and drama, but also extends to other fields, including: digital arts, fashion design, filmmaking, and game design. Creative practitioners who are interested in the programme, make the connection with schools by application. If successful, the creative and the school work together anywhere from 8 to 20 weeks once the terms of the partnership are created. The project has completed two rounds and will last until 2023.

[62] https://www.creativenz.govt.nz/news/creative-learning-projects-in-schools-and-kura-next-year
[63] https://artsonline.tki.org.nz/Teaching-and-Learning/Creatives-in-Schools

The programme: Creatives in Schools, has invited artists to join in the classroom and has encouraged students to learn from art practitioners directly. On the one hand, it has recognised the diversity of art forms in order to guarantee that students may experience arts with creative practitioners from different areas; on the other hand, it has provided employment opportunities for creatives[64] to share their creative expertise with students. This programme has reflected the implications of the engagement of artists in children's art education, in schools, but has not considered the specific importance of the environment of art museums to students' art learning, that was emphasised in the LEOTC educational programme; other than that, "it is not a long-lasting solution to shortcomings in the arts curriculum and in arts-related teacher training. Failures in arts education have long been a thorn in the side of teachers, who argue they are under-resourced"[65].

By reviewing the literature, available via official archives and documents, artists had been called artist-technicians and art-technicians, and had worked with education officers and associate education officers in art museums and galleries, until this position was removed in the educational reform of Tomorrow's Schools, but they had not been given any actual opportunity to teach art.

More recently, the Creatives in Schools programme began to engage artists in children's art education in schools. The programme developed the diversity of art forms offered to include creative practitioners from different backgrounds, but it remained restricted to the school environment. The importance of the environment of art museums to visual art learning has been put forward by national researchers and institutions many times. Central to this articulation is the direct experience of art works on display, within an environment outside of the classroom, where the frame of reference (architecturally and contextually) is different to the typical school environment. Being in the physical and spatial presence of art works can broaden the visual, spatial, and haptic experience of children. The 'authenticity' of the encounter centres on these conditions of the experience as well as how the learning is designed and delivered.

[64] https://www.scoop.co.nz/stories/PA2006/S00101/funding-boost-for-arts-in-schools-helps-keep-creatives-inwork.htm
[65] https://www.rnz.co.nz/national/programmes/standing-room-only/audio/2018754587/creatives-in-schools-get-welcome-support-but-is-it-enough

Reflecting upon the expectations of educators for the LEOTC programme, Abasa (2014) has noted that New Zealand lacks knowledge and understanding of international trends in museum education; meanwhile she believes that the LEOTC would have a profound influence on the development of museum and gallery education beyond current educational programmes. In concert with Abasa's indication, to further the development and innovation of its art education programmes, I also suggest that there are benefits in broadening references to practices occurring abroad and I will outline how examining certain examples has influenced this research's trajectory. Therefore, I have incorporated a selected exploration of the engagement of artists in visual art education programmes in other countries, and compared them with educational programmes in New Zealand.

A vignette: Biculturalism in New Zealand art education

The New Zealand situation is unique. Honouring the Treaty of Waitangi, Māori culture and language are required in the school curriculum (Smith, 2015).

While it is outside of the timeframe of this research, I wanted to note one of the commonly held influential periods of bicultural art education, which also involved practising artists at the core of the initiative to teaching art in schools.

There were some significant people who promoted the development of bicultural art education in New Zealand. Pine Taiapa, one of the first graduates from the Māori Arts and Crafts programme that was launched in 1926 in Rotorua, suggested integrating Māori culture into the mainstream, by encouraging Māori and Pākehā to learn together in schools. His proposition was important as the impetus behind bicultural art education development in New Zealand from the 1950s.

Clarence Edward Beeby, the Director of the Department of Education, appointed Doreen Blumhardt as the first National Advisor in Art and Craft in 1942 and Gordon Tovey as the National Supervisor in 1945 (Boyask, 2006). Blumhardt became the Head of the Art Department at Wellington Teachers' College from 1951. During her teaching, she encouraged students to immerse themselves in the arts by listening to music and simultaneously studying artworks. Blumhardt was a practising potter, and she often invited students to her studio to make ceramics and discuss art. As both an artist and an educator, Blumhardt had a consistent teaching pedagogy; enriching students' art experiences to foster their art learning.

Both Tovey and Blumhardt were interested in Māori art. In late 1947, they made a trip to the East Coast to explore Māori arts and crafts and develop a scheme catering for Māori school children's needs. Considering "traditional knowledge of custom, language and art was in danger of being totally lost" (Smith, 2015, p. 93), Tovey recruited 13 young Māori art advisers, most of whom had had primarily Pākehā education, to study Māori traditional arts and crafts. This course was held in March 1960 in Ruatoria (Henderson, 1998). Most of the art advisers who went through this scheme, namely: Cliff Whiting, Paratene Matchitt, and Ralph Hotere, became leading artists in New Zealand. Some were working in customary Māori art practices

and languages, and others blended Māori art with Western styles and materials. Smith (2015) commented that maintaining Māori culture and art was not Tovey's interest; his big vision was in using it to 'reform' art in schools. By the end of the 1960s, Tovey published his book *The Arts of the Māori*. This book "was issued to all schools throughout New Zealand, becoming also an integral part of a series of national courses" (Henderson, 1998, p. 178). Erik Schwimmer (1968) remarked that "the production of this book and the activities that followed it, have been remarkable and influential, indeed a model of biculturalism" (as cited in Henderson, 1998, p. 178).

Taiapa, Tovey, and Blumhardt made considerable contributions in placing value on Māori art and culture and melding it with Pākehā schooling and knowledge. Their educational practices changed the way that most people recognised and understood art, promoted the development of bicultural art education, and had long-lasting impact on the development of diverse cultures (Boyask, 2006).

A Comparison and Reflection on Visual Art Education Programmes; Both abroad and within New Zealand

Considering the benefits of the participation of artists in children's visual art education, the research has sought out visual art education programmes featuring artists engaging in children's art classes and activities internationally. This section examines some of these art programmes involving artists working in classrooms, along with museum and gallery environments, which are especially significant to consider in the light of this research on current contexts in New Zealand.

A Review and Analysis of Visual Art Education Programmes Abroad

There are five selected visual art education programmes that I will briefly discuss, including the K-12 system in the USA, Room 13 in Scotland, the Reggio Emilia in Italy, the Artist Teacher Scheme in England, and the engagement of artists in museum education in Australia[66].

These visual art education programmes have acknowledged the importance of artists' engagement in children's art education and attempted to explore the participation of artists in diverse ways. In the K-12[67] system of the USA, artists, (together with other art teachers), were required to understand fundamental educational pedagogies, the development and assessment of the curriculum, the management of classrooms, and children's psychological development (Remer, 2003). An artist was treated similarly to an art teacher; tasked with overseeing everything in the classroom. Some artists taking part in the programme felt frustrated. Charles Huntington, an artist working in one of the schools, expressed depressingly, "I would not participate in the programme after this year. I am learning all the answers, I am becoming an educator, not an artist. I am no longer qualified to carry out the purposes of this programme" (Eisner, 1974, p. 22). The engagement of artists in children's art education was supposed to bring a breath of fresh air, but accounts suggest that the artists' teaching styles seemed not to be easily reconciled with the teachers' traditional teaching patterns.

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[66] The key features of these international projects and two on-going projects in New Zealand were summarised and presented in Appendix G-Table G1.

[67] K-12 is a term used in education and educational technology in the United States, Canada, and possibly other countries, and is a short form for the publicly supported school grades prior to college. These grades are kindergarten (K) and 1st through 12th grade (K1-12). This programme was initiated in 1969 (Eisner, 1974) carried out through K-12 American Schools.

Different to the K-12 system in the United States, Room 13[68] in Scotland encouraged artists to adopt critical pedagogies in teaching rather than standing by the conventional verbal instructional method (Adams, 2005). Following the example of the Caol Primary School, other schools have established their own 'Room 13s' (Souness & Fairley, 2005 as cited in Adams, 2005).

Child-centred learning was a keystone of the Reggio Emilia programme in Italy. Artists engaging in the Reggio Emilia[69] programme were encouraged to follow their own working style created in their studios and other contexts. Artists, rather than assessing children's artworks, showed their appreciation of the children's creations and explored diverse art materials with them, and there were no institutional systems and regulations imposed on the artists (Hoekstra, 2015). Almost all Reggio Emilia programmes occurred in children's centres, whereas trips to museums and art galleries were infrequent. The environments of art museums and galleries were not directly considered.

The Artist Teacher Scheme (ATS)[70] in England adopted a two-pronged approach; it has one foot in academia, and another in museums and galleries[71]. The ATS collaborated with the Liverpool John Moores University (LJMU) and the Wimbledon School of Art (WSA), providing part-time courses, including: design, craft, and art, for students who were aspiring to be artist-teachers. In contrast to other programmes, the ATS initiative ushered in a change. It

[68] Room 13 International represents a growing network of student-run art studios in schools and community settings worldwide. It commenced in 1994 and was an independent art project, hiring artists-in-residence to work with children in the contemporary art field (Adams, 2005).

[69] The Reggio Emilia Approach is an innovative and inspiring approach to early childhood education which values the child as strong, capable and resilient; rich with wonder and knowledge. Every child brings with their deep curiosity and potential, and this innate curiosity drives their interest to understand their world and their place within it. Reggio Emilia was developed in northern Italy in 1963, and by 2007, there were 30 early childhood centres. Each centre employed a pedagogical specialist to support artists working with children (New, 2007; Rinaldi, 2004).

[70] "The Artist Teacher Scheme (ATS) initiative was developed by the Arts Council England (ACE) and the National Society of Education in Art and Design (NSEAD) in England" (Adams, 2003, p. 184). The ATS was conducted since 1999 aiming to encourage artists to play both roles of art teachers and practitioners. The definition of artists in the ATS is in accord with the original artist-teacher that emerged during the 19th century. In order to maintain this dual role, artist-teachers who are different from the previous artist-teachers not only need to improve professional competences but also to gain the knowledge of teaching pedagogies (Griffiths & Woolf, 2009; Hall, 2010; Hall & Thomson, 2017).

[71] The Artist Teacher Scheme is an expanding programme of continuing professional development courses devised by partnerships between galleries or museums and universities (the department of fine art and design) to enable teachers to regain or develop their personal practice with artists in the context of contemporary visual arts (NSEAD, 2009-2010).

referred to the historical development of the role of artist-teachers and reflected this role in the contemporary educational programme (Haanstra, 2003); moreover, it attempted to potentially erode the boundary between the role of artists and art teachers. In addition, it simultaneously collaborated with the Tate Modern. At the Tate Gallery, artists are employed as educators; sharing their experience and knowledge with students to help them engage in artworks (Charman et al., 2006; Pringle, 2009; Thomson et al., 2019).

Art programmes in European countries and America have motivated educators and researchers in Australia. Some museum educators began to consider bringing artists into museums and galleries to work with children. Healey and Lemon (2014) specifically described the teaching processes of museum educators at the Heide Museum of Modern Art working with artists:

> Students are guided through a visual analysis of the artworks. Museum educators carefully select information about artworks and artists to support students' personal interpretations. The museum educators might apply pedagogical strategies such as the Visual Thinking Strategies, asking students questions such as "what's going on in this picture?" and "what do you see that makes you say that?" to elicit responses and encourage students to provide a rationale for their observations. Ultimately, the motive of this pedagogy is to facilitate students' excitement about art on their own accord and to demonstrate that we value their voice and contribution to the dialogue. We 'teach' them how to navigate complex art museum environments. (p. 22)

These teaching processes of children's art classes in the art museum were similar to the art class I followed in New Zealand. Museum educators led the art class from the beginning to the end; art classes were well-rehearsed and well-organised, and questions designed by the educators were ready to be asked and answered (Kushner, 2006). From the description, museum educators tried to use some methods to frame their teaching processes; the pedagogy they adopted aimed to motivate students and value their voice. The artist in this art class appeared when children wanted to ask some questions about artworks (Healey & Lemon, 2014). Although the artist was more like a guest appearance, students felt excited and benefited from their professional knowledge about art (Healey & Lemon, 2014).

Comparisons and Propositions

I have, thus far, reviewed a selection of visual art education programmes in New Zealand and abroad. The simplified table, below, indicates the prospects of visual artists participating in children's art classes in art museums in New Zealand.

Name of the Programme	Place of the Programme	Roles	Pedagogies	Museums and Public Art Galleries Environment	Artworks	Subject
K-12	America	✔ (Artist-teachers)	✔			AEd
ATS	England	✔ (Artist-teachers)	✔	✔		AEd
Room 13	Scotland	✔ (Artists)	✔ (Critical pedagogy)			AEd
Reggio Emilia	Italy	✔ (Artists)	✔ (Artistic pedagogy)			AEd
-	Australia	✔ (Artists)	✔	✔		AEd
LEOTC	New Zealand		✔ (Signature pedagogy)	✔		AEd(AEx)
Creatives in Schools	New Zealand	✔ (Professional artists/ Creative practitioners)				

(Innovative Programme)	New Zealand	✔ (Artists, primary school teachers, and museum educators)		✔	✔	AEx>AEd

Table 2: *Comparisons and Propositions of Visual Art Education Programmes in New Zealand and Abroad*

AEd: Art education AEx: Art experience

The concrete black line represents current visual art education programmes abroad and New Zealand and the dashed red line denotes the prospect of the further development of the educational programmes. Factors that can influence and improve art education programmes with respect to roles and pedagogies, which were framed by the green line, were all proposed by other countries. Critical and artistic pedagogies were put forward by Room 13 and Reggio Emilia respectively. The details on these two pedagogies will be discussed later. Signature pedagogy which is employed by many art museums and galleries in New Zealand was identified by Abasa (2014). In concert with the indications of researchers and the expectation of educators and policy makers in terms of the innovation of museum education, I stress that the experience of exploration is most important in children's art learning.

The researchers of Harvard University Art Museums Study Centres emphasised that the three crucial factors affecting students' learning are environment, people, and objects; and Tishman et al. (2007) have recommended integrating these three elements. The current doctoral research project, compared with other programmes that only stress one or two elements, emphasises the importance of these three indispensable factors in students' art museum education, and proposes future innovations in the educational programme to highlight the status of the art museum as an explorative learning environment, to value students' natural understanding of artworks and engagement with artworks within a museum or gallery environment, and to integrate the engagement of visual artists in collaboration with museum educators and primary school teachers; and in addition, to reduce the undue restriction of teaching pedagogies on art

education. This model emphasises collaboration among artists, museum educators, and primary school teachers to devise and deliver programmes within the context of art museums (supported by pre- and post-visit activities in the classroom). The benefits of the collaboration to each role will be demonstrated in the workshop, delivery, and interview stages.

Reflection

After reviewing and analysing literature and art education programmes, I reflected on four aspects; 1. These art education programmes aim to encourage students to experience the art with artists directly, but most artists had to follow standard teaching pedagogies when working with children to achieve teaching goals and present learning outcomes within schools. Eisner (1994) has critiqued "the school as an institution with a static and common mission whose goals must be clearly specified, the belief that effective teaching must lead to the efficient attainment of such goals follows" (p. 162). However, the artist as an art teacher has the stance of "anti-pedagogy" (Smith, 1991). The engagement of artists was supposed to encourage students to experience the art with creative practitioners together, but finally artists had to compromise and focus on learning outcomes rather than learning quality and process (Zeichner & Liston, 2013).

Thus, I argued that artists' engagement and collaboration with museum educators and primary school teachers could potentially break down some stereotypical models of visual art education, enabling children to engage more deeply with, and experience the art in front of them. If the particularity of art education is recognised as a process of art experience, but we still seek suitable pedagogies to instruct this subject, it could be asked whether we are circumscribing ourselves in the 'form'[72] of our inquiry. "One should develop a mind which does not abide in anything"[73]. Teachers and educators trained at teachers' college are very familiar with how to manage art classes, how to impart drawing skills, and how to conduct an art class flexibly. I would argue that experiencing the art with children together, within a museum or gallery setting,

[72] Here I am pointedly enlisting a reference to the Buddhist idea that "The Tathagata speaks of forms which are not forms and of living beings who are not living beings", which I would argue proves relevant in this instance.
[73] This refers to the Buddhist idea that "the Tathagata speaks of forms which are not forms and of living beings who are not living beings". People are always confined by themselves. Everything is reluctant to us. We get accustomed to trapping ourselves into everything, and forget if being stuck in a thought, then you will be restricted in this thought. Sometimes being an outsider can bring unexpected and disparate experiences for you to reflect again.

sometimes as a facilitator, sometimes as an observer, instead of with highly directive or prescriptive instruction, will assist us in stimulating more genuine children-led learning. As Loris Malaguzzi, the founder of Reggio Emilia's education philosophy, said: "stand aside for a while and leave room for learning, observe carefully what children do, and then, when you have understood well, perhaps teaching will be different from before"[74].

2. As discussed previously, art museums have been acknowledged as a generative learning environment for students' art learning, but I question whether the prevalence of traditional teaching patterns makes them simply become another classroom? Artworks in art museums may provide an authentic art learning experience for students, but does the overly prescriptive interpretation of artworks potentially restrain students' imagination and creativity?

3. Furthermore, most researchers have examined such topics from the perspective of museum educators or teachers. Ideas emerging from artists on how to view museum education broadly speaking, ways to consider differences between the learning environments of art museums and schools in art education, and how to consider teaching pedagogies applied within art education from artists' perspective have not been as frequently and rigorously considered in scholarly contexts.

4. While the professional development of teachers and museum educators is anticipated to become enhanced by their working with artists, more commonly the artist becomes a kind of "guest teacher", and is asked to adhere to existing conservative structures and processes. There is less evidence of teachers and museum educators welcoming artists into this space and offering them agency or autonomy. This means of engagement can lead to formalisation over expansive or impactful practice. Closer, more dialogic exchange, and co-design would require museum educators and teachers to relinquish the traditional teaching patterns that they feel make art classes work smoothly, because they would be in a position of holding shared control. The collaborative approach requires co-designing and engaging in the class with artists, and being open to gaining knowledge and expertise from each other.

[74] https://www.youtube.com/watch?v=hcRgN0F-wik&t=16s

The reflections prompted by reviewing and analysing the literature and art education programmes in New Zealand and abroad have assisted in providing a clearer perspective on the present models for artists contributing to children's art education in art museums, and have motivated me to more deeply explore and develop a potential conceptual framework for the design and delivery of art education programmes in art museums through the collaboration among artists, museum educators, and primary school teachers. With the importance of artists to children's art learning in art museums in mind, along with the collaboration among the three different roles to make artists' engagement more effective and promote mutual professional development, I embarked on interviewing visual artists to understand how they might consider the environment of art museums for students' art learning, current museum education, and teaching pedagogies used in art education. I will be examining and discussing these themes further in Chapter four.

Chapter Four: Five Recurring Themes Emerging from the Interviews and Workshops

This chapter unpacks the findings of Phases two and three[75], and discusses five recurring themes emerging from the interviews and workshops, in five sections, respectively. These themes align with the second, third, and fourth research questions through the examination of the ideas of the interviewed artists on the development of current art museum education, the environment of art museums, artworks in children's art learning, and the teaching pedagogies applied in art museum education.

Theme One: Rediscovering Museum Learning

> *I do not believe that what I learned on that day could have been learned through books, classroom presentations, or in front of a video screen.*
>
> *Anna Kindler in the Musée Marmottan Monet, 1997, 13*

On the basis of my initial research, I observed that there are three important transformations within museum education practice needing clarification. One emphasises the shift from museum education to museum learning; another involves art learning through personal experience; the last one identifies the 'creativity', that is often mentioned by museum educators and teachers, and seeks to explore how this can be manifested through creative teaching.

The Semantic Shift from Museum Education to Museum Learning

The educational function of museums has been prioritised in many countries, as many scholars increasingly recognise that museum education enriches children's learning experiences outside the classroom (Hooper-Greenhill, 1991, 2000; Falk & Dierking, 2018). A survey was conducted by the National Endowment for the Arts on the purpose and function of museums among all the American museum directors; ultimately, it was commonly acknowledged that

[75] This chapter also presented a part of the findings of workshops at the Phase three as the prompts were designed for the workshops in the light of the themes emerging from the interviews. Therefore, the data of the workshops relevant to the themes were merged into the themes of the interviews through data analysis tools. The processes of data coding and analysis of this part were elucidated in detail in Chapter two. Another part (a novel framework of an art class in art museums) of the results of the workshops will be unpacked in alliance with the findings of the art classes delivery and reflective practice among artists, museum educators, and primary school teachers in Chapter five because the art classes, artists, museum educators, and primary school teachers delivered, were based on the novel framework they co-developed.

providing learning experiences for the larger population was the crucial goal of museums (Hein, 1998). As well, Hooper-Greenhill (1999) emphasised the importance of learning experiences in museums for children, and in 2007, she proposed, in the 21st century, there was a primary semantic shift from the expression of "museum education" to "museum learning". This could reflect two major implications for museum education. Firstly, an increased focus on the active learning process is underlined; additionally, it highlights the importance of self-conscious learning.

The difference between "education" and "learning", in theory, has been emphasised by certain scholars (Jarvis et al., 2003; Joyce et al., 2008). Education, to a large extent, stresses teaching processes and learning outcomes, concentrating on the transmission of knowledge from teachers to students, and how the knowledge students acquire is reflected in assessments (Cropley, 2001; Olson, 2003). Conversely, learning is a positive process rather than a passive transmission, as our brain is not a passive recipient, but rather, it is an active apparatus, digesting and dealing with our lived experience (Levent & Pascual-Leone, 2014). I suggest it is imperative to understand that learning is not simply imparting and receiving knowledge, before one can shift one's thinking from a passive receiver to an active learner. This aligns with Maxted's (1999) assertion that:

> Learning is a process of active engagement with experience. It is what people do when they want to make sense of the world. It may involve increase in or deepening of skills, knowledge, values, attitudes and the capacity to reflect. Effective learning leads to change, development and the desire to learn more. (p. 17)

This observation indicates that learning is a process of active exploration and engagement, and learners' awareness and enjoyment of a dynamic learning process can motivate them to keep exploring new knowledge and new experiences. Additionally, active learners are often self-directed rather than being directly controlled by others. Illich (1971) has claimed:

> In fact, learning is the human activity which least needs manipulation by others. Most learning is not the result of instruction. It is rather the result of unhampered participation in a meaningful setting. Most people learn best by being "with it", yet school makes them identify their personal, cognitive growth with elaborate planning and manipulation. (p. 39)

Illich points out that learning seldom needs others' manipulation, and schools generally impose well-planned agendas on students, rather than respecting the nature of learning through being "with it"; he simultaneously implies that students should positively engage in a meaningful learning environment and emphasised that learning need not be directed towards results. Learning processes can be ephemeral, and always changing, interacting and integrating new knowledge (Cropley, 2001) and experience is affected by learners per se and other people who are involved in the learning process (Falk & Dierking, 2018). The importance of the experience has often been reiterated by such education scholars, noting the inseparable relation between experience and learning.

Learning through Experience

Learning has been observed by multiple scholars as complicated and lifelong; stressing learners' experiences in connection to their surroundings (Freire, 1998; Falk & Dierking, 2018; Hooper-Greenhill, 2007; Baron, 2014). Hooper-Greenhill (2007) demonstrated the significance and value of immersive and embodied experiences for learners through research data, and added that the learning experience is equally important to learners of all ages. Polanyi (1958 as cited in Sotto, 2007) has stated that experience as "tacit knowledge" is categorically the essence of learning. It indicates that experiences are fused into the knowledge embodied in learning.

The pictures shown below offer an example of children's drawings[76]. The theme of the art class was beautiful flowers. It may appear that they are just some simple flowers, whereas I suggest that every drawing has its own story, since each child's experiences and emotions are embodied in these vivid and unique drawings.

[76] The drawings were from primary school-aged students when I was teaching at Jin Di Zi Zai Cheng Elementary School in China in 2016.

Figure 34: *Child's Drawing 1*

Figure 35: *Child's Drawing 2*

Figure 36: *Child's Drawing 3*

Figure 37: *Child's Drawing 4*

Drawing 4 (Figure 37) features only some plain lines on a black background. The flowers seen in this drawing are monochromatic, and radically dissimilar in form to "actual"[77] flowers. Distinctions between this drawing and some of the others raised curiosity and comment among the art teachers in my office; both positive and negative. I spoke informally with this student and did not ask him any questions about his drawing. He excitedly offered an account of a picnic with his family on the weekend, where he saw some strange creatures that he never noticed in the city, and found flowers growing in the gap between two stones as well as in a cave without soil. The experience of the outdoor picnic remained in his mind, and the art class was a stimulus that awakened his experience, enabling him to express "flowers" in a different way.

[77] "Actual" here indicates naturalistic depictions of flowers.

Experience can be affected by both one's own experience and that of others (Dewey, 1934), yet cannot be 'taught', as every person is different, and learners process knowledge and information relating to their own special experiences in highly disparate ways (Sotto, 2007). Two transformations could be observed, recognising that experiences cannot be taught. Firstly, directive or prescriptive teaching will be eclipsed. Teaching, to some extent, is not going to be 'teaching', and is more likely to involve the mutual influence and inspiration of conscious and unconscious experiences in the process of learning as "learning is what you do when you do not know what to do" (Claxton, 1999, p. 11).

Additionally, Pringle (2009) suggested that, when learning new knowledge in art museums, museum educators and teachers are regarded as "co-learners"[78] (p. 179) with students, rather than playing the role of "indoctrinators". With the increasing acknowledgement of the value and importance of experience in learning (Chakrabarty, 2002) and these two transformations, it would be more appropriate if we consider art learning as art experience for children. Anyone engaging in children's art classes, and experiencing the art along with them, could be viewed as co-learners. As a co-learner with children, imparting knowledge, training technical skills through a prescribed exemplar, and meeting restrictive learning outcomes would not be the primary goals of an art class anymore; and art museums could extend beyond being an 'outside learning environment' to being a place, encouraging people's engagement with their own personal perceptions and associations in relation to the art works, as a conduit for transforming learners' different experiences and knowledge (Falk et al., 1998).

Creativity and Creative Teaching

May (1994) suggested that creativity embodies two processes: thinking and creating, and the relationship between thinking and creating in creativity must intertwine with each other. A crucial feature of thinking and creating is that it is people-centred, or one could say learner-centred or student-centred. This is in accord with Black's (2012) reflection on the transformation of museum learning; that museum learning should focus on becoming people-centred in the 21st century. Black's text indicates that learners lead their own learning; other factors in terms of the environment of museums, artworks, and museum educators should not

[78] More discussions about "co-learners" suggested by the participants in this study will be unravelled in Chapter five and six.

manipulate learners' learning or creating; conversely, they should be regarded as stimuli, motivating learners' interest and imagination to create. Put another way, they facilitate learners in the process of learning instead of dominating or prescribing the creative process. If this transformation can be fostered by museum educators and teachers, they may be able to better distinguish between teacher-led teaching and student-centred learning.

Paul Torrance, an influential modern psychologist working in the field of creativity research, developed an impact test called Torrance Tests for Creative Thinking (TTCT) to measure human creative potential. TTCT generated several results, but there were three important ones with respect to ideational fluency, originality, and flexibility. Exploring these three factors, multiple scholars have researched creative teaching. One such scholar, Joubert (2001), stated that creative teaching should focus on learning processes rather than outcomes, encouraging children's imagination and originality and connecting all the subjects (Craft et al., 2001; Gardner, 2008). In light of these propositions, Silverstein and Layne (2010) identified the eight features of creative teaching, suggesting it is: "a process, not an event; grounded in imagination; dynamic; flexible; iterative, not linear; social and collaborative; [and, it] builds quality; and results in original work" (p. 4-6). Subsequently, Sawyer (2019) proposed seven habits of creative teachers, encompassing the following: they are thinkers as well as reflectors; they are enthusiastic and humorous in teaching; they listen to students and solve problems with them together; and they do not worry about failures, but rather consider them as good learning opportunities.

However, "creativity" seems to be often used as a generalised, placeholder term. In the preliminary survey within this research, almost all the responses museum educators gave regarding the purpose of designing art activities, noted the goal of developing students' creativity. The same answer was given by most of my colleagues in China as well. "Creativity" seems a ready answer for nearly any question relevant to the goals of the class. Art museums undeniably pique students' curiosity, as students have the opportunity to experience actual artworks in an environment which differs from a potentially more limited school environment. However, it does not guarantee that creativity is increased if the learning site is the museum, but the activity is prescriptive. I support Sawyer's assertion that, within art museums, creativity happens, with flow of ideas in an environment where risks are encouraged, failures are not

punished, and incorrect answers are accepted (Sawyer, 2019); and, more importantly, it depends on how museum educators inspire and work with them (Black, 2012; Sawyer, 2013).

Theme Two: Engaging with Artworks

> *In the twenty-first century, museum programmes will turn museums into places where people bring the artworks to life, and in the process, illuminate their own lives.*
>
> *Rika Burnham & Elliott Kai-Kee, 2011, 152*

This section reflects on the second research question, by identifying the importance of artworks in students' art learning in terms of three aspects. Firstly, it describes artworks as a medium in art learning, creating a connection between learners in dialogue; subsequently, it discusses the indecipherability of artworks. The last part touches on whether students are able to decipher artworks by themselves.

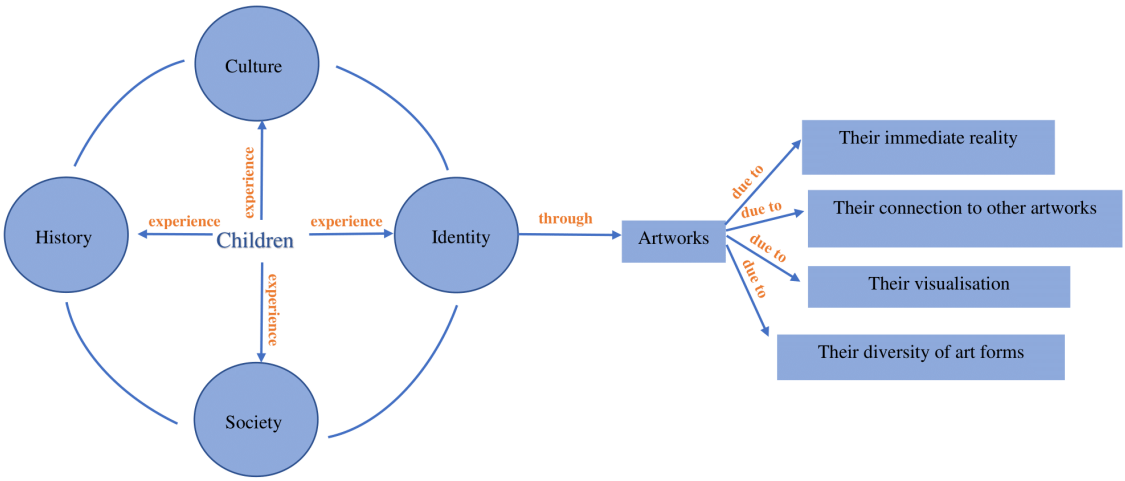

Image 1: *The Importance of Artworks to Children's Art Learning in Art Museums and Galleries (A hyperlink to the image)*

Connections between Learners via Artworks

Human life is affected by the rhythms of waking and sleeping, hunger and satiety, work and rest, pursuit and fulfilment, along with the development of nature's rhythm[79] (Dewey, 1934); hence, one's experience generates an inevitable connection with other beings and objects. Engeström (2005) has said that we think we create social networks, yet, in fact, objects make a big contribution to enabling people to connect with each other. In Simon's (2010) book, she gave a common example to demonstrate how an object of attention makes strangers associate with each other. She described that when she walks with her dog, some strangers will stop and have a chat with her, then she reflects that those strangers, to put it more precisely, talk to her because of her dog. "The dog allows for transference of attention from person-to-person to person-to-object-to-person" (p. 129). The dog, as a vehicle, plays an essential role, stimulating a topic between two strangers. Through a series of case studies, she concluded that social objects, as mediums, link learners to each other; simultaneously inferring that, in museums, more conversations can be evoked when students encounter an artwork within a learning context, because artworks, as catalysts, trigger conversations rather than imparting didactic content (Stainton, 2003). In the light of the scholars' theories, the artwork as an object stimulates students to talk and share their experiences; creating further topics of discussion with the continuing engagement of more students. Also, conversations and discussions around artworks, in alliance with manifold perspectives and experiences of different people, make students' experience meaningful (Tishman et al., 2007; Burnham & Kai-Kee, 2011).

Artworks, as catalysts, may potentially break up traditional teaching processes if museum educators are able to encourage students to talk and discuss the artworks more. Hein (2006) has suggested that museum educators should focus on helping students construct "meaningful experiences" by appreciating artworks rather than paying attention to teaching a "defined content outcome" (p. 348). He reminded museum educators of their core role in helping students construct meaningful experiences, while also indicating that students' experiences should be stimulated by having dialogues with others around artworks instead of interpreting the meaning of artworks that they understand only from their own perspectives.

[79] "The first characteristic of the environment world that makes possible the existence of artistic form is rhythm. There is rhythm in nature, before poetry, painting, architecture and music exist. Were it not so, rhythm, as an essential property of form, would be merely superimposed upon material; not an operation through which material effects its own culmination in experience" (Dewey, 1934, p. 152).

The Agency of the Viewer

Roberts (2004) has stated that if artworks could be explained, then they must be interpreted in such a way that satisfies everyone's expectation; otherwise, all explanations rest on externally aesthetic and historical criteria. Historical and aesthetic backgrounds facilitate an aspect of understanding artworks, yet they cannot decipher artists' thoughts, experiences, and emotions. Even though museum educators are versed in different languages, professional knowledge, and skills, they are unable to interpret artworks to every viewer as "museums do not have a single, homogenous audience" (Roberts, 2004, p. 223) and every audience has different experiences. Given this diversity, one potential solution is to empower the viewers' agency, encouraging them to explore and discover artworks themselves.

Artists frequently leave interpretation of artworks to the viewer, anticipating artworks to "speak" for themselves (Shuh, 1999; Roberts, 2004, DuBois, 2006). It is not uncommon that some museum educators prefer to find an appropriate way to explain artworks to children; believing that providing an interpretation helps students with their understanding (Dobbs & Eisner, 1987). Scholars have explored frameworks and methods of learning about artworks in art museums. Twiss-Garrity (1995) examined visitors' responses to a piece of artwork and concluded that they often go through four processes: description, classification, association, and evaluation. They start by observing and describing the object, then try to identify the date and genre of the object. Once they acquire factual information about the object, they begin to discover other connections, with respect to historical background, similar genres, and other artworks in the same time period. Finally, they narrow down their responses to personal experiences and any emotional connections.

Housen (2001) complemented and extended Twiss-Garrity's method, and created the Visual Thinking Strategies (VTS) approach for pre-K-8 (4-14 years old). The VTS approach suggests that museum educators ask open-ended questions and encourage students to construct the knowledge by learning with artworks rather than pursuing a specific outcome through teachers' step-by-step instruction. By the 1990s, this Visual Thinking Strategy approach had begun to be employed in museum education (Hein, 1991; Tishman et al., 2007; Burnham & Kai-Kee, 2011) and is still being adopted by some museum educators at present (Terrassa et al., 2016).

Housen (2001) stated that viewers usually experience five stages to make sense of an artwork. In the first phase, they tell some stories, then focus on describing some details in the art. The transformation in the second stage runs from personal associations to their own cultural associations. They relate one artwork to other artworks at the third stage, and then observations move into more complicated observations at the fourth phase. Some imaginative ideas with a specific point that others may not observe are added in observations at the final stage.

Housen (2001) believed that these important shifts follow the trajectory of humanity's mental origins and development. However, a few researchers questioned that the VTS approach did not include information about artists' backgrounds, the artworks' genre, and its materiality. Yenawine (2013), the co-founder of VTS, explained that they did not object to this information, and stressed that art should start with looking, prior to connecting with other information. Rice (1995) insisted on the necessity of appropriate information for students' learning, whereas Burnham and Kai-Kee (2011) stated that, while sometimes background information helps students understand a work of art, it could also be a hindrance. Another point some scholars have argued is, that this method may not be suitable for all learners, as they have different backgrounds, cultures, and experiences, and might not have the same level of learning (Hooper-Greenhill, 2000, 2007; Hubard, 2007; Hickman, 2010; Anila, 2017). Preziosi (2009), an art historian, has noted that exhibitions in art museums are not designed to present how talented artists are. Instead, they enable people to associate their own culture and experience with artworks. Although conceptual methods have been advanced by scholars, how much museum educators consider and implement them is rarely discussed.

In my own preliminary survey, I found that museum educators are familiar with the background information of an exhibition and have some insight into the intentions of the artists in creating the work. In an art class I followed, the educator explained to the students that the artist, one day, found some old photos in an album that aroused his memories, and he started to collect photos from his family members and friends. From the perspective of museum educators, a straightforward story behind artworks might be needed to discuss artworks. However, artists may retain a more ambiguous view towards their artworks. I discussed this with an artist and she said, "when I had the exhibition in Sydney, many visitors asked me what is the meaning of your artworks and what do you want to express through these artworks. I said, they have their own unique stories, let them tell you" (personal communication with an artist in a conference,

December 4, 2019). She prefers viewers to explore the artworks in connection with their own experience, instead of presenting the stories she considers as a guide or key to unpacking the meaning of the works.

Bourdieu et al. (1997) have stated that there is no singular or preferred way to explain a work of art, as the interpretation of an artwork connects to individual diverse experiences and the gradual familiarisation with artworks. In addition, changes in the understanding of an artwork, depending on one's individual feelings, perceptions, and cognition, cannot be avoided, even if the individual tries to express thoughts objectively. They noted that our prior knowledge frames our imagination regarding thinking and learning new things. This inherent knowledge could impact the ways that we appreciate artworks, potentially helping us decide what kinds of questions are important and which kinds of answers are most valuable. Even though museum educators try their best to interpret artworks objectively, it is suggested that individual preferences and views unconsciously influence processes of interpretation. As a result, museum educators may not recognize unpredictable and surprising answers from learners (Burnham & Kai-Kee, 2011).

Valuing Students' Voices

Some researchers expressed the concern that children are unable to understand highly conceptual contemporary artworks (Yenawine, 2013; Hendy-Ekers, 2019) as contemporary artworks can be involved in complex social and political issues (Page et al., 2006); and they believe that educators are capable of interpreting these problems for students. Brown et al. (1989) argued that, although teaching methods always try to deconstruct abstract conceptions and impart meaning to students by offering examples and employing repetition, these well-defined and conventionalised paradigms and practices may not align with individual and different experiences or ways of interpreting life. Meanwhile, Tishman et al. (2007) stated that learners in the environment of art museums are able to raise generative questions and make plentiful connections and comparisons to construct rich and sophisticated interpretations with their meticulous observation. Dezeuze (2012) expounded upon this further, adding that students have the ability to understand contemporary artworks in their own ways as long as museum educators provide enough time for students to engage in artworks directly.

Students need to see more and feel more. Engagement and exploration are better than someone explaining to them. They are eager to seek answers by engaging in the exhibition (A 4, 10, 13, 15, 17, 22, 23), but museum educators seldom leave the time for students to observe, think, and communicate with artworks (Gilman, 2016). Voices of students seem to be overwhelmed by teaching. Thus, A11 and A24 suggested that educators should stand back and observe students' communication, because students begin their learning and understanding of artworks at the moment of communicating with each other in front of artworks (Burnard & Swann, 2010; Burnham & Kai-Kee, 2011). Communication and interaction help students share different experiences and thoughts that may not be noticed by teachers and educators, and gradually develop their own thoughts, knowledge, and art language (Yenawine, 2013). One of the artists in this study expressed the idea that "if museum educators valued the communication and interaction between students, they would not struggle with finding a reasonable way to explain artworks" (A24).

Theme Three: What Can Artists Offer to Children?

> *I cannot teach children how to make art.*
> *They are more creative than me.*
>
> *Personal communication with an artist from the interviews, March 25, 2020*

Drawing upon my interviews with artists, this section unpacks certain shared ideas regarding museum education and museum educators, and the different approaches of artists in museum education in response to the third research question.

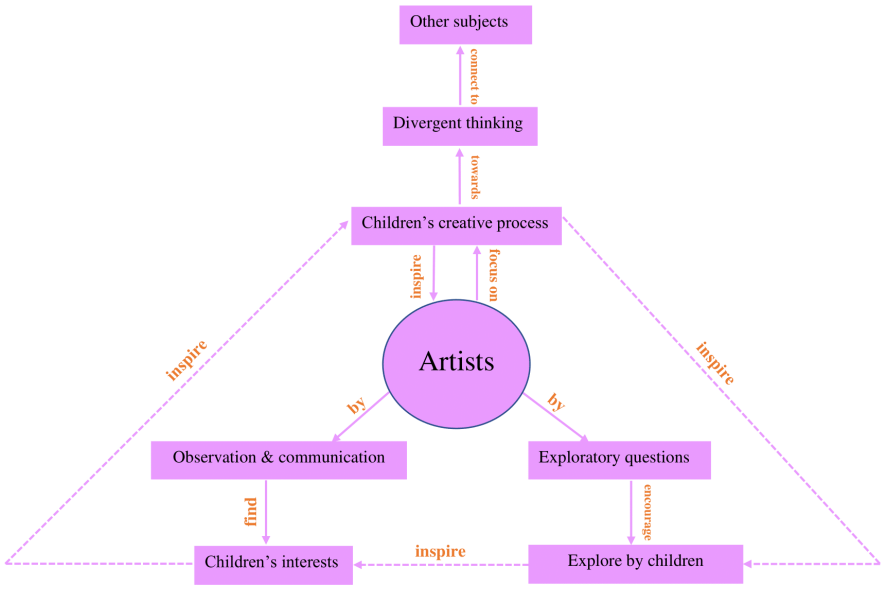

Image 2: *Artists Experiencing Art with Children (A hyperlink to the image)*

Students are Art Creators

When I spoke with the artists, they raised many interesting points about museum education. There is a tendency to focus on museum educators' ideas and suggestions because they are, primarily, in charge of the organisation and delivery of classes in art museums. However, this focus overlooks the knowledge that artists bring to the conversation, as creators of artworks and as people with intimate understanding of not only their own artworks, but also the artworks made by others. These artists have a unique ability to narrate their creation. In my research I observed that artists can want students to 'feel' artworks rather than solely interpreting them, as everyone is an individual with their own configuration of feeling, perception, cognition, emotion, motivation, and behaviour (Dewey, 1934; Read, 1948).

"Some museum educators treat children as knowledge receivers or young people who do not know a lot, and treat them as audiences, not participants. They just ask children to do some crafts rather than motivating their creativity and imagination" (A12). This aligns with Jaffe et al's (2015) suggestion to engage artists in children's classes, as artists consider children as "fellow artists, equals, co-learners, and perhaps at times direct collaborators in the making of art" (p. 227). Hall and Thomson (2017) also referred to artists who describe themselves as co-learners with students, and are reluctant to label their praxis as teaching and themselves with the "teachers' title" (p. 63).

To avoid artists becoming classroom teachers, Jaffe et al. (2015) clarified that:

> We seek to shift the teacher-student dynamic toward an artist-artist dynamic. The reason students, teachers and administrators ask us to come into their classrooms and after-school programmes is that we bring something that is not already there. We bring the work, play, atmosphere and ethos of art-making and all the intellectual, social and emotional dimensions that come with it. We are not there to replicate what exists in schools; we are there to complement it, or in some cases to subvert it. (p. 80)

The engagement of artists provides interesting and inspiring connections between what they know and what teachers may lack, and offers a different dynamic of engagement. Teachers may show more concerns about whether an art class achieves the goals of the school curriculum, whereas for students, incorporation of emotional responses enables them to feel that they are

valued, appreciated, and listened to (Burnard & Swann, 2010). It was observed that in contrast to teachers' styles of teaching, "we (artists) respect and appreciate the particularity of each student" (Aw2) and believe that "every student is an artist" (Aw4).

Creative Ideas and Processes over Pedagogies

Most museum educators understand the essence of museum education but once it moves towards practice, the achievement of teaching goals and learning outcomes may influence their approach. Burnham and Kai-Kee (2011), as museum educators, have reflected that:

> Most of us can recite a long litany of goals when asked what and why we teach. First and foremost, on the list is learning to look. But we also claim to teach – and are often mandated to teach – art history, cultural awareness, visual literacy, critical and analytical thinking skills, empathy, social or political or moral values, and so on. Yet such claims threaten to situate the artwork as a purveyor of those ideals, not as the rightful centre of our attention and study. (p. 148)

Some museum educators consider teaching pedagogies important to their art teaching (Bransford, 2012) but, ironically, they are not often familiar with which pedagogies they are using (Abasa, 2014). Much of the time, they repeat their teaching based on their own abundant teaching experiences that, to a large extent, could hinder them from considering ways to change their teaching. Conversely, artists support students' nonconformity (Burnard & Swann, 2010) encouraging them to enjoy the process of creation (A7, 15, 16, 21, 23). From the artists' perspective in this study, students' creative ideas and processes should be more valued and cherished than outcomes. "I bring my own creative experiences for children and focus on children's creative processes rather than results" (A2). Also, A5 said, "the creative process is more important. It is more about their experience. Once the trust relationship is built up between you and children, they will make amazing artworks". Most artists concentrate more on students' personal experience connected with the processes of making, believing that students will become more inspired once they are immersed in creative processes (Sawyer, 2018).

Connecting Subjects by Art

Eisner (1998), Jaffe et al. (2015), A5, A10, A12, A13, A20, and A24 have suggested that every child is unique and has artistic impulses, and museum educators and teachers should deliberate how to stimulate students' natural impulses towards art. Procedural and conscious thinking may be highly suitable for experimental sciences, as this type of subject needs to follow specific and explicit sequences without regard to "intuition and speculative thinking" (Jaffe et al., 2015, p. 70). Although experimental sciences abide by fundamental experimental procedures, it does not indicate that students can only learn in a single way. By contrast, knowledge can be connected and integrated through art to develop students' creative and divergent thinking. Jaffe et al. (2015) have articulated, that artists not only make art, but also are able to connect art with other subjects flexibly.

> My art programme is loose and transformable. I aim to improve the ability of children's observation which is relevant to every single subject they study at school. Learning through art and spreading it [*sic*] to other subjects is the real purpose of art education. It does not simply achieve the goals of the school curriculum and is life skills. I took them outside the class to learn how to draw a tree, and asked them to observe and touch trees; we discussed how trees grow, how to take care of a tree, and other knowledge related to trees rather than drawing directly. They learn all the things about trees through an art class. Art is not just one thing. It must integrate with other subjects. (A10)

Such acts of expanding from a small point to other broader knowledge and subjects are highlighted by most of the interviewed artists. Artists usually have a wide range of experiences and interests as they seek inspiration by connecting information and ideas to diverse disciplines (Jaffe et al., 2015).

> The strategy of my teaching is to link ideas and other subjects beyond the art. In New Zealand education, it has key competencies of creativity, innovation, resilience, and so on. Children can develop these competencies through making art. I would not say to children that you should be an artist when you grow up because I realised that art is not to turn everyone into an artist. It is about expanding their experience through the art to make all the children be flexible and spontaneous, and come up with solutions very easily when they grow up. I named these capacities as "soft skills"; these skills should be transformable. (A5)

"Soft skills" were proposed by the artist, to describe invisible competencies students acquired through art learning. Soft skills are like soft armour, helping students face unknown challenges in the future. And art, Janes (2014) noted, facilitates development of these skills.

Real Experiences over Fabricated Stories

Hall and Thomson (2017) found that artists are willing to talk about their personal lives, such as telling stories about their school and creative experiences, how they became an artist, and how they gained their inspiration from nature, travel, or the trivial things of daily life.

> Sharing what happened in life helps build up the trust relationship with children organically as real experiences are often more appealing than stories teachers and museum educators have composed catering for the teaching situation to achieve the objectives of the school curriculum. (A12)

Real life experiences are more touching and enable children to connect with their own experiences. More importantly, interesting points will emerge when they remember such experiences (Jaffe et al., 2015; A21), and these points could be valued and weaved into a recollection, stimulating students' creative tendancies. Jaffe et al. (2015) found that artists are experts at finding a small point a student has raised, and making good use of it within a class.

> I think art learning is a combination of a thing. I do not start with directly asking them to make something according to examples (artworks). I show them some artworks of other artists. They will express their thoughts around these artworks, then I try to get their interest [*sic*] through their discussions. Trying to listen to what they are interested in and finding an artist whose artworks they may like are important. You can develop their interests rather than duplicating the same artworks. It is about what they want to express, not what I want them to make. (A4)

Burnham and Kai-Kee (2011) suggested that sharing experiences with students, to observe what they are interested in, what they have passion for and to seek for a beginning point, brings them into the art world. Artists often would not impose personal opinions on a work of art in advance, as they believe that, interest is very important otherwise students cannot go further in art (A2, 3, 5, 7, 8, 9, 10, 13, 14, 15, 17, 19, 20, 21, 22, 23, 24).

Adapting to Multiple Ethnicities and Cultures

The engagement with artists of different countries helps students create their own special artworks from their own cultures, and encourages them to understand other cultures, as art practitioners often reflect cultural, historical, and social issues in their artworks (Roberts, 2004).

> When they visit art museums or galleries, they acquire knowledge not only from us (artists) but also from their classmates who are from different countries making them think from different perspectives. This kind of multicultural experience is really important to them. (A18)

In New Zealand, one can find a diversity of cultural perspectives. Understanding different cultures through museum education is crucial to enhance cultural identity in this bicultural nation. One of the artists, who is also a former museum educator said:

> We invited two Muslim artists to join our art class. The artists talked about xenophobia with students. We avoided discussing political issues and worried that students could not accept this kind of topic, but they are very political. It was really amazing that the artists brought it out because their belief and culture made it strong. We had a Muslim girl in that class. She felt comfortable after talking about that because their culture is identified. That is the power that the artists provided for students and students acquire in the art museum. (A8)

The artists from different countries and ethnicities help children promote cultural identity among their classmates. To reduce racial discrimination, Roberts (2004) suggested developing multicultural and inter-ethnic educational programmes with diverse exhibitions in art museums. Also, Abasa (2014) proposed to create a framework for museum practice to better embrace cultural aspects of te ao Māori, and communities of other ethnicities outside of a Pākehā majority.

Theme Four: Are Teaching Pedagogies Effective?

> - *Which teaching pedagogies did you apply in your teaching?*
> - *To be honest, I have no idea. We can frame teaching procedures but can we frame children's different interests, experience, and stories?*
>
> *Personal communication with an artist from the interviews, November 10, 2020*

Burnham & Kai-Kee (2011) stated that when museum education entered into the 21st Century, museum educators faced the new challenges of seeking which pedagogies should be employed in teaching. The topic of teaching pedagogies has been discussed by researchers for many years. This section, along with the fourth research question, explores the teaching pedagogies identified by researchers, reflects on the application of these pedagogies in museum education, and argues for the effectiveness of the pedagogies in teaching.

The Derivation of Teaching Pedagogies from Constructivism

Social constructivist teaching models stress that learning occurs in a collaborative, creative, and dynamic environment with socio-cultural approaches (Craft et al., 2007), and they are supported and frequently adopted by teachers, educators, and researchers (Nathan & Sawyer, 2014; Fleming et al., 2016, Vanada, 2016). Constructivism is a succinct and comprehensive theory, as Hein (1991) and Jeffery-Clay (1998) observed; one that helps museum learners construct new knowledge from their previous knowledge and experience. Contemporary research has repeatedly presented the advantage of constructivist methods for teaching innovatively (Sawyer, 2011), and this method has been internalised by most learners (Bransford et al., 2000; Sawyer, 2004, 2011; Bereiter, 2005).

According to the theory of constructivism, learners construct knowledge based on previous understandings and experiences within a social context. Put another way, constructivism encourages learners to positively build new knowledge, by associating prior experiences and knowledge with current knowledge and experiences. This approach needs learners to have enough comprehension and learning capacity, and to be capable of constantly integrating and applying the knowledge. This approach can be confronting to teachers too. I observed that educators, once they get used to one method, are more likely to repeatedly apply it in teaching. Even though some learning scientists continually demonstrate the effectiveness of constructivism in learning (Phillips, 1995; Von Glasersfeld, 1996; Jeffery-Clay, 1998), Sawyer (2011) questioned whether "today's constructivism is not a free-wheeling and student-centred caricature" (p. 3). He pointed out that constructivist teaching becomes paradoxical because it does not stress explorative learning. He identified it as a teaching contradiction that teachers want children to engage in the classroom, whilst they (the teachers) simultaneously control the

classroom. The theory of constructivism was proposed according to the proposition that learning is an active process and students construct the knowledge, yet, ultimately, it "focuses on the generation of [learning] outcomes" (Black, 2012, p. 79).

Researchers have advocated for ways to help balance this problem. Falk and Dierking (2018) articulated that, "free-choice learning tends to be non-linear, is personally motivated, and involves considerable choice on the part of the learner as to what to learn, as well as where and when to participate in learning" (p. 13). It respects students' selection and stresses the spontaneity of learning and student-centred learning. Perry (1989), in her doctoral study, discovered that six varying motivations played key roles in free-choice learning in museums. They were: curiosity, play, challenge, confidence, freedom, and interaction, all of which make children feel free to select what they want to learn. These motivations were also identified by museum researchers Salmi (1998), Griffin (1998), and Hendy-Ekers (2019). By observing educators' teaching, they suggested that it would be better if teachers instructed students based on students' particular needs. Svensson and Edström (2011) have recommended that pedagogies should emerge from students' needs and could not be imposed by anyone, as children's requirements transform from week to week based on different projects.

Incorporating the suggestions of other researchers, Hall and Thomson (2017) encouraged the development of "hybrid pedagogy". Hybrid pedagogy emphasises the blend of creative practices and the flexibility of teaching, and they summarised the five crucial aspects of hybrid pedagogy, in terms of: "the approach of inclusion"; "the importance of choice and agency", "the challenge of scale and ambition", "the role of the absurd and the carnivalesque", and "the lived experience of the present" (p. 130). Hybrid pedagogy absorbs the advantages of other teaching pedagogies and stresses flexible application. Similar to hybrid pedagogy, Erickson (1982), Borko and Livingston (1989), and Brown and Edelson (2003) noticed that the most effective way of avoiding stereotyped teaching is to associate structure with improvisation. Sawyer (2011) defined this way as an improvisational teaching method and he believed improvisational teaching is a good way to balance constructivism. Improvisation needs teachers to, not only understand the requirement of the curriculum, but also implement it in a flexible way.

Although this kind of improvisational teaching method could ameliorate other teaching models temporarily, some scholars began to criticise the effectiveness of this method on four counts. Firstly, whether it can be flexibly employed in teaching mostly depends on teachers and museum educators. Borko and Livingston (1989) and Ericsson (2014) have argued that more experienced teachers and educators can be better at conducting improvisational teaching. However, once sophisticated teachers and educators are familiar with fixed procedures of teaching, is it easy for them to relinquish these 'useful strategies'[80]?

Additionally, this method challenges teachers and educators' capabilities. Improvisational teaching requires the educator to be alert to the problem of repeating similar teaching methods every day, and to have the ability to provide for all possible contingencies as they arise in the classroom. Alexander (2004) has differentiated between pedagogy and teaching as, "teaching is an act (like improvisation) whereas pedagogy involves both act and thought, belief and theory" (p. 59). If teaching is regarded as an act, then, how to present this performance hinges on the capacity of 'the performer'[81]. It would question how 'a performer', who has internalised theories and beliefs, is able to execute a show successfully? 'Most performers' would capitulate to modes embedded in the mind. Clark and Yinger (1977) have articulated the idea that teachers barely change pre-prepared teaching plans even though the process of the teaching goes poorly. Definitions of improvisational teaching only stress the nature of spontaneity and intuition, Berliner (2009) indicated, yet instructors' competencies are often neglected[82].

Furthermore, good teaching, for most teachers, indicates well-organised classroom management and responsiveness to the school curriculum (Burnard, 2011). An effective classroom both satisfies goals of curricula and hopes of teachers, policy-makers, and parents.

> Teachers and educators are stuck in the middle of parents and policy-makers. We, on the one hand, have to cater for the expectations of parents, on the other hand, need to comply with the school curriculum that is set up by policy-makers who mostly do not have any first-line teaching experience. The school curriculum is like a mountain on the top of our head. (Personal communication with an educator, March 16, 2020)

[80] Useful strategies in this paragraph indicate that some teachers and museum educators follow their teaching routine every day as discussed in theme three (Abasa, 2014).
[81] The performers in this paragraph indicate teachers and museum educators.
[82] Berliner's assertion aligns with my observations at the stages of art classes delivery and reflection-on-action sessions in this study. I am going to discuss further in Chapter five.

Many teachers and educators feel restricted and overwhelmed by the school curriculum (Burnard & Swann, 2010). Lobman (2011) claimed that the inflexible criteria of the school curriculum are more likely to efface instructors' creativity. However, Boote (2006) argued that any curriculum is intrinsically broad and vague and should be dissected by instructors flexibly. Ofsted (2010) supported this view and stated that the standard school curriculum should not inhibit instructors from providing good teaching. Most interviewed artists also stated that the school curriculum is quite broad and does not restrict teachers' and museum educators' creativity in teaching, and they consider the problem is whether museum educators apply the school curriculum flexibly (A2, 3, 4, 5, 6, 7, 12, 13, 15, 19, 20, 21, 24). Connecting to the school curriculum is easier for teachers to teach art because they lack confidence in the art field. But sometimes they link the school curriculum to art programmes without thinking, and sometimes they are overly reliant upon it (A16, 19, 23).

Both museum educators' and teachers' teaching seem to form a stable pattern. Writ large, this is not the best teaching, but could be the easiest way to teach. Black (2012) and A3 suggested that museum educators should not depend on the school curriculum too much, but rather give priority to children's needs and interests. I suggest museum educators, prior to implementing the school curriculum strictly and in detail, need to think critically about how to flexibly apply or transform the school curriculum to shun learning or teaching defaulting into a groove. With particular consideration of the curriculum, as applied in art museums, Quinn (2006) commented that museum education is not general education in the classroom, and, as a result, its curriculum should be different from the common school curriculum. On the basis of the above evidence, I reflected on developing a curriculum tailored for museum education in Chapter six.

The last factor regarding the difficulty of popularising improvisational teaching among teachers and museum educators related to how this pedagogical mode is embraced within teachers' training colleges. "Teaching colleges generally have preconceptions in terms of how to treat children when their behaviour is out of control; how to teach children to draw or craft procedurally; and how to cultivate children to achieve the final goal" (personal communication with a primary school teacher, May 21, 2020). I reflect that when teachers and museum educators teach, intangible barriers, with respect to the requirements of schools, principals,

parents, prior to teaching, could gradually form in the mind, and their passion for teaching, correspondingly, may diminish with repeatedly covering the same content. Freire (1998) has articulated that, "teachers will never develop a truly 'critical' perspective as a teacher by indulging in mechanical memorisation or the rhythmic repetition of phrases and ideas at the expense of creative challenge" (p. 34). If a person can survive these mechanical repetitions, and be creative and enthusiastic in teaching, they would be a suitable person to teach art. The fact is, however, that very few of these teachers can be found (Bachar & Glaubman, 2006).

One possible way to balance this problem is to reform the system of teachers' training with regard to their teaching methods and ways of thinking, but this change would cause some unavoidable issues[83]. Hypothetically, if the new training system aims to cultivate integrative or multi-professional teachers who can teach art creatively, understand children's psychology, and be familiar with any outside learning settings, such as art museums, galleries, zoos, botanical gardens, and so forth; then is it necessary to preserve the position of museum educators and the difference between artists and teachers. One of the artists suggested, "teachers' training colleges should provide the experience of working with artists. The more teachers and artists collaborate with each other, the more professional knowledge teachers will get" (A20). Teachers and educators may be limited by the rules of schools and the school curriculum, but the participation of artists in children's art classes challenges these default pedagogies (Hall & Thomson, 2017) and loosens up hidebound teaching (Jeffery, 2005; Burnard & White, 2008). Because "artists are free from curriculum constraints, whereas teachers are not always at liberty to do so" (Pringle, 2008 as cited in Burnard, 2011, p. 65), "they (teachers and museum educators) need artists to help them break their conservative teaching" (A12). The changes that the artists bring by the collaboration with teachers and museum educators will be presented in Chapter six.

[83] Reflecting on the situation of New Zealand, one of the challenges is that teacher training occurs through multiple routes, a Bachelor of Education, a conjoint degree with a Bachelor of Education, or the popular route of a one-year Graduate Diploma in teaching after an undergraduate degree in another field. In all cases the emphasis is on general teaching, rather than specialist creative arts pedagogies, and many teachers in the primary field may enter their teaching without significant experience in terms of art teaching and working with museums and galleries, or indeed working with artists. The specific requirements to be a primary school teacher: https://www.careers.govt.nz/jobs-database/education-and-social-sciences/education/primary-school-teacher/how-to-enter-the-job

Flexible Pedagogy

All of the artists I interviewed could not precisely define or describe pedagogies they adopted to experience art with children. Generally, they articulated common aspirations, including: being concerned with children's interests and needs, the process of creating, and the importance of personal experience in connection to creation. These features positively align with Hall et al.'s (2007) suggestions for museum educators to enact flexible changes in museum education by concentrating on who children are, what they experience, what they are interested in, and what they want to express, and underscore the idea that there is no specific formula with which to tackle such aspirations, given the constant variation in students' thinking (Sawyer, 2019).

I have argued and provided evidence that art teaching within art museums is sometimes stuck in a rut, and it is hard to meet unexpected learning episodes (Abasa, 2014). We, on the one hand, rely on artists to break up the teaching routine by: bringing a "wow" element (Bamford, 2009); stirring things up (Pringle, 2002); creating a magic moment (Harding, 2005; A6); and, challenging children (A13, 18, 20); but, on the other hand, are worried that, without the direction of pedagogies, artists could not facilitate the completion of teaching goals and achievement of learning outcomes. Artists' teaching styles were identified as critical pedagogy and an artistic pedagogy by the countries that have art education programmes with the engagement of artists, discussed in Chapter three.

Brookfield (2017) admitted that critical pedagogy encourages instructors to change according to students' varying personalities, backgrounds, learning styles, interests, and needs, whereas it can only achieve so much in helping explain and respond to those features. He reminded us that "if we rely too heavily on the jargon of critical pedagogy[84], we may find ourselves operating within a self-enclosed semantic loop" (p. 210). If we insist on defining and formulating artists' teaching style as a fixed pedagogy, we probably will become trapped within the pernicious circle of seeking the best pedagogy for children's art learning. Then it may have another paradox, which could be named the pedagogical paradox. Theorists, on the one hand, expect that teaching is improvisational, and on the other hand, hope that theories of pedagogies can instruct improvisations. It would cause artists to fall into the teaching paradox that teachers

[84] In the light of Brookfield's explanation, "the jargon of critical pedagogy" indicates that we understand critical pedagogy theoretically rather than practically.

and museum educators are experiencing; artists would become another type of artist-teacher or artist-educator who has the title of artist, but feels pressured to repeat the same teaching methods as teachers and museum educators.

Reflecting on the international art programmes discussed in Chapter three, I argue that the innovation of visual art education programmes needs to focus on how to break the restriction of traditional pedagogies, through inclusion of artists in both the conceptualisation and delivery of art engagements within museums and galleries, rather than employing artists to teach under the rubric of standard pedagogies. This research advocates this position, as I have observed and demonstrated, that frequently, when pedagogies apply to teaching 'effectively' (in terms of delivering on specified curriculum range and content), they may not, in fact, be suitable or adaptable when responding to the different needs and interests of participating children. While the benefits of art museum education have been recognised, more suitable pedagogies are lacking, and I ask whether we are circumscribing ourselves within the 'form'[85] of our inquiry. I propose that the engagement of artists in children's art education could change traditional teaching pedagogies.

In line with the basic premise of the New Zealand Curriculum (2007) that, "there is no formula that will guarantee learning for every student in every context" (p.34), and each learner is distinctive (Abasa, 2014). There is often an expectation of creating a pedagogy which can suit everyone, but whatever we create, eventually, we will likely find that we fall into infinite exploration and paradox, as students' minds are ever-changing and their experiences are unique. Teaching pedagogy would be flexible and attuned to children's requirements and interests, because "no one theory can accommodate the complex, nonlinear, and multidimensional nature of learning in art museums. The use of multiple theories pushes us to think more creatively about how to define and assess visitors' learning" (Luke et al., 2007, p. 34).

Theme Five: Can Students Feel Free to Draw?

> *We know we need to give children freedom to express and create. However, when they start drawing, if there are lots of problems, we want to correct them. We interrupt their imagination and say, "it looks more reasonable if*

[85] Here I am pointedly referring to the Buddhist idea that "the Tathagata speaks of forms which are not forms and of living beings who are not living beings", which I would argue proves relevant in this instance.

you put this one in here". Children's drawing sometimes freaks me out if they do not follow what I planned before the class. It is so strange that we could not allow them to completely express themselves. We know art cannot be taught, but we have to give them some instructions.

Personal communication with a director of an art learning centre, April 23, 2020

In the light of the data from the interviews and workshops, one theme that emerged was that of freedom. Artists who were interviewed, on the one hand, advocated freedom in children's drawing, but on the other hand, put forward the necessity of simple instructions. Why freedom is sought, and why freedom operates under the oppression of 'freedom', are discussed in this section[86].

[86] There are two types of freedoms that I am referencing here. The first 'freedom' indicates the ideal freedom we pursue and the second 'freedom' represents the freedom artists give to children.

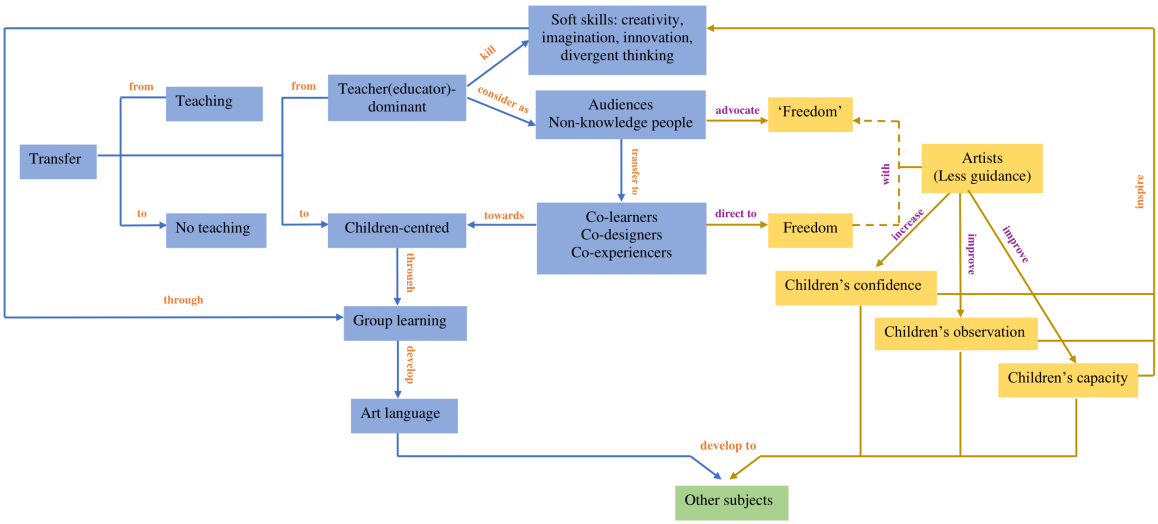

Image 3: *A Combined Diagram – 'Teaching without Teaching' and 'Freedom' with Freedom (A hyperlink to the image)*

Authority in the Relationship

We may often say to children, "feel free to express yourselves", however, do we really allow children to feel free to draw? When I taught children in a primary school, I always fell into the dilemma of whether I should give students complete freedom or not; it was commonly thought that the curriculum goal cannot be achieved if children were given total freedom. This issue haunts most teachers and museum educators (personal communication with a museum educator, February 22, 2019). The 'freedom' in teaching and learning we usually call for, in fact, may not coincide with our preconceived notions of 'freedom'.

Nevertheless, why do we feel that we cannot grant freedom to children? A series of issues can be reflected through this question. Jean-Paul Sartre (2001), describing a grocer's hectic day in a café and discussing the problem of combining a functional role with a social role, wrote that "society demands that he limit himself to his function as a grocer, …it is the rule, but not the interest" (p. 59). People often get accustomed to the role that society imposes on them, and every fixed role has its own functions. Certainly, people sometimes need to play different roles simultaneously but, in this study, the focus is on the relationship between teachers or museum educators and students. Through my observations and interviews, the primary tasks of teachers and museum educators are to teach effectively and to achieve the goals of the school curriculum. Hendy-Ekers (2019) stated that teachers are dominant in the classroom, and museum educators draw on "the hierarchy of the field of museums where they see themselves as the authority" (p. 11) and "regard teachers and students as audiences or outsiders" (A12). The potential hierarchy may lead to the imbalance of roles and not enable children arguably to feel immersed and engaged in art museums with the support of museum educators (A4, 7, 11, 14, 15, 17, 20, 22, 23, 24).

Smith (1991) suggested that only a person who treats children as creators could possibly teach art because "[art] teaching is not so easily amenable to scientific examination" (Fines, 1982, p. 3). I observe that this route would require teachers and museum educators to relinquish their fixed roles and ways of thinking. Rather than pursuing the learning outcomes, they could concentrate on their students' creative process; i.e., instead of teaching prescriptively they could focus on how to motivate students' creativity and imagination. It has been observed that when museum educators treat students as learners or users in art museums rather than visitors

and audiences, it increases pressures on them (Black, 2012). The transformation requires museum educators, (as suggested by most artists in this study), to be co-learners, co-designers, or co-creators, collaborating with the students (and other collaborators, including primary school teachers and artists).

However, it is interesting that all the artists in this study preferred to give children basic instructions. I would argue that the small instructions, provided by the artists, are more like catalysts to stimulate children's thinking and making, rather than the rules and procedures generally given by teachers and museum educators. One of the artists said: "I try to give them instructions as little as possible and ask them questions when they get stuck rather than giving them answers. I give them instructions like how to use a tool safely" (A12). Another artist agreed and stated: "it depends on what kind of freedom. You need to tell children how to use the tool. I mean this is the instruction but shouldn't limit their creativity when they make the art" (A16). Some of them think if you give children too much (in terms of options), they will be confused about how to start, and become easily lost (A1, 2, 3, 8, 19, 23). In line with these points, the 'freedom' that artists in the study aimed to provide motivated children to draw or craft creatively and imaginatively. I interviewed 24 artists, and all of them were not familiar with any named pedagogies employed by teachers and museum educators, nor did they think that they used established or fixed pedagogies when working with children. Artists, I suggest, are different from museum educators and teachers, in that they are not restricted by their previous teaching experiences or default pedagogies. This is the reason why Jaffe et al. (2015) called on more artists to participate in children's art education. Artists' "free" thoughts and expressions are appreciated by teachers and museum educators, and this kind of freedom is expected when brought into children's art classes to balance the structured teaching pattern (Burnard, 2011). If pedagogies continue being created for (and not by) artists, then the freedom of artists, that is valued within the classroom, could be extinguished with the increase of prescribed requirements.

In summary, I have discussed five themes as identified in the data of interviews and workshops in this chapter. In the next chapter, I will present another part of the findings of the workshops, the results of the delivery of the art classes and reflective practice amongst artists, museum educators, and primary school teachers.

A vignette: Who are they?

Below is my brief, subjective descriptions of the people with whom I have met and collaborated at the stage of art class delivery[87], and I gave them pseudonyms to preserve their anonymity.

Karen

It was drizzling, and I drove to Wellington Station as Karen and I had an appointment in a café on the ground floor. I was nervous because I thought my English was not very good. I arrived early and grabbed a seat, practising and preparing the questions. After a few minutes, a woman with a backpack was roaming around the café. It seemed that she was looking for someone. I walked towards her and she saw me: "I am Karen. Are you Carol"? "Yes, I am" I answered, then we hugged. With that hug, I relaxed a little bit. We ordered two cups of coffee and selected a quiet corner to start the interview.

When I was thinking where I should begin, Karen kicked us off by asking me about my research as she is very interested in children's art education. Karen is originally from the USA and immigrated to New Zealand over 10 years ago. She used to be a trained teacher and an artist in the USA. She is also wrangling with how to balance her dual roles as an artist and a teacher. We talked about the differences between art education here in New Zealand and in the USA, and the different experiences and feelings she had when taking her children to museums and galleries in both countries. I expressed my ideas about what I expected museum education to look like, and how I was interested in ways to redevelop and innovate art education in this space. She was excited to participate in the workshop and art class delivery as she wants to see more changes in and innovation within museum education.

Melissa

I met Melissa when I had just started my PhD research. She has worked as a museum educator for many years; and prior to that, was a trained teacher. She is familiar with the situations of every school around her community. She gave me a tour of the art museum and introduced me to the educational system of New Zealand. She often works in a team with another educator. They create classes together based on the school curriculum and schools' requirements;

[87] The process of art class delivery will be unpacked in Chapter five.

sometimes, they teach together. The classes are well-organised and materials such as pencils, coloured pens, paint brushes, sketch books, clay, pigments, and so forth are well-prepared.

Claire

Prior to meeting Claire in person, we contacted each other by email. I could feel that she is a joyful person through her words. She is a deputy principal of a primary school and is passionate about art. When I invited her to the workshop and art class, she agreed without hesitation. I made an appointment with her to discuss the details of the activities.

I met her at school and she was waiting for me at the main door. She is outgoing and engaged. She took me to her classroom. I was so impressed as I entered because the walls are full of students' artworks, and handicrafts hang from the ceiling. "This is an art gallery, not a classroom"! I said to her. She laughed and said: "Yes, I want my students to be exposed to an artistic atmosphere, not a strict classroom environment". "I will show you more," and she took out more of her students' artworks and told the stories of her students. Curiously, I asked her: "Do you only teach art"? She said: "No, I teach all the subjects in the curriculum but I connect every subject to the arts, haha"!

David

I encountered David at a local public art gallery through an event called Creatives in Schools. He joined as an artist. My first impression of him was that he is a humorous and active person. He dressed stylishly and talked to others with expressive body language. I walked up to him and introduced myself. We had a chat about his experiences working with children in his studio, different art museums, and schools.

David is very generous. He invited me to follow his class in a primary school as he participated in the educational programme of Creatives in Schools and collaborated with a primary school. I went to that school on a Wednesday afternoon. In that class, David taught them how to draw a tree. Rather than following him step-by-step, he took students outside the classroom to observe trees. They discussed how tall a tree grows, what branches look like, how to care for a tree, and so forth. After the discussion, students were drawing based on their own observation and creation, simultaneously, and David joined and interacted with them.

Emily

Emily and I are similar ages. She is a mother of a two-year-old girl, a museum educator, and also a freelancer. After the lockdown, she changed her job from one art museum to another, to work as a part-time educator as she wants to spend more time with her daughter. We sometimes have coffee together, sharing life, work, and study. At the beginning, I was shy about emailing artists. She helped me get in touch with them and took me to educators' meetings to meet more people.

After the workshop, I told her that I was going to invite one museum educator, one primary school teacher, and one artist to have an art class with students together, and planned to use the art museum she works in. She was very excited as she always wants to collaborate in different ways to get more ideas about art activities. She sacrificed a lot of time after work helping me negotiate the time and location with her manager, and discussing the details of the workshop and art class with me.

Maria

The first time I met Maria was in my workshop. She did not talk a lot but her ideas about art were inspirational. She had immigrated from South Africa to New Zealand and got a job here as a primary school teacher.

After one month, we came across each other in a shopping mall. She told me that she had been thinking about how to better improve students' art education and tried to engage students in different subjects through the arts. I did not expect that the workshop would influence her into changing her teaching. I told her I combined their brilliant ideas about changes in art museum education into a conceptual framework for an art class, and I was going to share it with them and that I would love to hear their opinions and hold an actual art class in an art museum with the new conceptual framework. I invited her and her students to join the art class.

Chapter Five: Workshop Findings and Art Classes Delivery

None of us is as smart as all of us.

Warren Bennis & Patricia Ward Biederman, 2007, 2

This chapter unpacks the findings of Phase three in response to the fifth (*In which ways do artists, museum educators, and primary school teachers expect to collaborate in order to experience artworks together with children in art museums?*) and sixth (*What are the potential benefits of collaborations among artists, museum educators, and primary school teachers?*) research questions. It includes three sections. The first section explores collaborative partnerships in international contexts. The second section illustrates the new conceptual framework for an art class co-devised by the workshop participants. The last section presents the development and delivery of art classes in two different art museums.

Collaborative Partnerships

Collaboration has been defined "as an interactive process chosen by two or more individuals with complementary skills working to accomplish a mutual goal that could not be accomplished alone and may result in new learning for individual partners and/or shared understandings" (Shaw, 2011, p. 10). The precondition of collaboration is that collaborators have a joint interest or concern to achieve a mutual goal, solve a problem, create something new, or develop a new idea or concept (Schrage, 1990). Additionally, collaboration is a voluntary selection (Bresler, 2002). It is built upon a sense of trust and responsibility (Friend & Cook, 1992; Sagor, 1997) and parity is also important in a collaborative relationship (Loucks-Horsley et al., 2009). Crucially, people who are willing to participate in collaboration must be able to recognise differences within the group, including aspects of personality, working styles, prior experiences, and to respect diverging opinions (DiPardo, 1999). This research looked to consider collaboration, engaging different roles in international art education contexts, as noted below, as a means to situate this research within a context of practice, and to learn through what others have already tested and found.

A creative partnership was created by the UK government in 2002 to pair artists or art practitioners to work with teachers in schools (Burnard, 2011). This project is named the

Nottingham Apprenticeship, and aims to provide opportunities for children to work closely with artists and creative practitioners in the classroom (Griffiths & Woolf, 2009). Hall & Thomson (2017) commented that both teachers and artists, by working with each other, learn new skills and how to look at issues from different angles.

Nevanen et al. (2012) developed collaboration between artists and teachers in the classroom in Finland. Teachers often mentioned that working with different artists stimulated students' curiosity and interest; children's different interests, needs, and personalities, that teachers often neglected, were considered differently by artists. Nevanen et al. (2012) also observed the benefits of the multi-professional cooperation between teachers and artists. Teachers could learn more about the theories of art, and artists could learn how to work with children. Teachers slowly realised the importance of the subject of art education, and their focus transformed from what results students achieved, to what social and general skills students learned through art. Both the teachers and the students were then able to reflect on their experiences.

In Australia, a collaborative partnership between teachers and museum educators was proposed by Groundwater-Smith and Kelly (2003). This partnership emphasised that the collaboration should be frequent, that art learning in both schools and art museums is transformable, and recommended teachers and museum educators to use a combined pedagogy which integrates problem-solving with inquiry-based learning in teaching.

The Odyssey Project in Canada features the collaboration of artists and teachers within art museums (Andrews, 2012). It aims to enhance teachers' professional development on how to teach creatively (Patteson, 2004) and how to encourage students to express themselves through a variety of artistic activities and art forms (Upitis, 2005).

Different from other programmes, Burnard and Swann (2010) turned their focus to the perspective of pupils learning with artists. Artists consider pupils as collaborative learners. As co-learners, it is easier for children to share and express their artistic ideas, and create or design artworks together rather than being dominated by artists' ideas. Many pupils expressed that they feel respect from artists. Beyond that, artists share their own experiences and expertise which can generate something new and interesting, supporting children to express their different, or what may sometimes feel like incomprehensible, ideas. Pupils feel themselves

more valued and grow in confidence while creating. Sometimes, artists integrate pupils' inspirational ideas into their own art creations (Burnard & Swann, 2010).

For the most part, the collaborations previous scholars have researched were mostly between teachers and artists, teachers and museum educators, or artists and teachers in schools or art museums. However, the collaboration between teachers, museum educators, and artists has not been put forward in greater detail. Griffiths and Woolf (2009) described the relationship of collaboration as: "everyone learns from everyone" (p. 567). It indicates the strengths of teachers, museum educators, and artists developing a reciprocal and dialogical learning relationship. The triangular partnership, compared with bilateral collaboration, on the one hand, could enhance children's art learning experience, and on the other hand, could complement professional deficiencies. Moreover, this research aligns with the suggestion that "collaboration drives creativity because innovation always emerges from a series of sparks – never a single flash of insight" (Sawyer, 2017, p. 8). Teachers, [museum educators], and artists have different thoughts pertaining to the organisation of the classroom, the choice of materials, and teaching styles (Burnard, 2011). This research argues that a creative partnership between these three roles is not only effective for students' art learning, but also would fuel innovation within art education.

Workshop Findings

In the methodology chapter, I described the process of organising the workshops in terms of selecting the locations and participants, setting up and testing the facilities, and so forth. This section discusses the results of the workshops.

The workshops began by considering the strengths and weaknesses in current museum education practices, as observed through art classes, interviews with museum educators, and researching published literature; as well as, notably, considering what children might gain from experiencing art in the museum. These considerations, in concert with the principle of the Double Diamond design process[88], at the stages of discovery and definition, guided the participants to explore the existing problems of museum education.

[88] The detail of the Double Diamond design process was discussed in Chapter two.

At the next phase, I encouraged the participants to co-develop a new conceptual framework of an art class including three co-operating roles: artists, primary school teachers, and museum educators. These participants discovered and defined the advantages, disadvantages, and suggestions by themselves. The participants were encouraged to overthrow traditional patterning or structure common to many art classes and pioneer a new art class with the goal of student-centeredness and facilitating direct encounters with artworks and artists.

With reference to the five recurring themes presented in Chapter four, many artists participating in the research believe that it is unlikely that children have exactly the same interests, experiences, and personalities (A2, 3, 5, 7, 8, 9, 10, 13, 14, 15, 17, 19, 20, 21, 22, 23, 24). Their creative expression reflects their personal experience, and art can be a special language that helps children express their emotions and record their experiences (Eisner, 1998; Yenawine, 2013). There was concern that a fixed teaching pedagogy would not attend to their different experiences and interests[89]. In line with these deliberations, the participants began to develop some concepts toward enacting a more novel art class within the art museum. I am here presenting and elaborating upon these concepts as a table.

[89] The discussion of teaching pedagogies was presented in detail in the theme four of Chapter four.

Concepts	Explanations (These explanations quoted the workshop participants' words.)
Facilitation	1. Facilitation helps build rapport with children. 2. Making children feel welcomed. 3. Active elements like movements and action, rather than only listening to teachers, encourage children to be more engaged within the class. 4. The class aspires to be open-ended and open-minded.
Provocation	1. The class starts by responding to students' ideas rather than through the teachers' instructions. 2. Encourage children to ask questions and lead the class. 3. Respect children's differences and find their interests by communicating with them. 4. Co-construct and co-explore classes with children together.
Agency	1. Children are separated into different learning groups according to their interests and needs. 2. Diverse learning groups satisfy children's different requirements. 3. Children need multisensory learning experiences by exploring multiple art forms including sculpture, drama, design, art painting, craft, and performance.
Student-centred	1. Encourage children to express themselves. 2. Creative processes are more important than outcomes. 3.Value children's ideas and opinions rather than teachers solely leading the class. 4. Allow children to discuss, in order to find the solutions, teachers act as part of the team.
Continuity	1. Children connect their experiences to their own lives and cultures. 2. Children can continue learning by online workshops because their ideas sometimes emerge after one week or more. 3. Children can take something back to the school or home after class. 4. Children will have an exhibition in art museums or galleries to share experience and artworks with whānau and others.

Table 3: *Concepts Co-created by Participants in Two Workshops*

By analysing and integrating these concepts proposed within the two workshops, I summarised them as a combined diagram, presented below. I then shared this integrated conceptual framework of a new art class with the participants. The participants discussed and clarified some concepts further. After discussion and revision, we moved to the last stage of co-developing and delivering actual art classes in art museums.

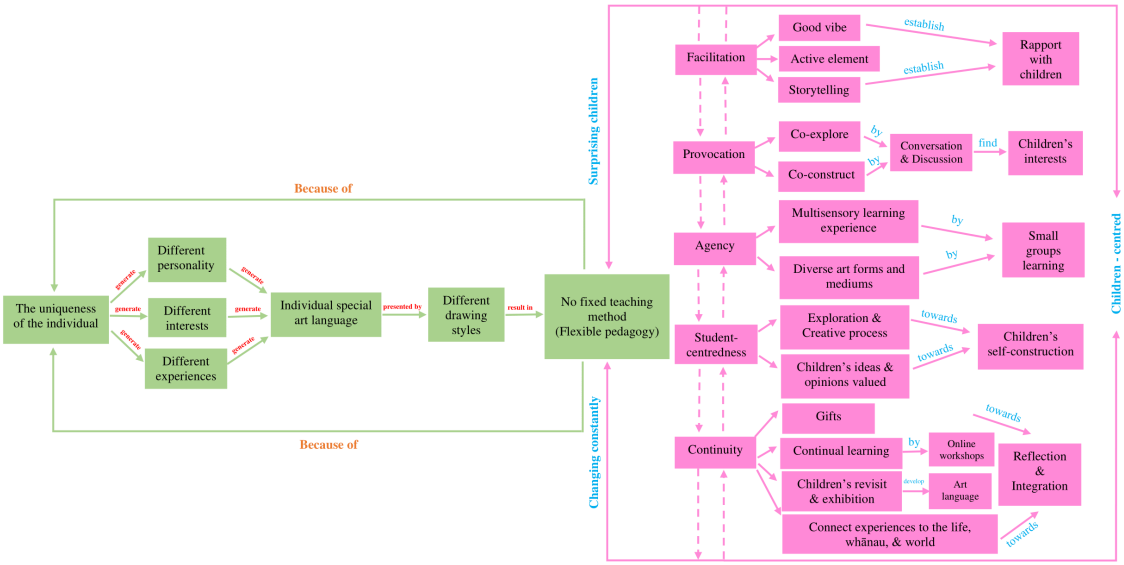

Image 4: *A Visualised Diagram of Concepts (A hyperlink to the image)*

Art Class Delivery in Art Museums

There are four parts in this section. The first touches on the preparation of two art classes. The second compares and contrasts the preparation and delivery of the two groups. The third introduces the "reflection-on-action", and how it is adopted in this project. The last observes and analyses the beliefs, theories, and practices of participants behind their teaching by viewing the selected video excerpts with questions designed on the basis of the theory of reflective practice.

Art Class Preparation

Participant Selection and Preparation. Two artists, two museum educators, and two primary school teachers were invited to deliver the art classes. There were three appropriate reasons to select them as participants at the stage of the art class delivery. Firstly, they joined the workshops and co-designed the new conceptual framework together. Secondly, they all had the experience of working with children either in schools or in some public institutions[90]. Finally, after I shared the findings of the workshops with them, and explained my plan of delivering the art classes based on the framework they co-designed, they expressed strong interest to engage in the art class delivery.

They were separated into two groups and delivered the art classes in two different art museums. Each group included one artist, one primary school teacher, and one museum educator. Before starting the art classes, artists, museum educators, and primary school teachers had a meeting in the respective art museums. They first had a tour of the exhibitions they were going to use for the art class. Secondly, they discussed and prepared the art class based on the new conceptual framework of an art class they had co-developed.

Participant Pseudonyms. Although all the participants agreed to use their actual names, they were all given pseudonyms due to the small size of their field and associated institutions.

[90] The selected artists for the art classes delivery participated in both workshop and interview. The selection of the artists was discussed in Chapter two.

	Group 1	Group 2
Artist	Karen	David
Museum educator	Melissa	Emily
Primary school teacher	Claire	Maria

Table 4: *Participant Pseudonyms*

Art Museums Selection. The art museums the students visited are the same locations where participants joined the workshops, and two of the selected museum educators work in these museums. Both art museums focus on contemporary art and provide extensive educational programmes for schools. These two art museums are located in a multicultural community but in two different districts.

The Exhibitions Selection. Through the discussions between participants, there were two exhibitions chosen for art classes. Due to the small size of the field of museum education and the distinctive nature of each art museum, the exhibitions are likely to be identifiable if the specific titles and contents of the exhibitions are provided. To help understand the entire process of the art classes, the themes of the exhibitions are given broadly. The exhibition selected by Group 1 related to ceramic artworks in connection with shared Māori and Moana kinship across the Pacific. Group 2 selected an exhibition with respect to a choose-your-own adventure inside a technological world.

The Basic Situation of the Two Classes. Two classes were selected from the same primary school. Both teachers participated in the workshops and co-created the conceptual framework with other participants. While the school is located in a largely Māori community, the ethnicity of students is mixed. The basic information on these two classes is presented below.

	Class one	Class two
The number of students	20 (13 girls + 7 boys)	20 (10 girls + 10 boys)
Age group	Around 9-10 years old	Around 8-9 years old
Ethnicity	Māori, Pacific People, Asian, Fiji-Indian, European	Māori, Pacific People, Asian, German, Dutch-Māori
The rate of visits	Once a term (depending on the school's schedule)	Once a term (depending on the school's schedule)
Adult accompanying	1	1

Table 5: *The Basic Information of Two Classes*

Art Class Recording. Processes, including the preparation, the delivery, and the reflection-on-action regarding the art classes of the two groups were video-recorded. The recordings of the delivery of the art classes primarily focused on the behaviours and languages of artists, museum educators, and primary school teachers, rather than the students attending the art classes[91].

The Role of the Researcher in the Art Classes Delivery. Gillham (2008) stated that, "observation deals not with what people say they do but what they actually do" (p. 1). In accordance with this statement, and the multiple roles I played at different research phases discussed in Chapter two, at this stage of the project I played the role of an observer to observe how the art classes were "actually delivered". As this collaboration involved three different roles, a single observer might neglect some details in the observation. Thus, another observer, whose research area involves discourse analysis, joined me in observing and documenting.

[91] The ethical considerations of video recordings were discussed in Chapter two.

Comparing the Two Groups' Preparation and Delivery

The collaborative preparations among these three roles helped to generally clarify the learning intentions and processes, and familiarise everyone with the ideas and views regarding the design of the activities. Prior to explaining the preparation and delivery of the two groups, I will offer a comparison of these two groups through a table.

	Group 1	Group 2
Learning intention	Keep it open	Visual literacy Thinking strategy
Curriculum link	Keep it open	Share ideas, feelings, and stories Explore various materials
Student-centred learning	Artist: ✓	Artist: ✓ (Surprise students)
	Educator: ✓	Educator: ✓
	Teacher: ✓	Teacher: ✓
Multisensory learning	Artist: ✓	Artist: ✓
	Educator: ×	Educator: ✓
	Teacher: ×	Teacher: ✓
Agency	Artist: storytelling	Artist: illusion drawing
	Educator: pattern printing	Educator: mirror illusion
	Teacher: clay making	Teacher: tessellating shapes building
Preparation before visit	Teacher: art museum online resources	Teacher: art museum online resources

Table 6: *The Comparison of the Two Groups' Preparation and Delivery*

In the course of their preparation, Group 1 did not clarify the learning intention and the link to the school curriculum. They planned to keep it open and let students lead the class. It seemed that they had acknowledged student-centred learning. Karen suggested that:

> We can do a little bit of instruction and guidance at the beginning and allow the kids to talk and express their ideas. Kids are brilliant. Through their conversations, we will know what they are interested in and what is important to them. If we give too much information, it could stifle their creativity.

The artist expected that the class could be completely open and wanted to give that right to the children, but Melissa disagreed with Karen, saying, "we do not have enough time. There are some structures and limitations in teaching". In addition, she noted that, "it is hard to handle a large number of students".

Although Melissa acknowledged student-centred learning, Karen's suggestion seemed not to change Melissa's ideas on traditional teaching styles. Eisner and Dobbs (1986) write that a standard process of museum education includes giving a tour, discussing artworks on the walls, asking questions relevant to artworks, and hands-on activities. They found that a number of museum educators have less interest in the innovation of museum education. I have described this stereotype as a 'tetralogy' [92] which is an approach frequently used by museum educators. The artist in their role in this collaboration generally prioritised students' voices and ideas.

> My philosophy about learning art in art museums is 'pull out' rather than 'stuff in'. Students are often taken for looking around the exhibition and reading the information. They even do not have enough time to stay and communicate with artworks in their own specific ways. They have already been stuffed with some ideas by the information. (Karen)

The divergence of opinions between the artist and museum educator on how to experience the art with children, to some extent, planted an unpredictable seed for the further development of this class.

Conversely, Group 2 put forward a clear learning goal, and a way to connect the art class to the school curriculum. They all agreed that student-centred learning is essential. Other than that, the artist proposed that surprising students is very important. "I think the primary purpose of this class is to keep surprising students and have fun with them" (David). In their well-

[92] 'Tetralogy' which was described in Chapter one metaphorically indicates the general form of art classes in art museums in terms of introduction – visiting – theme-related game – hands-on activity.

prepared plan, they decided to "gather students' responses to the exhibition without any explanation" (Emily). The artist suggested that, rather than providing a formal tour of the exhibition, they design a game to help students engage in the class. Students were divided into pairs. They started from each corner of the exhibition hall. One was blindfolded and the other guided him or her to walk in the light of the maze on the floor. The leading student needed to describe what they saw as much as possible. After the student who was blindfolded guessed what it was, they switched roles. The form of the game gave students a sense of curiosity to explore more in the exhibition hall, and it helped students build up trust between each other and challenged them to observe and express the information they saw in as detailed a way as they could.

David said:

> We do have a map about how to experience the art with students but it is very flexible. I want to hear what students want to say. I want them to teach me and lead me to see what they see.

They expected students' art learning to be like peeling layers off of an onion, letting students' curiosity and imagination guide them to discover what they most wanted to learn. In these two cases, it became clear that artists tried to break up the cliché of traditional teaching methods all the time and push museum educators and teachers outside their comfort zone. Emily, the museum educator, kept an open mind and was excited about new roles available by joining the art class. She said: "it is a very good experience for me to collaborate with different roles to examine and inspire my teaching".

With regard to the multisensory learning experience, artists often tried to design activities that integrated visual, haptic, and aural senses. In Group 1, Karen wondered, "are there any artworks students would be able to touch?" This was because she thought that, "students learn in very different ways that cannot be controlled by us. Some of them prefer to learn through touching. Sometimes sounds might inspire them for creation." Her suggestion was not supported by the museum educator due to the delicacy of the artworks. Thus, Karen took differently shaped and textured fruit, vegetables, pots, and small sculptures which were similar to the tactile feeling of the ceramics to satisfy students' curiosity. After telling stories about the kaupapa Māori embodied in these artworks, she asked students to touch and feel these samples and share their

own stories. She selected a waiata[93] using those samples as instruments, and they sang and moved their instruments to the rhythm of the music together. Smashing the pumpkin at the finale was the highlight of the entire class, and it was in concert with the story of the artist seeking her own culture and presenting it through art. Students recommended that one of the strongest boys in the class smash the pumpkin and then pick up the seeds inside. The artist compared the students to the seeds in the pumpkin, looking for their own culture and roots.

The other two activities were pattern printing, which was led by the museum educator, and clay moulding, instructed by the teacher. Pattern printing aimed to "help students explore their own identity and story in their design" (Melissa). In the process of this activity, the museum educator taught students how to do the pattern printing step-by-step, and showed her design as an example. Students drew patterns which were similar to the museum educator's example. After drawing, they were instructed how to paint colours on the image and print it onto the paper.



Figures 38, 39 & 40: *Activity 1 – Pattern Printing*

In the teacher's session, Claire taught them to make a pot with the clay.

> Clay is a new thing to them. The purpose of teaching them how to use the clay is to enable them to transfer the skills they get from the clay to other things. They can be flexible to connect what they already know to what they want to know. Beyond that, they can design different patterns on their pots to present their own special culture and identity. (Claire)

[93] Waiata (noun) is a word in the Māori language meaning "song". https://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=Waiata

She took off a chunk of clay and separated it into smaller pieces. Students were asked to describe the texture of the clay. Students then followed teachers' procedures to complete a pot. At the stage of creating decorative patterns, students were allowed to design by themselves. Without providing the example of patterns, students were able to create various styles of patterns, and there was a unique story behind each design. The designs of each student from the teacher's group were not similar to each other or to the one the teacher made. Designing different forms of patterns to reflect the students' own identity and culture on their craft was the core principle of the museum educator and teacher's sessions. Both teacher and museum educator preferred to instruct step-by-step, but the teacher allowed students to exert creativity and imagination to create their own patterns. However, in contrast to the teacher and museum educator, the artist enabled students to feel and experience the art through different art forms.


Figures 41 & 42: *Activity 2 – Clay Making*

In contrast to Group 1, the artist in Group 2 used notions of multisensory learning from the beginning to the end. David said:

> The core purpose of designing the game was to make students feel engaged and fun [*sic*], and to stimulate their creativity and imagination. When they describe the image in front of them, they need to observe the features of an image and try their best to transmit the information to the students whose eyes are blindfolded; the students guessing the image must exert their imagination to shape a possible image based on their partners' descriptions. Sometimes, the blindfolded students after removing the patch may find that what their partners depicted is quite different from what they imagined. Then it will surprise them and stimulate a dialogue between them about what the image is and why it is different from the description.

Besides, “we want students to become familiar with the environment of the art museum through exploring by themselves” (Emily).

The knowledge and skills the artist, museum educator, and teacher expected the students to learn are involved in the game. Describing an image is not easy for students, and in the process of the game, trust and responsibility are gradually built up. Moreover, the vocabulary used to describe an image must be selected properly and carefully if they want their partner to imagine what the image is. Other than seeking appropriate vocabulary, they need to find a way to express themselves, and if they want to do this adequately, they will use their creative and imaginative mind to connect the image to another similar thing. Students’ senses in terms of visual, acoustic, verbal, and physical, are simultaneously activated. David, Emily, and Maria expect that “all the skills students practice and learn in the art museum will transfer and reflect back into their life” because they consider students’ learning as a long-term development rather than simply the completion of a task.

In the collaborative conceptual framework, they put forward the importance of preparation, not only the preparation for the class but also the preparation before the students’ visit in the classroom. Both primary school teachers presented the art museums’ online resources, such as videos and photos of the artworks, to the students prior to visiting the art museums. “We talked about the historical and cultural background of the exhibition. Students’ curiosities have been aroused before going here. They could not wait to understand more about the exhibition and artist” (Claire). The preparation in the classroom motivates students’ curiosities and interests to explore more in the art museums. Maria expressed that “we have limited time in the art museum. We did small research in the classroom, then it would save more time to have fun in there”.

In summary, through the comparison between the two groups, it can be seen that the concept of student-centeredness was supported and advocated across both groups, although there were times when the learning processes did not follow this aspiration. It is not uncommon to hear this phrase among teachers and museum educators. A concept can be advocated in advance, whereas it becomes less evident once the class begins. Conversely, the two artists in group 1 and 2 both considered what the students were interested in, how to motivate the students’ curiosity to explore and discover, and how to make students feel engaged, by constantly

surprising them. Additionally, the two groups presented two different formats for teaching. There was no structure and plan in the first group. They kept the learning goals and school curriculum links open, to alert their teaching pedagogies in the light of students' requirements. The second group had a well-structured plan to address the class. Based on the preliminary analysis at the stage of preparation, the plan of non-structure probably would not have been as ideal as the plan with the lucid learning intentions and clear connections to the school curriculum. However, the subsequent findings will be discussed after analysing and comparing them with the reflection sessions.

Furthermore, the artists in both groups emphasised and focused on multisensory learning. They believe that only visual learning cannot satisfy students' curiosity and creativity, and the more all the senses are engaged simultaneously, the more powerful the students' experience would be. The primary school teacher and museum educator in the second group, mirrored the same roles of the first group, accepting and supporting the artist's ideas on developing multisensory learning in their art class. In the first group, Melissa, from the perspective of protecting the artworks, refused to "mess up the exhibition hall". Claire agreed with her and did not "see touching as a part of students' learning experience". Nonetheless, both primary school teachers were cooperative and provided contextual information on the exhibitions before the visit. There were some differences between the two groups which became evident in the preparation and delivery stages. However, it is difficult to make conclusions merely through these initial observations. More extensive thoughts will be developed in the reflection sessions.

Reflection-on-action

This section presents the results of reflective practice amongst artists, museum educators, and primary school teachers in response to the last phase of delivery in the Double Diamond design process[94]. Through this process, different ideas on designing and delivering the art classes amongst the three different roles have been revealed. There are limitations in terms of data and analysis of the participant's responses, because the researcher cannot have access to all of their subjective thoughts, but the process of inviting reflection on action (teamed with the

[94] How the Double Diamond design process applied in this study was discussed in detail in Chapter two.

observation, and analysis of the participants responses through verbal, non-verbal and written responses), offers valuable insights.

"Reflection is an active process of exploration and discovery which often leads to very unexpected outcomes" (Boud et al., 2013, p. 7). Reflection stresses practitioners' initiative to explore and discover their practice, and can evoke new or unpredictable perspectives on diverse aspects; it involves reflectors' emotion, intuition, and passion (Zeichner & Liston, 2013). Dewey (1997) in his book *How We Think* distinguished two types of actions. He defined routine action as that which is primarily driven by authority and tradition, but reflective action he defined as mostly influenced by individual thought and critiques. In the light of Dewey's definitions, it has been observed that routine action imposed by an external authority is more likely to accomplish goals and tasks, thus considering self-reflection as a tool to complete a reflective task makes reflection mechanical and meaningless. It is a kind of repetition of post-class summaries without considering the entire teaching process in greater depth, and from differing angles. It gives rise to the formalisation of reflection more than content; and reflection remains superficial. It has not explored the influences of practitioners' individual experiences with respect to what motivates their teaching, what their beliefs are towards the teaching, what pedagogies they use for teaching, and the intentions behind their activities.

Proponents of reflective action argue that personal beliefs, emotions, and intuitions, to a larger extent, must affect teaching. Therefore, Dewey encourages practitioners to self-reflect on the practice of teaching continually and critically. Reflection is not only considered as a way to break up stereotypical thoughts and actions, but also is a process of "continual reorganisation, reconstruction, and transformation of experience" (Dewey, 1986, p. 50) and creating new meanings of experiences. Similarly, Silcock (1994) explained that "reflection is a way of converting ready-structured experiences into the newly structured actions we call professional practice" (p. 278).

The Forms of Reflection. The forms of reflection include written reflection and video reflection. By comparing written reflection with video reflection, some researchers found that written reflection is more focused and intensive than video reflection (Welsch & Devlin, 2007; Shepherd & Hannafin, 2008). Written reflection rooted in memories are mostly founded on reflectors' personal impressions and feelings, which may not be accurate, and the signature

phrases such as “I feel…”, “I think…”, or “I guess…” are frequently used by teachers in their memory-based reflection (Rosaen et al., 2008). This implies that uncertain elements are blended in their memory. Nevertheless, the use of video recordings presents evidence and facts (Wang & Hartley, 2003; Sherin & Van Es, 2005; Tripp & Rich, 2012) helping teachers recollect teaching episodes. One of the teachers in Rosaen et al.’s (2008) research said, “the video gives me evidence to look at my teaching as others see myself [*sic*]” (p. 354). Sherin (2003), and Roche and Gal-Petitfaux (2014) commented that video reflection does not sacrifice “authenticity”. In addition, details, teachers think they remembered properly, could be different from what they see in the videos (Baecher & Connor, 2010; Harlin, 2014; Gaudin & Chaliès, 2015). Furthermore, some interactions with students, which might be out of the range of the teacher’s vision in class, can be observed when they view videos (Snoeyink, 2010; Zhang et al., 2011). More importantly, teachers, in the course of video reflection, focus more on students’ learning and thinking rather than themselves (Yerrick et al., 2005).

The Benefits of Video Reflection. The benefits of video reflection make it an effective method, conducive to practitioners’ reflection on their practice. Firstly, video reflection gives teachers opportunities to critique and improve their teaching practice (Borko et al., 2008) and their action and language in class (Coffey, 2014). Viewing videos, additionally, provides different perspectives for teachers to reflect on their teaching routines which are familiar to them (Putnam & Borko, 2000) and develop new teaching forms (Tripp & Rich, 2012). The effects of these benefits on the changes and improvements of teachers’ teaching practices, after applying the videos in their teaching reflections, have been confirmed in several studies (Storeygard & Fox, 1995; Wedman et al., 1999; Shepherd & Hannafin, 2008). Hougham (1992) did a study comparing teachers who reflected on their teaching with the assistance of the video with those who didn’t incorporate video in their reflective process; he broadly concluded that video reflection helps teachers promote their tactics of question-asking. Later, in Sherin and Van Es’s (2005) investigation, they specified which aspects teachers changed after using the video reflection. The major shift was from the focus of what teachers were doing in the video to a focus on students’ behaviour and thinking. Viewing video also provides opportunities for teachers to pay close attention to students’ expression and behaviour in class. Concentrating on students’ thinking, Franke et al. (1997) also have concluded, helps practitioners make valuable changes in their subsequent teaching practice. The shift “from evaluation to interpretation” (Sherin & Van Es, 2005, p. 485) was considered as another important change.

Previously, teachers preferred to use evaluative comments on classroom teaching or students' behaviour in the written reflection, whereas, upon transferring to the video reflection, they started trying to interpret their teaching intentions or teaching methods.

Brookfield (2017) highlighted that video reflection is an important way for teachers to reflect upon their concealed beliefs, intuitions, and emotions behind daily teaching routines and thus an irreplaceable manner of promoting teachers' professional development. However, Karl and Kopf (1993) argued that, although video reflection benefits teachers in diverse ways, there is no evidence for the assumption that, the more teachers view their behaviour, the more they are going to change it. Also, no research has indicated how many times participants need to reflect, the number of participants in terms of individual reflection or collaborative reflection, and whether each reflection should remain with the same focus or needs to be changed (Tripp & Rich, 2012).

In line with this study, the real purpose of reflection through the medium of the video, I suggest, is not so much recognising actions and language, but more importantly, the willingness to acknowledge and transform mindsets. Therefore, although it certainly does not guarantee that they will abandon routine teaching, considering the benefits of video reflection, this project adopted the form of video reflection at the stage of the reflection-on-action sessions. Changing of a mindset might not happen due to a one-time reflection, but this research observed that, artists' creative ideas while collaborating with the other team members, more or less pushed museum educators and primary school teachers out of their comfort zones and was effective and memorable in terms of provoking them to think differently about their practice.

Collaborative Reflection. Individual reflection is a commonly used tool among teachers. Several studies employed the form of individual reflection via writing reflective comments or essays and viewing video clips (Halter, 2006). Most of them, however, did not indicate whether participants benefited from this reflective process (Tripp & Rich, 2012). Along with individual reflection, collaborative reflection has prevailed as the process of choice more recently. The benefits of collaborative reflection have been highlighted to help teachers examine and notice their teaching practices (Grainger, 2004) and optimise their teaching and learning (Boud et al., 2013). In addition, teachers are able to see their mistakes, which they did not notice during individual reflection, through their peers' eyes (Tripp & Rich, 2012);

recommendations and suggestions, proposed by peers, are considered the most effective components in prompting them to change (Rich & Hannafin, 2008).

Peer review, albeit more productive and valuable than individual reflection, sometimes has its own limitations. People from the same field are often trained in similar ways so that similar ideas and opinions could be dominant; whereas, others in diverse roles may hold different views and this may help individuals reflect on their practice by incorporating other perspectives. Osterman and Kottkamp (1993) explained that:

> Because of the deeply ingrained nature of our behavioural patterns, it is sometimes difficult to develop a critical perspective on our own behaviour. For that reason alone, analysis occurring in a collaborative and cooperative environment is most likely to lead to greater learning. (p. 25)

Accordingly, the collaboration, through co-design and collaborative reflection amongst artists, museum educators, and primary school teachers in this study, provided not only the opportunity for them to hear suggestions from people in other fields, but also the inspiration to critique their own practices.

Time and Location of the Reflection Sessions. Formal reflection often occurs after the class but not after more than a week, and is under the direct guidance and structure imposed by the leader (Boud et al., 2013). However, in this study, formal and informal reflection were naturally mixed due to unexpected data sometimes surfacing during informal conversations with participants. Some informal debriefings happened immediately after the class, and the formal reflective debriefings occurred five days after the art classes. This process provided primary school teachers enough time to continue learning in the classroom with students; and additionally, enabled practitioners to refresh their minds. Each reflection lasted around 90 minutes. The practitioners reviewed the video clips of the art classes and were asked some questions with reference to the video excerpts. The reflection sessions occured in the same art museums in which the artists, museum educators, and primary school teachers delivered the art classes.

The Role of the Researcher in the Reflection Sessions. In considering processes of reflection, many researchers have concluded that teachers need systematic guidance during reflection procedures (Collins et al., 2004) because providing guidance helps enhance the

quality of their reflections (Fox et al., 2007). Those who guide the reflection processes may include experienced teachers (Fadde & Sullivan, 2013), academic supervisors (Arya et al., 2014), or other researchers (Sherin & Van Es, 2005; Gaudin & Chaliès, 2015). It is not uncommon to conduct research systematically and scientifically, but it does not indicate that researchers should stick to their role as a researcher to maintain equitability. Conducting research involves meeting, talking, and sharing experiences with different people, and it both influences your ideas and reveals unexpected episodes.

In the reflection sessions of this study, I did not position myself solely as a researcher. I changed my roles according to different situations. In the reflection sessions, rather than a "commander" with authority and power (Boud et al., 2013), I played the roles of a facilitator, a moderator, and a participant; sometimes motivating participants to share knowledge and ideas with reflective questions, and sometimes integrating and highlighting important points to arouse deeper discussions. Reflecting upon the positions I undertook, from the workshops and art classes delivery to the reflection sessions, it was challenging for me to switch roles at the beginning. The participants sometimes discussed something off-topic. The specialist from Toi Āria oversaw my first workshop and advised me about ways to guide participants back to the topic-in-hand topics, and how to shift from one topic to another. I felt more confident and comfortable after the first workshop. Playing multiple roles helped me better engage with participants and reflect on the development of the project.

The Preparation before the Reflection Sessions. Before starting a reflection session, I reviewed the entire video at least three times. The first time was to browse the video, from the beginning to the end, to understand its length, its turning points in terms of the change of topics, the beginning of discussions, and the interactions between the participants. The second time, I paid specific attention to the practitioners' behaviour and language, and how these were manifest across the three different roles in relation to particular behavioural expressions and usage of language. Selecting the excerpts with the assistance of a multimedia editor and making written comments (Rosaen et al., 2008) for data analysis, were the final stages in reviewing the video.

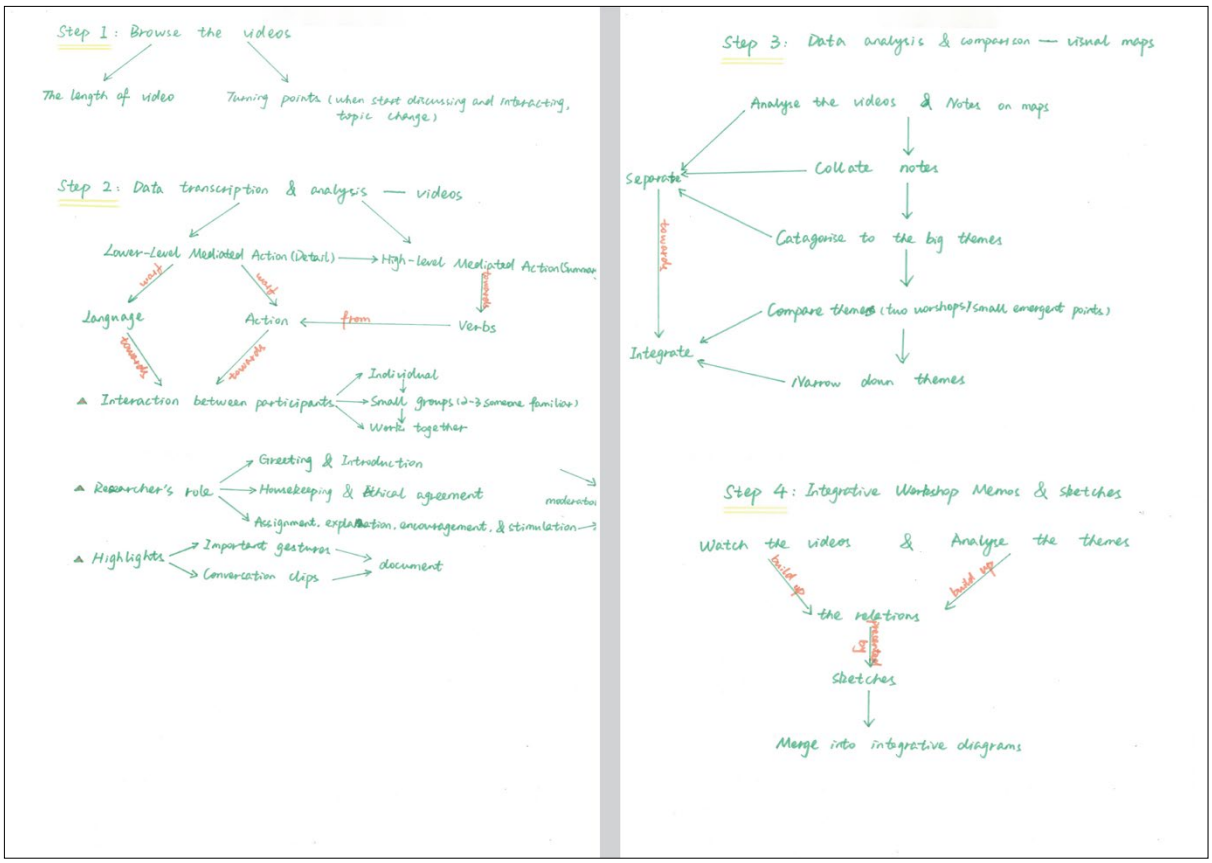

Figure 43: *The Videos Data Process and Analysis*

With regard to the video length for reflection sessions, Pailliotet (1995) argued that completing a reflective session by viewing a whole video is impossible because it is time-consuming. Sharpe et al. (2003) suggested that the length of the video used for reflection should be longer than three minutes, whereas they did not limit the maximum. Alternatively, the videos can vary from a two-minute excerpt (Blomberg et al., 2011; Fadde & Sullivan, 2013) to an entire lesson (Yung et al., 2007; Viiri & Saari, 2006).

It is difficult to standardise the length of the video since there was no research comparing the influence of the video's length on teachers' capacity to reflect upon their practice (Gaudin & Chaliès, 2015). As mentioned by many researchers, reflection needs to be under the guidance of researchers, hence the length of the video should depend on the different types of research and the questions that researchers plan to explore. Determining a standard of video length is difficult due to changes in research and requirements of researchers, but, considering the limited time of the entire reflection session, viewing video clips from two to seven minutes is recommended by most researchers (Calandra et al., 2008; Star & Strickland, 2008; Santagata

& Angelici, 2010). In the light of the aforementioned researchers' suggestions and the situation of my research, the video clips in this study ranged from two to five minutes. It provides enough time for practitioners to recollect their practices and, at the same time, prevents practitioners from losing focus due to excerpts being too long.

The Design of the Reflective Questions. Some questions were designed based on the video excerpts. It has been suggested that debriefing should start with non-threatening questions, and before viewing the actual videos. Such initial questions, could focus on shared experiences and actions, or highlights of the class or the in-class activities (Boud et al., 2013). They enable participants to recollect the class generally, and pave the way for deeper reflections. The design of the questions, in these two reflection sessions, conforms to Dewey's (1997) and Schön's (1984) theories of reflective practice; i.e., from the development of beliefs, principles, theory, practice, and beyond practice, yet it is slightly changed in the light of the core themes discussed in Chapter four. The purposes of these reflective questions are: firstly, to enable participants to reflect on their teaching at different levels in terms of descriptive reflection, conceptual reflection, and critical reflection (Schön, 1984); and subsequently, by analysing the responses, to examine themes emerging from the interviews and workshops. These questions were trialled by two primary school teachers who did not participate in the art classes, in order to test whether they were understandable. In line with Miller's (2009) and Zeichner and Liston's (2013) suggestion that, to obtain reflectors' real expressions and emotions, researchers should not send the specific questions prior to reflection, the topics relevant to the questions were sent to the participants in the form of statements two days before starting the reflection sessions.

A table to illustrate the connection of the reflective topics and the selected video excerpts follows.

Topic 1: Describe your role in the art class.	
Group 1 Video excerpts (Nil)	Group 2 Video excerpts (Nil)
Topic 2: Describe the teaching pedagogies you used in a series of activities.	
Group 1 Video 1 (09:28:00-09:31:30) Video 2 (09:35:45-09:38:10) Video 3 (00:00:00-06:45:00)	Group 2 Video 1 (14:45:00-16:30:30) Video 2 (04:25:10-06:30:00) Video 3 (09:20:10-11:20:26/ 16:50:00-18:05:30)
Topic 3: Your purposes for designing activities.	
Group 1 GoPro (09:40:20-11:30:00) Video 4 (02:00:00-05:30:00) Video 5 (00:00:00-04:30:00)	Group 2 GoPro (10:00:00-12:50:00) Video 4 (04:00:00-06:40:30)
Topic 4: Reflecting on the implementation of the conceptual framework.	
Group 1 Video excerpts (Nil)	Group 2 Video excerpts (Nil)

Table 7: *The Connection of the Reflective Topics and the Selected Video Excerpts*

After reviewing all the videos, I selected and extracted the video footage that the participants would view in the reflection sessions. Due to using two video sources (one 360° Go-Pro camera and one Nikon DSLR camera[95]) during the art classes, the videos for the reflection were chosen from both sources. The selected video excerpts were coded as Video 1, 2, … 5 as shown in the table. The first and fourth topics are general reflections on the art classes, thus, the participants do not require the assistance of videos. The specific reflective questions will be presented along with the processes of reflection in the following sections.

Comparing the Two Groups' Reflection Sessions with the Reflective Questions

This part unpacks the comparison of the reflections between the two groups to the reflective questions. The reflections of the two groups are also compared with their preparations before the art classes. A table was provided before analysing the reflection sessions to help understand which aspects the participants reflected on generally.

[95] The equipment selection and setup were discussed in Chapter two.

	Group 1	Group 2
Learning intention	?	✓
Curriculum link	?	✓
Student-centred learning	Artist: ×	Artist: ✓
	Educator: ×	Educator: ✓
	Teacher: ×	Teacher: ✓
Multisensory learning	Artist: ✓ (Tactile, acoustic, visual, verbal)	Artist: ✓ (Physical, acoustic, visual, verbal)
	Educator: ×	Educator: ✓
	Teacher: ×	Teacher: ✓
Roles	Artist: facilitator	Artist: multiple roles
	Educator: educator	Educator: educator
	Teacher: from facilitator to observer	Teacher: multiple roles
Teaching pedagogies	Artist: ×	Artist: ×
	Educator: unclear	Educator: scaffolding
	Teacher: instruction	Teacher: instruction
Alter pedagogies	Artist: ×	Artist: ✓
	Educator: ×	Educator: ✓
	Teacher: ×	Teacher: ✓
Exploration in the exhibition hall	×	✓
Interactive learning in the exhibition hall	✓ (traditional)	✓ (creative)
Interactive learning in the educational room	×	×
Complementarity	Artist: ✓	Artist: ✓
	Educator: ✓	Educator: ✓
	Teacher: ✓	Teacher: ✓

Table 8: *The Comparison of the Two Groups' Reflection Sessions*

Descriptive Reflection. The reflection started with a descriptive task; the participants being required to use a metaphor to describe their role in the co-devised art class, and to subsequently suggest the significance of the choice of such a metaphor. “Metaphors bear the images or conceptions teachers hold of themselves as teachers, [*sic*] their professional identity” (Bullough et al., 1991, p. 7). Metaphors make connections between the concrete and the abstract (Kerchner, 2006) examining how participants identify themselves in teaching beyond their original roles as artists, primary school teachers, or art museum educators. More importantly, it can give insight into the beliefs behind the teaching (Hilton, 2006). Belief is the agent of the action (Macnamara et al., 1988), and our basic beliefs drive our daily action and practice (Jay & Johnson, 2002). Teachers’ beliefs affect their actions and thoughts in teaching (Hentschke & Del Ben, 2006). Reflective practice often derives from beliefs in a small or simple activity that influences teaching (Hilton, 2006). In keeping with the suggestions of other scholars, I suggest that artists, museum educators, and primary school teachers’ teaching is affected by their beliefs, experiences, assumptions, knowledge, and values; and that these influencing factors, as Zeichner and Liston (2013) stated, can be re-examined and critiqued by engaging in reflection-on-action.

The Reflection of Group 1. In Group 1, although Melissa, the museum educator, supported student-centred learning and was ready to keep any connections to the learning intentions and the school curriculum open, she insisted on her traditional teaching styles when conducting the art class. Before initiating the reflection session, Melissa plainly expressed that “the art class was not creative” and reflected that “I was not pleased about what I did in the class. I had no plan for the class because I did not have time to do that”. Concerning Melissa’s attitude to teaching, Mayer (2007) has suggested that “the educator must project sincere interest in the students. Such qualities as empathy, patience, and appreciation are needed” (p. 192). Not only the attitude and interest of museum educators but also those of the teachers and artists directly impact on the entire class.

Richert (1992) has pointed out that after many years’ teaching, teachers often rely on what they know, what they believe, and what they experience when they teach, rather than updating and complementing their current practice with newly gained insights. These routine and cyclic processes of preparing, planning, arranging, and teaching make them seldom reflect and

critique their own teaching (Day, 2002). The ready-made knowledge and activities save plenty of time and are manipulated more easily.

This was demonstrated indirectly when Melissa described her own role in class. She commented: "I was part of providing the exhibition. I think I gave more context about the exhibition as an educator. I am just a representative of the art museum usually". Identifying herself as a museum educator and an official representative of her workplace could be argued as reflecting her veiled beliefs towards teaching. I consider whether the aim of the art class for Melissa, rather than experiencing art with students, was to complete a mission for her job, as the student-centred learning seemed not to be present in her teaching.

Conversely, Karen, the artist, expressed that:

> In terms of my role, I consider myself as connecting everything, kind of building up relationships between different areas such as students' contexts, lives and different subject matters, letting them see the art in a big picture. I would like to describe myself as a facilitator.

As Karen undertook the varied tasks required in the class, she was trying to observe, see what the students knew, and deepen their understanding by asking them questions to help them build up and develop knowledge. Her beliefs behind the teaching were reflected in how she approached teaching.

Claire, the primary school teacher, described her roles at the two different stages of preparation and afterwards:

> I would say at the preparation [*sic*], I played the role as a facilitator, helping students understand the background of [*sic*] the exhibition; afterwards, I played the role of an observer. I stood outside and asked the children to lead the class. I think I changed my roles from the beginning to the end. (Claire)

Claire considers "art is a springboard to connect to every subject" and believes "she can put art in every subject", and she regarded herself as an assistant to the students and allowed students to be in charge of the class when they returned to the school. Claire's beliefs in student-led teaching and the substantial influence of art in other subjects prompted her to attempt new ways of learning art with students.

The Reflection of Group 2. Group 2 presented their collaboration more enthusiastically and positively than Group 1. In the later reflection session, David, the artist, stated, "I would describe myself as a facilitator. I also feel like I was a participant. I always treat children as artists. We were creating artworks together. I would say I played multiple roles". His point of view was supported by the primary school teacher. Maria said, "I think it totally depends on the children. Children were leading everything. We were there to experience and learn with them. It is a kind of inquiry learning. You need to change when children change". Emily, the museum educator, at the beginning did not directly express her opinion on the changing of roles. Instead, she said:

> In the museum, we are often asked to link art programmes to the school curriculum and achieve learning goals. I still remembered that beautiful moment on that day. After the class, I shared that memory with my colleagues and realised that if you overprotect it, you cannot appreciate it. If you stick to the plan tightly, you will never get unexpected moments. Children take us to explore and discover more art forms that we never noticed before.

Inherent in Emily's words, a conservative plan could be another aspect hidden behind routine teaching. Britzman (2012) has commented that, due to their confidence placed in a well-prepared teaching schedule, educators often worry once their plans go awry, and the first thought that arises is, "why did I not exactly follow up the plan, rather than reflecting on the complexity of teaching pedagogies and the change of students". The unexpected learning episodes would not emerge with too prescriptive guidance (Kind & Kind, 2007). If they stuck to the plan, they would not encounter this spontaneous moment. Although Emily did not clearly state her roles, her articulation indicated that her beliefs towards teaching were temporarily changed under the influence of the collaboration with the other two roles.

In summary, I surmise that the participant's beliefs behind their teaching were exposed through their responses to being asked to describe their roles metaphorically. The opting for processes of routine teaching could derive from the pressure to complete tasks quickly in order to achieve a lesson plan or from a fear of addressing situations which are out of their control. Although educational policy and systems provide a fundamental framework as a guidance for museum educators and teachers, it does not take into account personal attitude and passion in relation to teaching. The authority and policy of the educational system seem to be considered as a

'protective umbrella'[96] once their beliefs behind teaching do not necessarily align with their teaching methods.

Conceptual Reflection. After a descriptive task employing metaphors to clarify beliefs behind the teaching, the second question was designed to examine the theory behind the practice. Teaching pedagogy, as one of five themes, was discussed in Chapter four. In line with the discussion of the teaching pedagogies, the purpose of designing the questions for conceptual reflection was to examine how the participants identified the teaching pedagogies and theories in their practices, and whether they could alter teaching pedagogies to reflect the change in students' interests and needs. With the specific activities presented through the video excerpts, the leading question was, "which teaching pedagogies did you apply in those activities?" Another sub-question was, "were you able to alter your teaching pedagogies to fit the needs of the students during the class?".

The Reflection of Group 1. In the exhibition space, Melissa, without collaborating with the other two teaching participants, completed many activities such as body movement, seed exploration, artists introduction, and drawing. When asked about the teaching pedagogies used in these activities, Melissa replied:

> I used the same forms to teach other students with my colleague before. We want to bring a lot of learning skills for kids [*sic*]. I try to cover two or three different ways of engaging kids and different learning styles in my teaching.

Melissa realised that she should include different types of teaching, but could not specify the theory behind the teaching pedagogies. She believes that trying to apply as many teaching styles as possible would always achieve learning goals and outcomes. Subsequently, she was asked the sub-question to understand whether the students' needs and interests were considered as the centre of learning. She said, "not in there (the exhibition hall). That is why we have a space like this (the educational room). I noticed that I did not allow them to move around in the exhibition hall". The responses to this question initially seemed irrelevant to the original

[96] 'Protective umbrella' in this paragraph indicates that museum educators and teachers sometimes use the suppression of authority as an excuse if they are not satisfied with their teaching.

purpose of this question, but they, in fact, indirectly reflected the fixed routine teaching again. What Melissa said was that the same teaching forms were adopted to teach other students.

Zeichner and Liston (2013) stated that, "we may value the child's perspective and still insist that certain bodies of knowledge and skills need to be conveyed and mastered. In teaching we tend to mix some of the different traditions together" (p. 52). Completing the procedures of a class is often assumed to address the interests and needs of students, and combining several different activities is assumed to complete transmission of the knowledge and skills. The activity of pattern printing led by the museum educator still followed a traditional teaching mode in that students were asked to mimic their instructors' example. Melissa presented a pattern on the paper she made, then asked students to make a pattern in the light of their own identity and culture. It was not surprising that patterns drawn by students were similar to her example. In contrast to the conventional teaching mode of the museum educator, the primary school teacher said: "I taught them how to make the pot with clay, step-by-step, and let them design the pattern based on their own culture" (Claire). It seemed that a traditional relationship between teachers and students leads them to believe that the students need to be taught step-by-step to align with a demonstration or prescribed exemplar.

Although Claire let children design their pot by themselves and share ideas along with stories behind the design, because of her beliefs on learning art, she might not realise that her identity as a trained teacher had unwittingly impacted on her teaching process. Karen indirectly helped Claire reflect on this point. Claire admitted that:

> I think my situation is a little tricky because I am an artist and a trained teacher. As the role of a teacher, I know what I should follow to teach students; but as an artist, I want children to make everything creative. I want them to be a creator, not a duplicator. I know art is not about education, it is about how you can make your own thing. You need to value kids' opinions and let them say what they see and hear. But, my training experience more or less impacts my teaching.

Karen implied that as a trained teacher, she has been instructed to teach children step-by-step. As has already been noted, research argues that teachers' manner of teaching usually reflects how they were taught (Grossman, 1990; Bullough et al., 1991; Dollase, 1992). Knowles (2003) reflected that teachers, to a large extent, replicate the teaching patterns of the teachers who inspired and influenced them. Accordingly, it seems that traditional teaching processes, taught

by teacher training colleges, could be adapted but not erased. Once museum educators and teachers get used to these traditions, by practice, signature pedagogy, with the increase of teaching experience, becomes more effective than a theory.

The Reflection of Group 2. A similar answer about step-by-step teaching and learning was stated by the primary school teacher in Group 2. However, not surprisingly, David, the artist, said, "to be honest, I do not know what teaching pedagogies I use. I am an artist. I just want children to feel and experience art, rather than teaching them something". Without the background of a trained teacher, David has no idea about what pedagogy is or what structure should be followed to teach children. "As an artist, making children feel art is my philosophy" (David). Emily summarised that "the pedagogy which is prevailing recently is scaffolding. That is a pedagogical word". But, when she was asked to embody this pedagogy in teaching practice, she replied that, such embodiment included, "linking it to the school curriculum and instructing students to build up their own knowledge". These responses indicate that the core of the named teaching pedagogy may not be well understood, and that the school curriculum can be used as a shield when instructors struggle to name or articulate their pedagogical approach.

Even though Emily's attitude to the pedagogy was ambiguous, there was an expectation that the traditional teaching mode would change through her engagement in the different roles. A spontaneous moment in class demonstrated a change in Emily's opinion, and demonstrated that, the engagement of an artist within the collaboration broke up the plan, and shifted the dynamic from teacher-led teaching to student-centred learning. At the time, in class, there was a student exploring and discovering a new form by playing with a bunch of kids. When they were talking in front of a piece of artwork, one boy suddenly found that the reflection of the artwork was projected onto his friend's face. They then proceeded to put their hands, arms, faces, and necks in front of the artwork, mocking the movement of the images on the artwork, and designing a 'tattoo' on their hands. This moment was quickly noticed by the artist. David was excited about their discovery and asked everyone to come and play with those moving images. The artist not only highlighted the children's discovery, but also relayed his curiosity and invited them to talk more about their ideas.

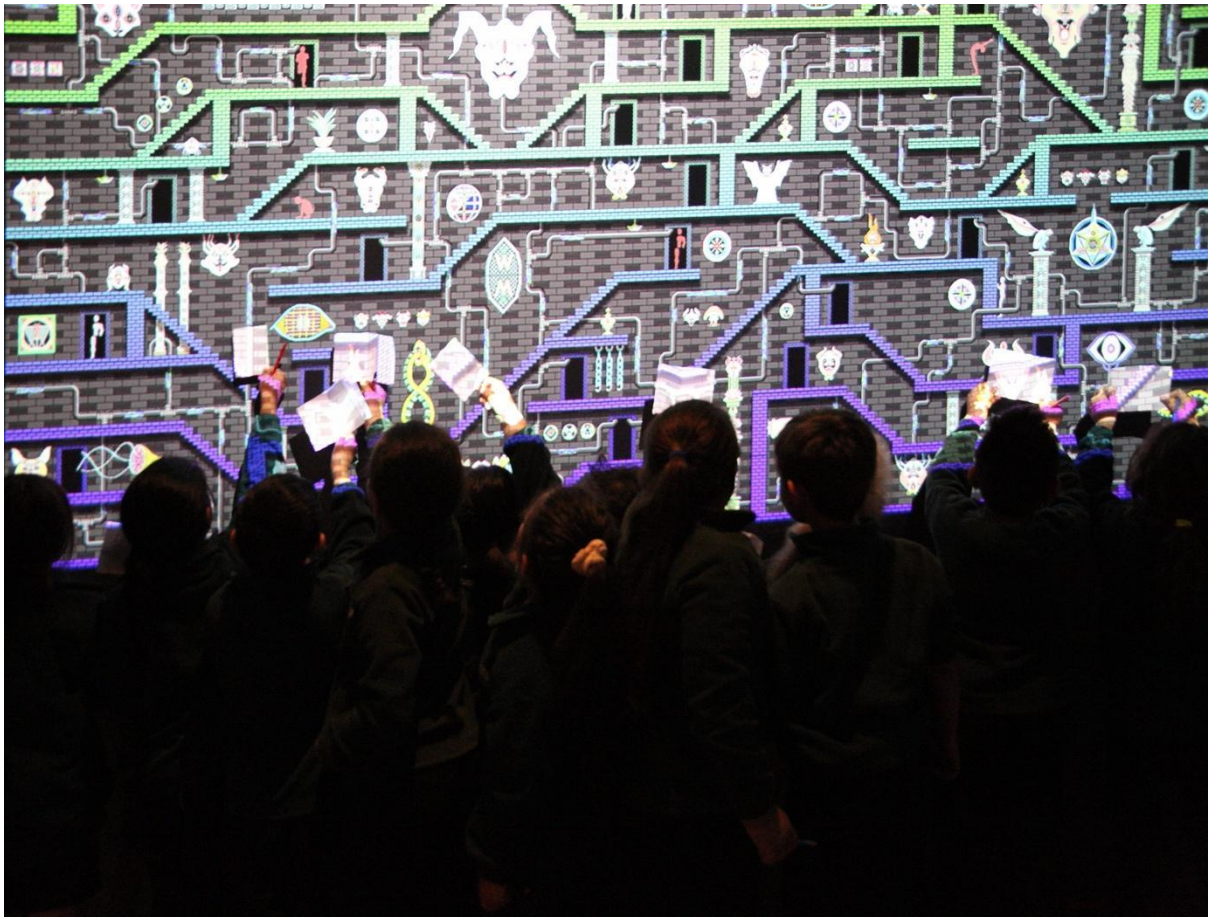

Figure 44: *Students Interacting with An Artwork in the Exhibition Hall*

Paley (1986) stated that when you begin to listen to and respect students' ideas, students will expose more ideas, then gradually start to critique their own opinions. They feel their ideas are being heard and valued by others who they respect, and a simple encouragement gives them courage to express more. It would be difficult to encounter this unexpected moment if the class had stuck to the well-structured procedures; it would be not easy to notice this unpredictable moment if the artist was not part of the class. Emily reflected that:

> Although you have a beautiful plan at the beginning, children will not go with your plan. They will direct you everywhere. We cannot keep them in a box and need to notice their changes. I might miss this spontaneous moment if I focused on finishing the class as usual.

The museum educator alone might not have altered the plan based on the students' discovery and may not have had a moment of critical reflection herself if she had not collaborated with the artist.

Through these case studies I observed that the trained teachers and museum educators, more or less, knew some pedagogical terminologies, but they did not transfer these theories into practice. This does not mean that theories are incomplete or that the teachers and museum educators are not capable of exploring them. It has been observed that it is frequently too difficult to reconcile the gap between theory and practice. Aronowitz (1991) has stated that although theory informs practice, practice is the most important agent for change. Particularly in art education, it has been observed that theories could not reflect on practice because art creation involves self-understanding and self-expression (Williams, 2000; Constantino, 2010), and associating with personal experience and culture (Jeffery-Clay, 1998), which reflect on personal practices (Jaffe et al., 2015), and therefore could not be instructed by theories (Collins & Sullivan, 2020).

To sum up, conceptual reflection focuses on how participants reflect theories through their teaching practices. This research observed that for the teachers and the museum educators, even if there was an expression of interest in child-led approaches, there tended to be a default to instruction-led processes, with a more prescribed outcome demonstrated through a supplied example and a step-by-step technical instruction. For the artists, teaching pedagogies did not take priority, unless they are asked to follow the structured or traditional teaching mode. Artists took the role of challenging and criticising authority and stereotypes. Conceptual reflection revealed the confusion of teachers and museum educators around teaching pedagogies, and demonstrated that collaborative reflection between different roles started gradually shifting the museum educator and teacher's insistence on patterned teaching procedures.

Critical Reflection. The reflection at this stage is to examine how theory instructs practice. Silcock (1994) stated that it is very difficult to lead practitioners from one level of reflection to another unless one realises the necessity of changing behaviours and minds. Through the descriptive and conceptual reflections participants completed, problems, with respect to the blurring of teaching pedagogies and the dearth of examples in particular for this form of collaborative reflection between different roles, can be detected. Considering the suggestion of Silcock and the problems that emerged from the first and second phase of reflection, it may not be easy for participants to achieve an advanced level of critical reflection. Due to the limited information supplied by the participants at this stage, I will combine the reflections of Group 1 and 2 together.

The Reflection of Group 1 and 2. The question at this phase was, "what do you expect students to learn in these activities?". In Group 1, participants started repeating similar answers they had given previously, or broadly promoted the purposes of these activities on language development. "I want kids to tell their own stories through my activities and asked them to explore their own cultures and identities" (Melissa), which was similar to the answer she provided at the stage of conceptual reflection, which also aligned with the answer given by the two primary school teachers. The answer of the museum educator in Group 2, despite not reflecting on the theory, explained reasons for designing activities:

> The purpose of the first one about the illusion drawing is to present how the artists use the illusions in their drawing and how they see things differently. The building structure is kind of responding to the artworks in the exhibition. I think there are a lot of sub-learnings inside. I try to add extra skills for them.

In these hands-on activities, learning new skills was the dominant purpose described by museum educators and teachers. However, the artists had different opinions, "I want them to feel, touch, and see different textures rather than whether they can present a complete artwork (Karen). David's ideas were similar to Karen, and he said, "I think I planted the seed at the beginning and wanted children to take me to explore more". From these assertions I deduced that the museum educators and teachers believed that, presenting the skills children learned and the outcomes children gained, was more important than the creative practice and learning process that the artists focussed on. Although participants were unable to reflect the practices critically through the theory, I would argue that it demonstrated that traditional teaching habits were embedded in the teachers and museum educators' minds, and confirmed that the focus of the artists was on the experiential encounter rather than specific demonstrable skills and outcomes.

All in all, it is not necessarily realistic or viable to completely shift a participant's mindset and/or behaviours through a singular collaborative exercise, but articulating and encouraging a visible understanding of their beliefs and behaviours when working with children, may assist with processes of self-reflection, leading to trying different approaches. The prescribed, or default, teaching patterns could be better understood by museum educators and teachers through the collaborative experience and the critical reflection they were invited to undertake,

individually and collectively. The beliefs and attitudes of artists might not have been considered or recognised as specialisation within art education by the trained teachers and museum educators, however the emergence of the unexpected teaching moment, had encouraged them to reflect on the limitations of traditional teaching.

Questions Relevant to the Conceptual Framework. The fourth and fifth topics were pertinent to the application of the conceptual framework co-devised by participants in the art classes. The questions asked, "how did you apply this conceptual framework in this art class?" and, "how did you evaluate yourself in this collaboration with the other two roles?" Through these two questions, participants were invited to reflect on the benefits of collaboration amongst the different roles, and the influences on their thoughts by collaboration.

The Reflection of Group 1. At this stage, Melissa realised that "we just co-designed this art class but did not collaborate in the activities", and the reasons for her realisation were articulated during the first stage of describing metaphorical roles to reflect hidden beliefs. In regard to this new form of collaboration, she said, "I found it is good to have a teacher and an artist in the class, because the teacher is quite familiar with her class, and the artist always brings new perspectives and fresh ideas to us". Her point of view was supported by the primary school teacher:

> I took children to this art museum once a semester. This is the very first time we had a class like this. I think it is important that I engaged in the class because I learned from the educator and artist, and taught students when we went back to the school. They (students) can learn from their (the educator and artist) expertise and get it back into the classroom because I am not an expert at art and still learning. It was good to see children-led [*sic*] in the classroom. One girl in my class, she is very shy, but actually she is the bossy one when she teaches other students. Two boys from Samoa, they designed based on Samoan patterns. One girl is Fiji-Indian, and she made "Mandalas" on her pot. On the top of what we learned here, they added their own cultures inside and taught other kids, which was really interesting. All the discussions between [*sic*] them came from their experiences in the museum, and they linked their own culture to the artist's culture. My kids (students) asked me, shall we go to the museum again? (Claire)

In these two questions, Claire's reflection addressed different levels. First, in contrast to standing aside in the previous classes, Claire considered the collaboration as a good opportunity

to promote her professional development in art knowledge. She also highlighted how the art class could stimulate further activities and discussions in the classroom. When they returned to school, Claire allowed students to play the roles of artist, teacher, and museum educator to teach other students. The role-playing in class enabled students to have more time to digest what they experienced in the art museum, and to reflect more deeply on their own cultures and identities through their artworks. Claire stood by as an observer in the role-playing class, providing an opportunity for her to focus on the student actions and ideas. As she described, the girl, who was previously considered shy, showed a different side to her character. Correspondingly, in Shaw's (2011) investigation of the collaboration between teachers and artists in the classroom, teachers found that they learned new skills and knowledge by working with artists, and they had opportunities to observe students' potential behaviours and personalities, that are difficult to notice when they teach students for a long time.

The Reflection of Group 2. The attitude of the museum educator to the collaboration in Group 2 was more emotional and active than the museum educator in Group 1. Emily expressed that:

> I think it is a good experience for all of us to bring an artist into class. How cool it is to see different roles engaging in museum education. I would say other roles are very complementary. Maria knows about her children and she can observe them in a different space. David pays more attention to the changes of students' interests. That would be very [*sic*] beautiful if we have more opportunities to collaborate like this.

Maria, the primary school teacher, expanded Emily's opinion and said:

> Initially, we threw all the ideas in the plan, then in class we adjusted our plan according to the children's ideas. Emily knows the environment of the art museum better than me. David knows the art and how to inspire children better than us. I know my students a lot and what suits my students. It is kind of complementing each other's needs. It is an opportunity for me to learn expertise from the artist and museum educator and to observe my students from different angles.

David articulated:

> I do not know anything about teaching pedagogies or procedures. I might challenge the museum educator and teacher's ideas on teaching, but what I did in class is from my intuition as an artist. If we speak too much, we cannot hear students' beautiful ideas. As an artist, we rarely get opportunities to collaborate with them (the museum educator and teacher). I did not see the collaboration as a big problem because I understood the situation of the museum from Emily and the background of children from Maria before commencing the art class. I really enjoyed this collaboration.

Summary of the Reflective Practices

The reflection-on-action sessions began with descriptive reflection to invite articulation of unshared beliefs of teachers, museum educators, and artists towards teaching. The articulation of these ideas by the museum educators and teachers, indirectly, revealed attitudes behind their adherence to routine teaching and some unquestioned attitudes towards student learning. Then, the session moved to conceptual reflection to examine how the participants identify teaching pedagogies used in their practices, and whether they could flexibly adjust teaching pedagogies to students' needs and interests. This amplified the centrality of a traditional teaching mode, with respect to step-by-step instruction to enhance students' skills and knowledge, which, through observation, could be traced back to teachers training colleges.

At the stage of critical reflection, practitioners started repeating similar answers to the ones provided at the phases of descriptive and conceptual reflection. It could be understood that the teachers and museum educators were not specifically familiar with the pedagogies they employed in teaching (or specialist language to describe pedagogies in action). It might also reflect a challenge in understanding how theory instructs practice. Additionally, a contributing factor could be a lack of reflection-on-action experiences with peers, let alone focused attention to the collaborative reflection amongst the different roles. This was the first time that they had reflective practice together and did not have the chance to iterate it.

The last part aimed to reflect on the benefits and influences offered by this new form of collaboration among the three different roles. The museum educators, artists, and primary school teachers expressed awareness of the benefits and influences of the collaboration in terms of complementing areas of knowledge that other roles lacked, and shaking up the museum

educators' routine teaching, and changing the teachers' stereotyped attitudes towards aspects of children's learning.

Combining the results of these four levels of reflection, and referring back to the conceptual framework co-designed by the reflectors, it indicates that the reflective practitioners generally considered those five concepts in the framework, but some points were not reflected on fully. The potential reasons why these points were not embodied in their practices will be dissected in Chapter six.

In this chapter, I have elucidated the findings of the workshops, the results of the delivery of the art classes and the conclusions drawn from the reflective practice among the three different roles. The next chapter will focus on the summary and discussion of the findings, the potential innovations for art museum education through the prototyped form of collaboration, and the propositions for the further development of the collaboration.

A vignette: Adaptation to the lockdown

Due to the severe spread of COVID-19 all over the world, we were in lockdown in 2020 for almost four months in New Zealand, while parts of New Zealand, (i.e., Auckland, Northland, and Waikato), because of the COVID-19 Delta variant, have been in elongated lockdown from August to October 2021 (and even longer in specific areas). This situation has led to restrictions on museum and gallery opening conditions. In 2020 I transferred the remaining face-to-face interviews to online interviews. At that time, the Internet became incredibly important as a forum to connect, engage and disseminate research. Zoom or similar online group meetings were the dominant mode of engagement. Unfortunately, face-to-face museum education had to be completely discontinued because of the spread of COVID-19 primarily through human contact. Most art museums and galleries faced the problem of temporary closure.

MoMA (The Museum of Modern Art) in New York even terminated all museum educators' contracts[97]. One of the educators working at MoMA said, "I am not sure what a museum is without education, especially a closed museum for which I would argue education is even more crucial" (April 3, 2020). The same day, Whitney Museum of American Art announced they would lay off staff members (April 3, 2020)[98]. Art museums in the USA faced the issue of sacking educators due to budget restrictions; a pattern also observed in other art museums and galleries in other countries. Fortunately, the layoffs of permanent museum education staff did not have the same momentum in New Zealand, (which may in part be due to the security of LEOTC funding coming from the Ministry of Education, and the option of COVID-19 specific wage subsidy allowances being made available by the NZ Government). Thus, in most instances, core staff were retained. Curtailment of sessional employees involved in education programming may have impacted part-time contracted staff.

Pressures felt within the museum and gallery sector in New Zealand (and globally) is likely to be an ongoing issue, as visitor numbers, (and corresponding revenue streams), are less than what had been forecast, and, as developing COVID-19 variants continue to influence peoples' travel and willingness to attend museums and galleries. The suspension of face-to-face museum education made me consider, how it could be viable to continue museum education, (and

[97] https://hyperallergic.com/551571/moma-educator-contracts/
[98] https://www.artnews.com/art-news/news/whitney-museum-layoffs-coronavirus-1202683104/

especially engage artists), when we face such contingencies. While the primary focus of this thesis remains on face-to-face encounters within museum and gallery environments, with direct experience of art works, I discussed this with some artists and touched on this area.

Both New Zealand art museums, in this study, quickly made the adjustment to transfer the face-to-face teaching to online teaching. The primary social media they used to share learning resources with children are Facebook, Instagram, and Twitter. By observing their posts, I noticed that they updated the learning programmes around once a week. These programmes were geared more broadly to families at home trying to engage their children in art-activities to keep them busy and stimulated. There were few video posts and most posts were in the form of photos with step-by-step procedures to guide children to do some hands-on activities with materials that are commonly available at home. Although this form of online teaching provided opportunities for hands-on activities, it could, to a large extent, reduce opportunities for interactive learning.

Other museums in New Zealand also provided different online learning programmes. The National Museum of New Zealand: Te Papa Tongarewa, developed Virtual Explorer: live-feed programmes for Years 3-13 students[99]. Furthermore, Esther McNaughton (2020), the education team leader at the Suter Art Gallery, (Te Aratoi o Whakatū), Nelson, suggested that:

> Students could have a gallery visit as usual, but this would be a virtual opportunity to move around independently while looking at and discussing artworks. The second part of the lesson was a hands-on art-making workshop provided on YouTube. Additionally, classroom teachers also received a comprehensive education pack with curriculum links, pre- and post-visit ideas, and other support material. (pp. 144-145)

Moreover, the online activity of "Art Bubbles" was produced by Auckland Art Gallery (Toi o Tāmaki) for students and families on Instagram. Also, they opened online access for schools

[99] Te Papa Tongarewa's virtual programmes for students: https://www.tepapa.govt.nz/virtual-explorer-live-feed-programmes
Some museum programmes (not specific for students) in New Zealand have been produced utilising VR techniques such as: Brett Graham's show at the Govett-Brewster Art Gallery (https://govettbrewster.com/news/2021/8/gallery-launches-virtual-tour-of-acclaimed-exhibit);
Lianne Edwards' show at the Tauranga Art Gallery (https://www.artgallery.org.nz/exhibitions/id/1394);
Contemporary Māori Art and Enchanted Worlds virtual tour at the Auckland Art Gallery (https://www.aucklandartgallery.com/page/virtual-tours?q=%2Fpage%2Fvirtual-tours)

to visit the gallery virtually, and use artworks, within the gallery's collection, as artmaking resources in their online learning classroom activities.

I undertook some research in consideration of options for online learning programmes within museums and galleries in New Zealand, but this research sits outside of the scope of this project, and is not reflected in the co-design models used within the workshops which prioritised face-to-face learning environments. Continuing this research is of interest to my post-doctoral work, as it is likely, whether in pandemic or endemic status, more museum and gallery education will be developed within online spheres, and the adoption of the co-design participatory model would be a valuable point of focus for future research.

Chapter Six: Findings, Discussion, Innovation, Proposition, and Conclusion

> *Making is thinking, and learning is what occurs at the instance of activity. Praxis is theory.*
>
> *Raqs Media Collective, 2009, 76*

This chapter is divided into four sections. The first section summarises the findings and discusses how these findings relate to relevant theory and research of others. The second part unravels how the form of collaboration devised and modelled in this thesis offers an original contribution to art education in art museums in Aotearoa New Zealand. The third part provides propositions for the further development of the collaboration. The last section summarises the key findings and contributions of this study, and suggests directions for future research.

Findings and Discussions

Complementarity

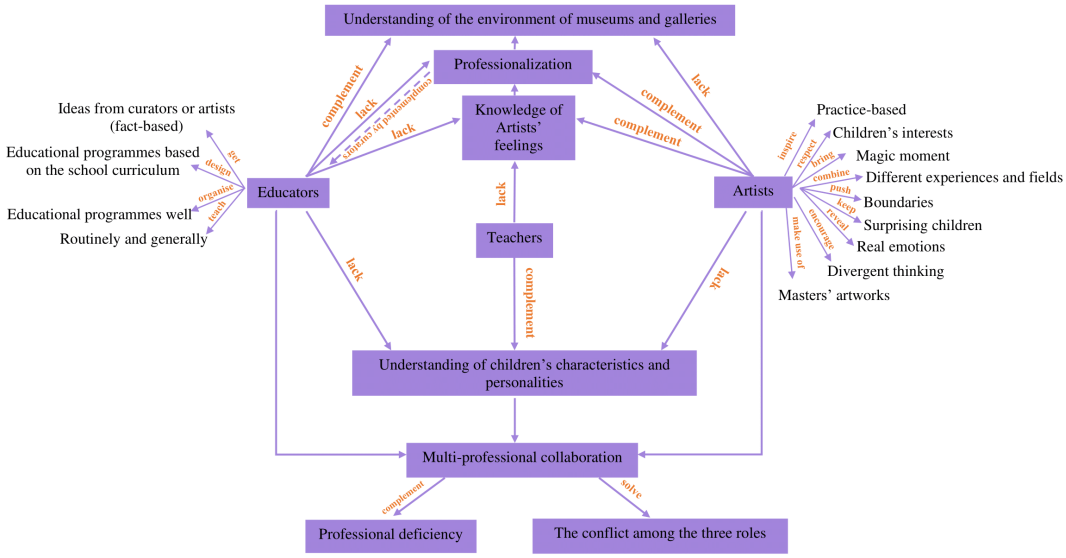

Image 5: *Collaborative Partnership between Artists, Museums Educators, and, Primary School Teachers (A hyperlink to the image)*

"Complementarity is one of the driving forces of creative partnerships" (John-Steiner, 2000, p. 5) because practitioners complement skills and knowledge by collaborating with each other (Schrage, 1990; Bennis & Biederman, 2007). In the collaboration within this project, museum educators are anticipated to hold knowledge of museum collections, or temporary exhibitions, and the museum environment (Rice, 1998). Teachers frequently believe that museum educators have a special way to engage students in class (Clarkin-Phillips, 2013), and provide the 'best' practice; both of which trigger a different experience to how students learn in the classroom (Mathewson-Mitchell, 2013). Moreover, it is commonly considered that museum educators offer authentic learning experiences with artworks (Bedford, 2009; Bryant, 2011; Isa & Forrest, 2011; Baguley et al., 2018). A key motivating factor is also that specific and deep knowledge of contemporary art may be felt to be beyond many teachers' expertise, therefore they bring students to art museums to engage with art led by museum educators (Page et al., 2006). Castle (2006) pointed out, however, that museum educators can lack the knowledge of the school curriculum and have limited teaching pedagogies. In addition, they are not very familiar with different students' personalities and characteristics within a class cohort. In this regard, teachers hold more knowledge than those people in other roles. Artists bring their knowledge of making and interpreting art works, and relaying how these works relate to, and open up, discussions about aspects of our environment and lived experience. They also have insights into how materials and media behave and perform in a studio and gallery environment.

There is a need to be cautious about broad generalisations; acknowledging that some people hold roles that may draw on hybrid training and experiences; e.g., artists may also have trained as teachers, and museum educators may also have trained or practised as artists or school educators. Additionally, it is important not to make assumptions with respect to expertise within a specific field being 'superior' to others, but rather, to focus on what the experience of bringing together skills and experiences across the three roles of museum educator, artist and school teacher within a collaborative co-design process can foster. For example, working within art museums does not indicate that museum educators would necessarily 'better' understand exhibitions and spaces than artists. Museum educators often draw on content and information shared by curators within their institutions to develop their ideas and skills in relation to artworks, and to promote their professional development (personal communication with a museum educator, November 22, 2018). Ebitz (2007) has illustrated the relationships between educator and curator (p. 27).

Educator/<--Resisting-->Curator
Educator/<--Collaborating-->Curator
Educator/<--Embodying-->Curator

This can be a valuable source of information but should be understood as being mediated or filtered through a curatorial perspective. As presented in the illustration, the relationships between these two roles can be symbiotic as well as exclusive. Lacking specific or in-depth professional knowledge of artworks, museum educators frequently turn to resources or accounts from the curators working on the exhibition or with collection objects. Curators are frequently those who have a close knowledge of artists and their creative processes and can play crucial roles in this relationship. Although Ebitz clarified the potential relationships between educators and curators, he did not position any roles for artists and artworks within this matrix. Dobbs and Eisner (1987) stated that artworks are the central components of museum education. This premise is supported by the International Council of Museums, which referred to artworks as the primary medium of communication in museums, but, contemporary literature has positioned museum educators as considering artworks as resources, servicing their teaching (Hendy-Ekers, 2019). From my observation, museum educators can capitalise on artworks to design a general art class that can suit all the participating schools; across age ranges, curriculum emphasis and cultural perspective. Information about artworks is shared and transferred between artists and curators, curators and museum educators, and museum educators and teachers, with layers of mediation and calibration within each knowledge transfer. Involvement of, or engagement directly with artists, (either those who have made the work, or other artists who bring their embodied understanding of creative processes) can be rare or infrequent.

Eisner (2002) has recommended that art museum educators learn about artworks from artists directly, and noted that it would benefit them from many points of view. They might see or hear stories relevant to artworks that they have never been aware of previously; appreciate artworks from another perspective after working with artists; become imaginative; and have experience with addressing a problem in multiple ways. The benefits of direct engagement with artists are relevant for primary school teachers as well. They do not need to count on schools' prescribed training in art, if this is offered, to promote their deepening of specialist knowledge. As has been evidenced, conventional teacher training approaches frequently do not motivate

teachers to develop their professional knowledge and create something new (Stein et al., 1999). Encouraging teachers to collaborate with different professionals has been observed as a more effective process (Loucks-Horsley, 1987; Smylie, 1995; Shaw, 2011). Teachers involved in Matarasso's (1997) project expressed the opinion that working with art practitioners complemented their knowledge and skills in the field of arts and promoted professional development. Also, Silverstein (2003) and Kind et al. (2007) valued the collaboration between artists and teachers to complement the professional knowledge that teachers frequently lack in art. Furthermore, Thomson et al. (2019), through many years' investigation on the collaboration between teachers and artists, found that those conservative pedagogies are changed when these two roles collaborate with each other, because artists often break up teachers' routine teaching, push them to explore, and attempt something new (Harding, 2005).

Not only do museum educators and teachers benefit from the collaboration, but also, there is evidence that artists also get inspiration from collaboration. Collaboration offers opportunities for artists to develop professional practice and increase the rate of employment (Matarasso, 1997). Artists' work and lives can become demystified because they get more chances to interact with the public and share their experiences. Similarly, Harding (2005) mentioned that the involvement of artists in children's museum education provides job opportunities for them outside of the studio, which can be an isolated work environment, and they can seek inspiration by working with people. McLean (1993) specified that when artists present their artworks to the public, through communication and interaction with others, they can reflect on their artworks and return to their creative processes with fresh ideas acquired by communicating with teachers, museum educators, and students. This may enhance or challenge their original ideas and opinions, and provide inspiration for further creative works.

Ideally within the collaboration, everyone exerts their own strengths to complement others' role limitations. Artists can share professional knowledge on conceptual development and the processes of making art with teachers and museum educators, and museum educators can offer expertise about the environment of art museums and the context of exhibition development. While both roles are not familiar with every student's personality and character, the teachers can support them with regard to the situation of their students. Artists can also participate in a further loop in the feedback, by responding to work made by the children, offering new perspectives with fresh eyes.

Maintaining Integrity

Historical reports from artists express frustration in terms of their involvement with previous programme structures[100]. Charles Huntington, an artist working in one of the schools, expressed depressingly, "I would not participate in the programme after this year. I am learning all the answers, I am becoming an educator, not an artist. I am no longer qualified to carry out the purposes of this programme" (Eisner, 1974, p. 22). His comment articulates his concerns that the specific offerings he brought as an artist might have been subsumed because he felt he was being 'trained' to deliver according to a pedagogy and process aligned with existing 'teacher' delivery. It has been observed that teachers often asked artists to take over their role to teach in the classroom as an artist-teacher, with the teacher then offering 'help' to try to correct artists' teaching (Oreck, 2000). Shaw (2011) has pointed out that the collaboration was less successful if artists became another teacher and repeated the same teaching pattern. When different roles can satisfy and complement each other's needs, then the dilemma of feeling like you are playing two roles at once could be solved. Artists may or may not have had prior experience of working with children, and they are likely to not have detailed knowledge of a specific cohort's (or an individual child's) learning development. It is important for all parties to recognise and value their own and each other's strengths and specialisms, as equality is crucial to a collaborative relationship (Loucks-Horsley et al., 2009).

The collaboration, furthermore, reduces aspects of disparity between museum educators and teachers that may be present. Some museum educators have been reported as seeing themselves as "the authority" (Hendy-Ekers, 2019, p. 11) within the context of the art museum, and teachers are regarded as outsiders in this context. I suggest that they have an equal authority and can exert their individual expertise to create something new with students together. Previous research suggests that people who collaborate with others are willing to learn from each other's different working styles and views (Friend & Cook, 1992), and are eager to change clichéd teaching patterns (Schrage, 1990; DiPardo, 1999; Bresler, 2002). Collaboration enables them to play their own roles as primary school teachers, museum educators, and artists because

[100] I referred to the art programme conducted in the USA and analysed in Chapter three.

all three roles possess the special expertise in their own fields and contribute to students' learning.

Shifting to Student-centred Learning with the Engagement of Artists

Griffin (1998) did a comparison between teacher-led learning and student-centred learning in museums. Teacher-led learning means that teachers structure all learning agendas in advance and students conduct the tasks teachers set up. Student-centred learning does not mean that teachers do not prepare the class; they need to formulate the class flexibly and are able to alter any plan quickly in the light of children's curiosity and interest. Student-centred learning is more inclined towards free-choice learning that caters to students' needs rather than a teacher's agenda. Other than these six motivations named above, Hedge (1995) put forward that expectation was another motivation that strongly affects students' learning as well. He noticed that students are not surprised and excited if things follow the way they expect, whereas if things occur in a surprising way, they show more curiosity and desire to explore and engage more. The collaboration of Group 2 in this project strongly demonstrated this point. The museum educator and teacher could not adhere to their lesson plan, which was aligned with prescriptive modes of teaching, because of the artist's invitation to the children to have greater autonomy within the experience, which highlighted the children's processes of discovery, and which distracted them from the museum educator's original plan for the class. On reflection, all three roles realised that the plan, in spite of being well-prepared, should have been used flexibly in response to the direction and needs of the students.

There was a further example of a prescribed teaching episode in this study. When students were required to sit on the ground and discuss with their group partners about which artwork they would choose as a gift for their parents or friends, the museum educator maintained the formality of a question-and-answer session. The artist interrupted the museum educator, taking the children in front of the artworks they had chosen and asking them more questions about why they wanted to give this work of art to their friend, and why they thought their parents would like this particular artwork. The curiosity and guidance of the artist stimulated the students to observe more closely and relay more detail, and this encounter, extended in such a manner by the artist, seemed to enable the students to feel that their ideas were valued and the artist was trying to understand and learn from them.

Freire (1998) has articulated that teachers and museum educators are regarded as experts and students are seen as learners, but both of them, when education happens, bring their own knowledge and experience to learning, and "to create new knowledge, the teacher and the student come to the learning situation as possessors of past knowledge" (Freire, 1998, p. 9). He stated that they are equal as co-creators when facing unfamiliar knowledge; their relationship turning to co-learners sharing the knowledge and experience with each other and reflecting on their own lives.

A prescriptive or 'fixed' relationship between students and primary school teachers and museum educators can be gradually shaken by ongoing collaboration with artists, which would shift the 'student-centred learning' from being an aspiration to a more lived reality. In this context it has been argued that students' nature and creative ideas would be more respected instead of being ignored (Freire, 1998). As evidenced in the delivery phase of this research, the artist's highlighting of the students' discovery, valuing their ideas, quickly placed the students in central position in the learning process, and inspired them to elaborate upon their ideas. The actions and articulations of the artist, meanwhile, shifted the attention of the museum educators and teachers from instructing to engaging and communicating with students. Within the participants' reflection sessions of this study, the museum educators and primary school teachers began a process of reflecting on their roles and behaviours in teaching. The key catalyst for this was their active participation in the process of collaboration and co-design.

Towards Variety

Within discussions prior to, and in the midst of, the collaborative development of the workshops, it was observed that one single activity for the duration of a workshop would be unlikely to satisfy students' curiosity and interest, and that not all activities would engage and stimulate every student. Aw1 questioned whether, "different students have different interests? Not all the students like hands-on activity. Some may like dancing or singing that we could link to the art". P3 recommended that "we can have different types of agencies such as design, sculpture, drama, dance, craft, painting groups, and so forth. Students choose what they want rather than being limited in [*sic*] one group". Thus, at the delivery phase, three different activities were designed, and students, based on their interests, selected the one they wanted

to join. It not only extended the variety of activities offered but also aligned with the suggestion of Falk and Dierking (2018) to break up the traditional single pattern of activity.

After the class, the primary school teacher said, "my students had a lot of fun in class. They never experienced this kind of multi-group form previously, and engaged in the groups they like [*sic*]. They swapped the knowledge when we returned to the school" (Claire). Students, when participating in preferred activities, are more likely to apply prior knowledge and experience in the new contexts, and simultaneously learn new knowledge and experience that will be effective in completing future tasks (Falk & Dierking, 2018). If we (the workshop participants) expect to slowly transform to student-centred learning, "we should start by providing various activities" (P2); if we (the workshop participants) expect students to have a deeper engagement and exploration, "we need to make sure that students are comfortable and confident with the activities they are doing" (Aw5). Students would be highly motivated when they engage in various activities (Csikszentmihalyi, 1990), when they can select and manipulate their learning (McCombs, 1991), when they feel free to express themselves mentally and physically (Patrick & Pintrich, 2001), when they meet a supportive learning environment, and when they enjoy the joy of learning (Paris, 1997).

In addition, with respect to the large number of children in a classroom, teachers could not manage the teaching environment if they were required to teach interactively, responsively, and idiosyncratically, in equal measure to all (Huberman, 1993). Museum educators also face the same problem. The museum educator in Group 1 said, "it is quite hard to handle thirty kids at the same time. You could not focus on all of them. Some kids must be neglected" (Melissa). That could be a reason why museum educators often repeat the same activities. It is challenging for one person to deal with the whole class, and to pay individual attention to each child. Collaboration effectively divides students into different groups, allows them to select activities based on their interests, and extends the variety of activities.

Interests Build Connection

Interaction is an indispensable element of experience (Dewey, 1986) because, "an experience, then, is not an experience unless it involves interaction between the self and another person, the material world, the natural world, an idea, or whatever constitutes the environment at hand"

(Rodgers, 2002, p. 846). Interaction can occur automatically without a connecting point. Interests, as connecting points, motivate students to communicate and interact with each other because people tend to connect with each other through a shared interest, religion, or culture (Simon, 2010). Simultaneously, people, through active interaction, seek to locate a mutual topic or interest (Silverman, 2004).

Interactive learning was mooted during the 1970s (Mayer, 2005), and included teaching methods developed with respect to inquiring, hands-on activities, storytelling, and games. Techniques derived from interactive learning were preferred by museum educators (Sternberg, 1989). These methods were finally named as "Visual Literacy" (Mayer, 2005). Until now, many museum educators often described the purpose of an art class as developing students' visual literacy. The content of classes adhered to an existing framework that might have limited involvement with interactive learning. Hooper-Greenhill (2000) has commented that this approach might initiate and encourage a new evolution in art museum education, but it could not loosen the traditional beliefs of museum educators in terms of their teaching goals and teaching outcomes, as their practices sometimes cannot reconcile with the theory of Visual Literacy, or even other theories. As evidenced in this study, when the museum educator in Group 2 was asked, "why did you encourage students to work in pairs", she said, "I try to give children more opportunities to express their ideas rather than only listening to adults" (Emily), and a similar answer was given by the other museum educator. The basic feature of their classes is that sharing is more than interacting; they often ask students a question, then get answers back. The behaviour of the artist, with respect to placing an emphasis not only on children's self-motivated discovery but also on their willingness to share outcomes with their peers, demonstrated effective interaction between artists and students, and students and students.

Silverman (2004) has suggested that "to truly support, encourage, and promote dialogues in museums, museum educators [and other roles] must hone their skills as facilitators – learning and improving in the areas of listening, supporting, prodding, and negotiating" (p. 241). Currently, the interactive learning in museum education seems to be structured around sharing; whereas stronger, more dynamic communication and interaction could be driven by the collaboration with artists.

Multisensory Learning

Within the collaborative co-design of the workshops, artists considered physical touch with artworks or materials as an important way of connecting with artworks. The artist in Group 1 was concerned that "each kid has their preferences to learn. Some love touching to feel the shape and texture. Some through sounds feel the power of artworks" (Karen). Bresler (2013) has noted that people have better opportunities in the art field to learn and embody knowledge through their bodies. Particularly, in art museums, students might have more multisensory learning opportunities open to them. An exhibition experienced through multisensory appreciation can lead to more a personal experience through encounters with different aspects (Pallasmaa, 2014). Some researchers have examined the influence of touching objects in art museums and galleries. They believe that touching objects can arouse memories (Lehmann & Murray, 2005) or richer memories (Gallace & Spence, 2009). Rowlands (2008) gave an example of visiting a classic house in a historical museum and stated that touching antique pieces, such as: handles, doors, drawers, plates, pantry items, and so forth, more easily awaken people's dormant memories. Sean Montgomery (2012), in his exhibition of "Emergence", articulated that the experiences of viewing and touching are completely different. The intimate touch of an artwork synchronises viewers' pulses. Everyone has their own rhythm; within and without, and people will experience disparate emotions when they intimately touch an object in their own rhythm.

However, due to the requirement to protect artworks, museum educators could not allow students, in this research's workshops, to touch artworks. To enable the students to better feel the textures of artworks on display, the artist brought some materials with similar textures to these artworks, and encouraged students to touch and feel these exemplars. It has been observed that our lives are full of multisensory experiences, and children, in particular, are naturally curious and can remember and learn better with the tactile experience (Spock, 2010); simultaneously, this kind of tactile experience can make students more engaged in class (Black, 2012). The artist (David) from Group 2 designed the game, encouraging students, through verbal description, to form images. In Kreiman et al. (2000) and Albright's (2012) experiment on the formation of images in the neurological field, they found that objects, with the facilitation of sound, appear more vividly in the human brain. Additionally, Levent and

Pascual-Leone (2014) suggested that museums should provide multisensory learning experiences, including aspects of smell, touch, movement, sound, and even taste.

Disjunction between Theory and Practice

Various teaching pedagogies have been discussed in Chapter four. It seems that museum education is frequently under the guidance of educational theories, including: constructivist learning, object-centred learning, teacher-guided learning, improvisational teaching, and entertainment teaching (Hooper-Greenhill, 1999; Gooding-Brown, 2000; Sawyer, 2011). Approaches to museum education derive from constructivist learning in terms of Visual Thinking Strategies (Housen, 2001; Yenawine, 2013) and Free-choice learning (Falk & Dierking, 2002). However, these theories in the museum education field seem not to be reflected in practice. From the preliminary investigation into the art class delivery to the reflection of this study, it has been found to be not uncommon that theories, including a series of methods, are not welcomed by museum educators in practice because these educators remain guided by their repetitive teaching practices.

Mayer (2007) has stated that, "the relationship of theory and practice should be symbiotic. Whether theory informs practice or practice transforms theory, the process should be integrated and reciprocal" (p. 44). Considering the alienation between theory and practice, and the particularity of museum education, Ebitz (2007) created a transacting theory for museum education because he maintained that the feature of all activities in museums were part of a transactional process. He articulated that:

> Transacting resists definition and can be embodied only in practice, in openings between contiguous roles of educators, curators, directors, security guards, visitors, donors, and other stakeholders, and the objects, ideas, and contexts that are part of our lives in museums. (p. 28)

Transactional theory features openness, fluidity, and ambiguity; considers that all functions and roles in museums are integrated and connected; and stands opposed to any specific definition on what happens in museums. In alliance with the theory, I suggest exploring museum education not only through individual value but also through the wisdom of collaboration between different roles embodied in practices. In other words, museum education should be inclusive and flexible. It should be featureless and shapeless externally but well-

ordered and prepared internally, primarily reflecting on practices. With regard to whether the Transacting Theory can be applied in practice in museums, Ebitz questioned the competency of museum educators to flexibly adopt the approach.

The gap between theory and practice is not easily bridged. The theories created by theorists for museum education seem not to be understood properly by museum educators, let alone applyied in practice. Various factors governing this situation will be deliberated upon in a later section, and will include: similar theories, methods, and curricula; classroom teaching, in terms of conventional, non-expansive learning structures; the training of museum educators together with teachers in teacher training colleges; and, finally, the ambiguity of the role of museum educators. However, this new form of collaboration, if adopted in art museums, could help practitioners develop and identify the theory emerging from their own practices, and they could continue refining and innovating their approaches.

Innovations

Schrage (1990) articulated that collaboration indicates working together at the levels of creativity and innovation rather than putting separate pieces together to achieve goals. Collaboration not only creates something new, but also potentially drives changes. The benefits and changes through the collaboration between three different roles have been discussed. If the collaboration continues, it could gradually drive a series of innovations in museum education.

Developing Featured Museum Learning Programmes

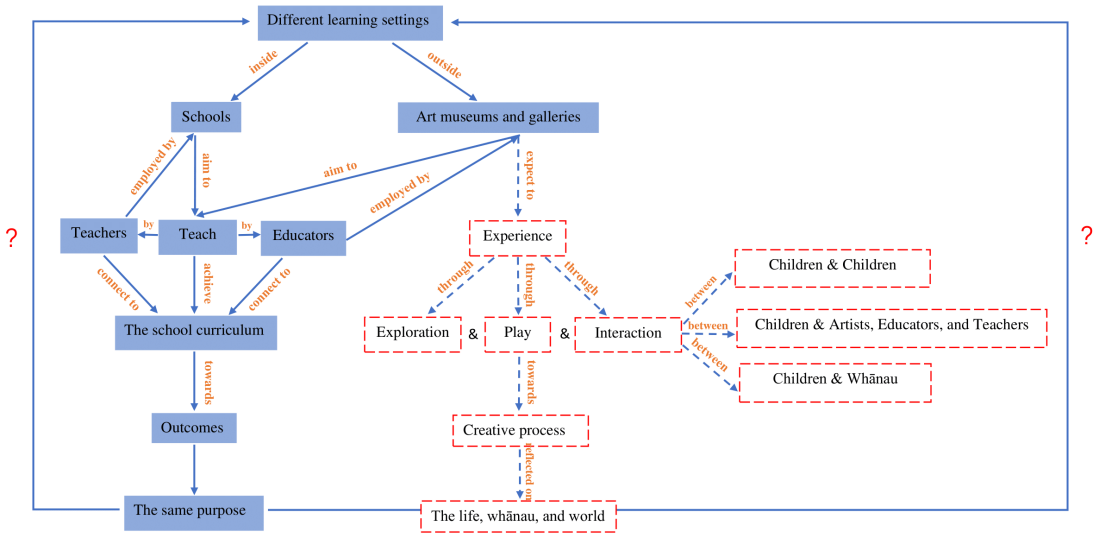

Image 6: *Different Learning Environments of Art Museums/Galleries and Schools (A hyperlink to the image)*

Many schools and museums have developed a collaborative partnership that allows museums to develop outreach, educational programmes with schools. At the same time, schools view museums as their second classrooms, in which teachers can 'take a break' from routine teaching, and students can 'get something fresh', in a different ambiance. Nevertheless, the change, frequently, does not make a big difference between school education and museum education and, except for the physical movement from one site to another site, the content and form of school education still can be recognised in museum education activities. Hein (1998) stated that art museums, initially, were considered as outside learning spaces which provided disparate learning experiences for children. However, due to similar training and teaching ways, currently, museum education is similar to traditional teaching modes, in terms of transmission and absorption of the knowledge, and this has led to the featurelessness of museum education. Hendy-Ekers (2019) confirmed that art museum and gallery educators have been trained as school teachers, and that educators' teaching exactly duplicates teachers' teaching. By repeating the same ways of teaching in different learning settings, it is difficult to promote museum education, especially, as the purpose of museum education is not to simply complete daily teaching missions (Roberts, 2014). Falk and Dierking (2018) articulated that, "when museums try too hard to mimic compulsory education or force specific learning agendas on the public, they undermine their own success and value as learning institutions" (p. 138). Museums should never compromise the feature of an authentic and explorative learning environment and fall into clichéd teaching and learning. In addition to this, similar teaching patterns directly impact on the ambiguous position of museum educators (Dobbs & Eisner, 1987; Burnham & Kai-Kee, 2011; Baguley et al., 2018). In this study, one of the artists who used to be an art teacher in the USA mentioned that:

> In the USA, you can specialise in art education if you want to teach art in the future. We do have the position for art teachers. However, in New Zealand, they do not specialise the role of an art teacher or educator. It seems that everyone is able to teach. My children do not like art classes here because not too many teachers are interested in teaching art. (A13)

Thus, Davis and Gardner (1999) suggested museum educators use special approaches different from teaching methods employed in the classroom to engage students. Eisner and Dobbs (1986) directly recommended separating the training of museum educators and teachers; furthermore, separating museum education from other education and museum educators' training from teachers' training; and ultimately, alerting universities to the necessity of

developing and funding the discipline of museum education. They have noticed that museum education, as a discipline, lacks theoretical foundations, leading to museum education regarded as a peripheral discipline in job markets. Buffington (2007) stated that museum education, in the past 30 years, received less funding and attention than other functions of museums, leading to only a few positions for museum educators. In concert with these scholars' viewpoints, I suggest that the re-invention of museum education should, firstly, involve divorcing itself from other types of education; additionally, it should re-define itself to reflect different educational programmes in the light of the features of different subjects, whilst, at the same time, connect these subjects to provide interdisciplinary learning experiences with the engagement of people in diverse roles from different fields.

Reflecting on the educational programmes: the LEOTC programme and the Creatives in Schools programme, both of which are currently being conducted in New Zealand, as discussed in Chapter three[101], the LEOTC programme emphasises the learning experience outside the classroom, and the Creatives in Schools programme highlights the participation of professional artists and creative practitioners in schools. Both of them are developed and supported by the Ministry of Education, and so far, have not put forward the collaboration between different roles[102]. In response to the proposition about the future innovation of the educational programme I proposed in Chapter three, and based on the benefits of the collaboration between museum educators, artists, and primary school teachers discussed early in part I of this section, I suggest combining the current two programmes to form an innovative educational programme. A visualised diagram is presented below to help understand my proposition.

[101] These two educational programmes were reviewed and analysed in detail in Chapter three.
[102] The LEOTC programme for 2022 is being redesigned by the Ministry of Education, and the current LEOTC contracts are being extended for 6 months, until June 2022. Thus, currently, there is no information about the new LEOTC programme on the website. https://eotc.tki.org.nz/LEOTC-home
The Round 3 applications of Creatives in Schools is on-going and will be confirmed by late November 2021. https://www.education.govt.nz/our-work/publications/budget-2019/creatives-in-schools/

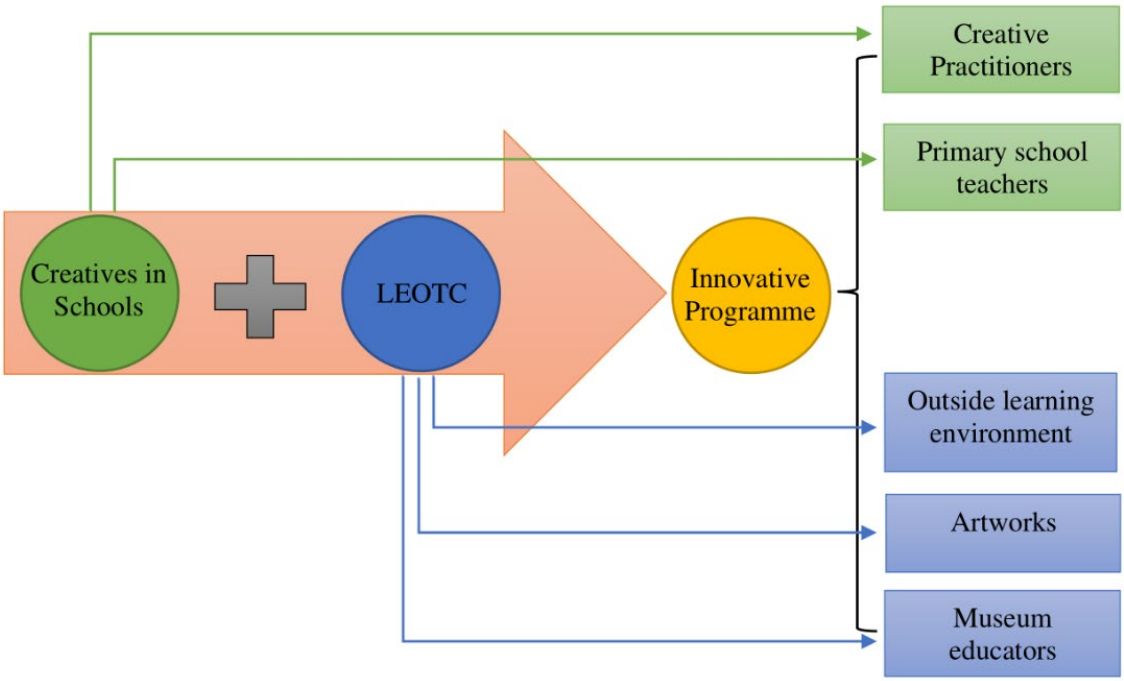

Figure 45: *A Further Innovative Educational Programme*

The green and blue circles represent the current two programmes, and the yellow circle represents the innovative programme. A list of the components in the green and blue rectangles, featured in the proposed future innovative programme, can be provided by these two programmes with the guidance of green and blue arrows, respectively. The combination of these two programmes complements each other. It firstly provides learning opportunities outside the classroom for schools that participate in the Creatives in Schools project, and builds up more connections between schools and art museums or galleries. Secondly, it potentially invites creative practitioners, who are both enthusiastic about experiencing art with students, and familiar with these particular students, to engage in the innovative programme. Last but not least, the combination of these two programmes aligns with the core principle in this research: collaborative partnership, and artists, museum educators, and primary school teachers can continue their collaboration by applying the new framework, co-designed by themselves, to reflect their practices and improve professional development.

Developing Featured Curriculum

If we separate the training of museum educators and teachers, another germane issue associated with this is whether museums should consider developing their curriculum to reflect the spectrum of different learning objectives compared to that of schools. Researchers have defined the terminology of curriculum in multiple ways. Grundy (1987) and Moreno (2007) described the curriculum as a series of documents to instruct teachers what skills and knowledge should be taught to students, catering for social, cultural, and economic goals. Gilbert (2012) specified that:

> The term 'curriculum' refers to a course of study, usually described in a document specifying the content of what is to be learned. As a process, curriculum entails the development of students' knowledge, understanding, skills, and attitudes to satisfy social, personal, cultural, environmental, and economic goals. It exists within a triadic relationship between curriculum, content, instructional practices and assessment. (p. 6)

Eisner (1997), from the perspective of museum education, identified its curriculum as consisting of different activities to provide an educational experience for students. Conversely, Ewing (2013) and Tyler (2013) claimed that it is difficult to define curriculum because it is a complicated web, mixing people's individual experience with different aspects, and different institutions should have their own special curricula to reflect their social, political, cultural, and economic values. In consideration of the differences between the learning environment of art museums and schools, Rose (2006), and Mathewson-Mitchell (2013) suggested that art museums should develop a curriculum which reflects the features of art museums, rather than linking their art education programmes to the school curriculum. DuBois (2006) demonstrated, in his research, that artworks and questions museum educators selected are all in accordance with the school curriculum. As discussed in Chapter three, artists who joined in the classes have complained that they had to compromise their creativity because of the demands of the school curriculum. The complaints are, in effect, not only from artists but also from museum educators. One of the museum educators in this study said:

> If you want to be funded by the LEOTC, you have to link everything to the goals of the school curriculum. Some museums and galleries do not want to have it (LEOTC) because that is a limitation, also sometimes, it is really hard to fit the exhibition into the school curriculum. (E1)

As the educator stated, in the LEOTC programme, connecting learning activities to the curriculum is a requirement. For many art galleries and museums, they would not be in a position to fund school education programmes without an LEOTC contract, which could leave them in a bind. However, there are some ways in which this can be approached with flexibility and responsiveness. What I am promoting is the idea that it is more effective and energising when both the planning and execution of such programmes are child-centred and involve art specialists, with different strengths, co-devising learning programmes.

Regarding the reform of the curriculum, Vallance (1995) created a "public curriculum" and stressed that art museums should have their own independent curriculum which is designed for public learning. She distinguished museum education from classroom education in terms of objects, spaces, and the purpose of education, and noted that the curriculum in art museums should deliberate over not only learners' intelligence but also physical connections to exhibitions and spaces. Subsequently, Vallance (2003) suggested learners and museum educators co-construct the curriculum, in particular, for art museums because learners, as learning subjects in art museums, know what they want to learn. In concert with these recommendations, one of the artists in this study expressed that:

> Art museums and galleries get the funding from the government and have to finish the programmes under the budget of the school curriculum. From this point, it is good. There are a lot of criteria they have to follow, but they cannot ask artists to follow because artists' ideas are quite broad and wide. Artists should teach what they want to teach. Some artists will say I want to teach this today because sometimes they are so emotional. I think it is better to be flexible with the curriculum, and we need more artists to involve [*sic*] in designing the curriculum. I do not mean only artists; museum educators, teachers, and students also can join. They should have more options in the curriculum such as teaching in the classroom, teaching outside the classroom, or teaching in studios. They may need to create specific types of curricula. (A9)

Similarly, Bruner (2009) indicated that each discipline has its own characteristics and process of inquiry, so that the development of the curriculum could not be similar and should involve different specialists from related fields. Sticking to the traditional curriculum might be a reason to mislead artists and museum educators on teaching, as they have to focus on executing tasks and completing goals, rather than paying attention to students' needs and interests. Enriching the school curriculum and making a clear distinction between learning in schools and learning

in art museums may lay a foundation for artists participating in children's art education, and the engagement of artists in designing the curriculum may be a potential beginning to gradually reform and innovate art education.

Propositions

The new form of collaboration among the three different roles central to this thesis offers an opportunity to also reflect upon innovations in museum education. Through analysis and discussion, there are some propositions anchored within this study for the further development and collaboration in art museums among different roles.

Plan as not Plan

People's interest is variable (Csikszentmihalyi & Hermanson, 1995); thus, it is not easy to seize students' interests, and it is not practical to allow students to explore all points of interest, otherwise overload and unproductive discord are likely to happen in class. Giving freedom to students does not indicate that teachers and educators stop talking or abdicate engagement (Brookfield, 2017). Instructors need to avoid using more structures (Prieto et al., 2011) as too much or too little structure in teaching reduces creativity (Scott et al., 2004), and "students are [*sic*] easy to get lost and feel helpless, and are not able to express and continue ideas without some structures" (P5). Sawyer (2019) described this process like building a house. Teachers should have quite a flexible structure in their minds but guide students in the light of their personalities and interests. Eisner and Dobbs (1986) have suggested that museum educational programmes should be planned deliberately, yet educators must change according to students' needs and interests. In this study, the collaboration in Group 2 was in concert with this point. Their well-structured plan provided basic guidance, but they flexibly altered the plan based on the students' discovery and change in interest.

Preparation and Afterwards in the Classroom

In the conceptual framework, developed in the workshops, participants discussed preparation before the class and followed-up the engagement afterwards. They considered the preparation of the art classes as a collaboration among the three roles, but one of the primary school

teachers suggested that the primary school teachers should help the other two roles prepare before and after the visit.

> I think the preparation with students in the classroom about the background of the exhibition before coming to the museum is important. I could trigger students' interests, and students will be more curious about what will happen in the art museum. (Claire)

At the same time, Claire was concerned, asking, "how can we carry on the experience in this art museum back to the school. That is also one of the important values of coming to the art museum". After the class, Claire undertook role-playing with her students. Students played the roles of artists, teachers, and museum educators to share what they learned about these three roles in the art museum. Simon (2010) has noticed that museums only focus on delivering educational programmes but seldom concern themselves with students' experience after the project. Students are unable to extend the knowledge to other fields after learning in art museums because experiences are concentrated within the specified art class, and are not joined up with cross-curricular learning opportunities. Arguably the value of museum experiences and learning is not only what happens within the walls of the museum, but also what occurs beyond the walls (Falk, 2016) as "students would not show their responses in class quickly, and they will keep it until it is aroused by others in another experience" (Aw5). Spock (2010) also observed that the extent to which museum experiences affected students after a few weeks, months, or years, would reflect on different aspects of their life and study. The pre-trip and post-trip activities, the primary school teachers led, helped the extension of the knowledge and experience, and reflected the value primary school teachers placed on the collaboration. They planted seeds of curiosity in children's minds, motivating them to explore and discover more prior to visiting the art museum, and helped students extend their knowledge after the visit.

Making Good Use of the Exhibition Space

In the art classes, children were divided into three different learning groups in the light of their interests and the selections they had made before completing the activities in the exhibition hall. From my observation, these three roles in terms of artists, museum educators, and teachers from both groups had their own activities but did not allow students to interact between groups. Museum educators in both groups did not regard it as a problem, but the primary school teacher from Group 2 suggested that "it would be better if these activities can

be rotated. Students can taste a little bit of every activity" (Maria). The artist from Group 2 had a different view on this problem.

> Options for creative activities give the right of selection to children but should depend on the quantity [*sic*] of a class. It is unnecessary to divide three groups if the number of students is small. We could continue the game in the exhibition hall and do one or two other activities together, rather than going back to the educational room. (David)

Because of the limited time, students might not discover enough in one activity if they rotated to different groups. Creative activities can be adjusted based on the numbers of students in a class, and these activities, from the artist's perspective, should carry on and be connected to the exhibition instead of being separated from the exhibition. As the artist felt that "what kids want, is to talk about artworks, rather than having a simple tour with educators. They need more time to explore, and there were so many conversations and details going on between students beside the artworks" (David). Karen agreed with David's opinion and said: "students will never get bored if they study in the exhibition hall. It [*sic*] is always something new they could discover through talking to their pals". Also, as discussed in the theme two of Chapter four, artworks, as a medium, stimulate students to explore and share their experiences (Burnham & Kai-Kee, 2011).

Interactive Learning

In the exhibition space, it is common that museum educators familiarise the students with the museum, look at artworks, then ask some questions. In the reflection session, Melissa, the museum educator from Group 1, realised that she, "just asked students to sit down but [*sic*] did not move around and talk with each other too much". Although teaching methods involving stimulating conversations among children or allowing children to talk to and around artworks are not neglected, I have observed that museum education, currently, can involve limited sharing, rather than inviting more complex communicating and interacting. The museum educators tend to only ask questions and collect answers from children, then move to the next part, with little interaction after an initial sharing moment. David, the artist in Group 2, made the following suggestion:

> When one kid is talking about his ideas on a work of art, we should not just sit in the middle of the exhibition hall and listen to his ideas. Instead, we should move in front of the artwork and discuss it together.

We should notice that sharing answers is not the same thing as stimulating communication and interaction among children. Rodgers (2002) claimed that "without interaction learning is sterile and passive, never fundamentally changing the learner" (p. 847); and many researchers have observed that interactive learning generates breakthroughs (Doise et al., 2013). Kuhn (2015) and Sawyer (2017) stated that students learn better when they interact with others. Through reflections after class, we should realise that interaction is more than asking and answering questions, and, to be effective, it requires continual interplay among students, and between students and people in other roles.

In the Form of Play

Avoiding compulsion and letting the children's art class take the form of play would enable you to observe what suits them (Read, 1948) as their nature and talent naturally emerge by play (Illich, 1971). In the course of play, students need to organise, collaborate, and discuss ideas with each other, all of which provide good opportunities for teachers and educators to obtain a deeper understanding of their students (Nevanen et al., 2012). Jaffe et al. (2015) recommended teachers and educators "observe silently" (p. 152) students' interactions when they play together, because students would reveal what they are interested in and are eager to explore (Tishman et al., 2007), resulting in a string of inquiries being aroused which can be woven into something unexpected. In Group 2, the artist commenced the art class with play.

> Educators often stick to the tour of the exhibition. They neglect that students are [*sic*] the primary roles of this class. In the game, firstly, I want students to have fun and engage in class; additionally, I want them to explore the exhibition by themselves and guide me to what they want to learn because this is their class. (David)

Lobman (2011) encouraged teachers and museum educators to take children to play and explore in the exhibition. Burnham and Kai-Kee (2011) agreed with her point of view, stating that play is a way for children to learn and experience art in art museums and galleries, and is a catalyst, important to children's inquiry (Piscitelli & Penfold, 2015). The artists in this study defined, play in art museums is a kind of explorative play that is an important part of art

experience (A2, A5, A15, A21, A23, A24) because "they explore and learn through playing and interacting with others" (A12).

> It does not matter how do [*sic*] you teach them (students) in the art museum and gallery context. You just stay in there, observe and draw something with children, letting them play and talk to each other. I do not think we have much about that in New Zealand's museum education. In European countries, you can see many children visiting art museums or galleries, talking and playing with each other freely, and drawing something casually. (A19)

Based on my observations at the stage of the art classes' delivery and discussions, in theme five of Chapter four, some statements from the participants may be idealized because, when they faced the real art classes with students, they had some rules for students. These statements cannot be generalised as each country, in the light of the educational situation, adjusts educational policies. I partly agree with the suggestion of explorative play, because with observation, museum educators, artists, and primary school teachers can discover students' interests.

Reflective Practice

Teachers' action is guided by their knowledge (Schön, 1984) and influences their everyday teaching (Shulman, 1986). Shulman (1987) elucidated the value of reflective practice, suggesting it helps practitioners look back to what they taught in the classroom and recapture, reconstruct, and rethink teaching episodes. Joseph (2006) stated that "reflection is a voyage of on-going self-discovery and change, and is very challenging" (p. 151). However, once practitioners are accustomed to doing reflections, they will be conscious of reflecting upon their actions continually in further practices (Schön, 1987). Although reflective practice consumes time and demands effort, it compels teachers to examine and critique their actions in teaching continually in order to understand students' reactions in class (Brookfield, 2017). Most researchers have examined the benefits of reflection to the teachers themselves, yet the benefits also to the artists and museum educators, that were discussed previously in the reflection sessions of this study, cannot be neglected[103]. The museum educators, through reflections, realised their deficiencies in terms of professional development, teaching methods,

[103] The reflective practices amongst the three different roles were discussed in detail in Chapter five.

and programme development. Csikszentmihalyi (1997) explained artists' reflection as "involvement and detachment" (p. 248) because their experience of creation is involved in the process of reflective cycles even though sometimes it is untraceable. The effect of reflection on the artist may not be immediate but could influence later work.

Most importantly, the new form of reflective practice amongst artists, museum educators, and primary school teachers, outlined in this research, enabled practitioners to reflect upon their teaching not only in the form of critique from their peers but also from those in the other two roles. It provided opportunities for practitioners to criticise and question their own actions, assumptions, hypotheses, and knowledge from different perspectives.

Conclusion

Summary of Key Findings

This doctoral research project initially developed from the process of questioning and reflecting on my own teaching. I was ambitious to be an art teacher who could teach creatively and responsively, but when I began to teach, what I managed to accomplish in class did not correspond to what I had planned before the class. I was, on the one hand, satisfying the learning outcomes in terms of what students achieved, but on the other hand, I started asking myself whether this is actually what students wanted to create, and more broadly speaking, what do they expect from an art class? I reflected upon whether what I had done gave me satisfaction as a teacher but not as an artist. With these doubts, I began my new journey in New Zealand and found that art education not only occurs in classrooms but also in art museums. I was curious regarding who teaches in art museums, and what were the specific differences between art classes held in classrooms and those held in art museums. With these two provisional questions, I embarked on my investigation.

Phase One. By reviewing the relevant literature about museum education, I found that researchers in New Zealand have explored museum education from different perspectives in terms of students' learning experience outside the classroom, the improvement of students' visual art education, teaching pedagogies, and the collaboration between cultural institutions and schools. Furthermore, in most scholars' research, although they did not expand on the involvement of artists in students' art classes in art museums, they implied the benefits of such an engagement. Therefore, in conducting the preliminary investigation, I sought to explore whether there were currently artists actively engaging in children's art museum education.

I observed nine art classes at two different art museums, and found two reasons, provided by museum educators, addressing why very few artists join the art classes. The first reason was that artists are often busy with their own art creation. In addition, the art educational programmes in art museums may not attract most artists. With the findings of this preliminary investigation, I reflected back on the literature and decided to research how artists might, more effectively, engage in children's art education within art museums. Based on this primary

research question, I decided to explore this question in three phases. Each phase aimed to address a specific research question originating from further reflection of my literature review. The core idea of this study's design was participant-centred and focused on participants' ideas and needs, highlighting collaborative development and practice among participants. Figure 52 reiterates the primary research question and sub-questions, illustrating in which research phases these questions were addressed.

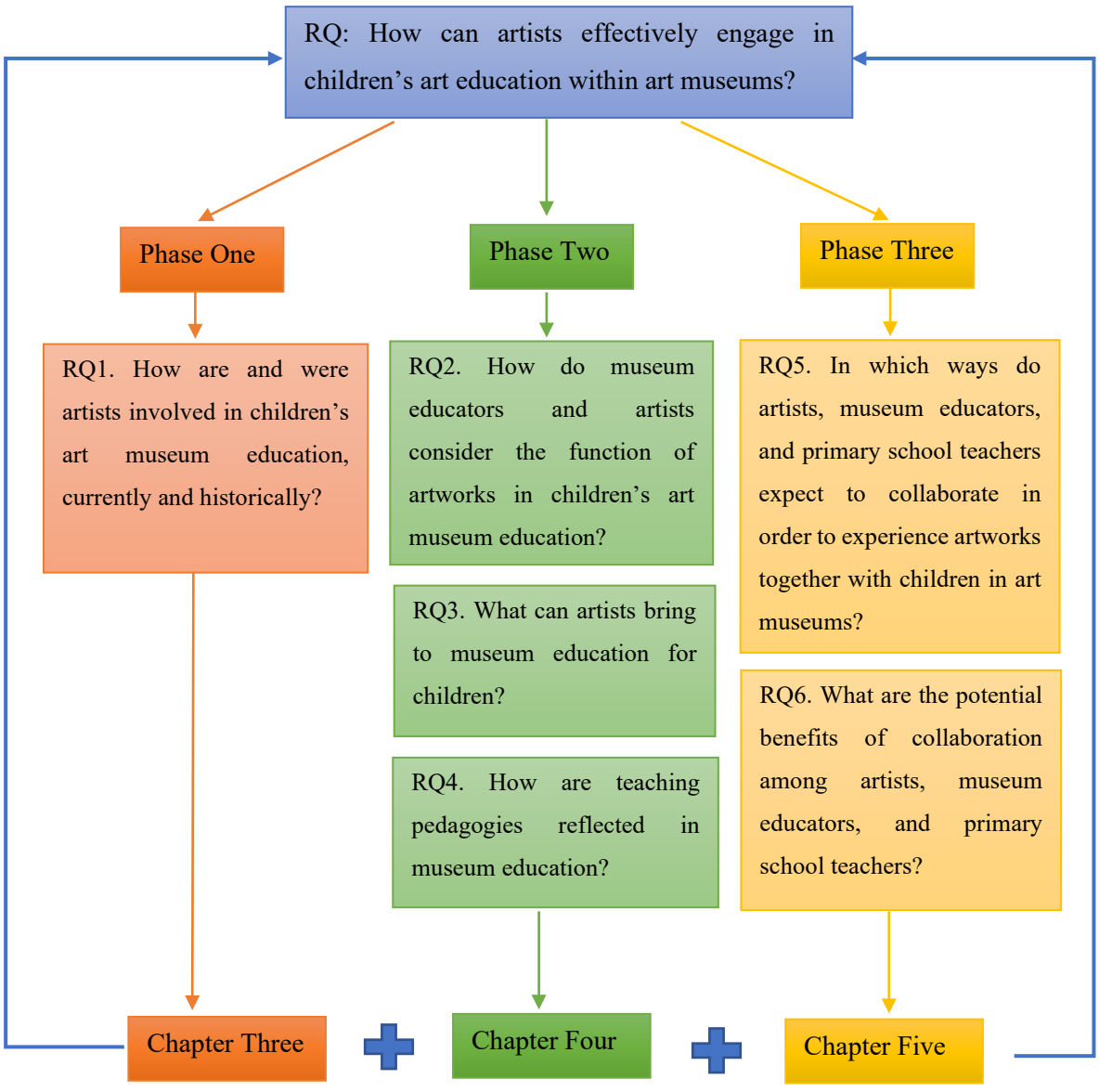

Figure 46: *A Connection between Research Questions and Research Phases*

RQ: Research Question

Phase one addressed research question one and sought to understand the situation of current museum education and the historical development of museum education in New Zealand. The aim was to explore whether there had been some artists engaging in children's art museum education historically, and to review and analyse art education programmes existing both abroad and within New Zealand. With these purposes, I gleaned archives relevant to the development of museum education from Archives New Zealand and teased out the turning points of museum education, both historically and currently. The findings showed that there had been some artists, termed artist-technicians, who had taken part in museum education historically. Their task had been to execute displays, prepare tactile teaching aids, distribute loan materials, label the paintings, and help education officers with practical work if required.

Furthermore, I reviewed and analysed the current art education programmes in New Zealand: LEOTC and Creatives in Schools, in addition to some international art education programmes, with respect to the engagement of artists in children's art classes. By comparing these art education programmes domestically and internationally, I reflected further on art education programmes within New Zealand and proposed increased innovation in art museum education programmes through the active engagement of artists.

Phase Two. The exploration of Phase one laid an important foundation for the further investigation of Phase two. To engage artists in children's art museum education, Phase two aimed to more deeply explore artists' ideas on current museum education regarding the learning environment, artworks, and teaching pedagogies used in art museums. The findings were presented and discussed in terms of five themes: the rediscovery of museum learning; the significance for children of being in close proximity to artworks; the unique contribution made by artists in terms of educating children in art; the effectiveness of teaching pedagogies; and the opportunities offered to children in an art museum to freely create works of art. These five themes focused on addressing research questions two, three, and four.

Phase Three. Phase three adopted two collaborative research approaches: the Double Diamond Design process and the Co-design Approach, to explore research questions five and six. Two workshops were held, to which selected museum educators, artists, and primary school teachers were invited, in order to discover the strengths and weaknesses of current museum education, and then to explore the challenges of collaboration between these three

different roles. In the workshops, the participants co-designed a novel framework for art classes in art museums. Later, they tested the framework by delivering two art classes at two different art museums and had reflection-on-action sessions to reflect on their practice and collaboration.

The findings of Phase three indicated that the collaboration between museum educators, artists, and primary school teachers was broadly successful in terms of the following: defining the theory emerging from their practices; enhancing their professional development; shifting the focus of the class to student-centred learning; enriching the forms of art activities based on students' own interests; and developing a multisensory learning experience. Simultaneously, the findings support a range of potential changes and innovations if this framework were applied to museum education on an ongoing basis. The potential innovations incorporate two significant aspects, which include developing featured museum learning programmes by combining the current two educational programmes: the LEOTC and Creatives in Schools, and developing featured curriculum which involves artists providing professional knowledge for museum education.

Contributions of the Research

The current study has made four major research contributions to the field of museum education. Firstly, through the use of primary archival resources, it has addressed the role of artists in museum education historically, and explored the current situation of artists' engagement in art classes in art museums in New Zealand. Secondly, this study has adopted collaborative research approaches in the investigation of museum education, to help participants discover and define the problems, and develop and deliver the practices they themselves co-designed. Thirdly, most art education research has focused on examining the collaborative partnership between two roles: teachers and artists; teachers and museum educators; or artists and teachers, in schools or art museums. This research explored the collaboration between the three roles of artists, museum educators, and primary school teachers. Finally, most reflective practices were conducted amongst peers, whilst mainly focusing on the reflections among teachers. The form of collaborative reflection among the three different roles was infrequent. This study explored the new form of collaborative reflection among the three different roles in terms of artists, museum educators, and primary school teachers.

The primary contribution of this research demonstrates that the new form of collaboration between museum educators, artists, and primary school teachers has become a way to effectively engage artists in children's art museum education. The benefits of collaboration and its impacts have been exemplified from various aspects. Collaborative teaching rather than independent teaching could become the common experience in art museums, providing new learning experiences for students, professional learning opportunities for teachers and museum educators, and job and professional development opportunities for artists. In addition, the potential innovative education programme could be developed further by combining two current educational programmes: the LEOTC and Creatives in Schools, with the collaborative partnership among the different roles.

Directions for Future Research

The participants in this study co-created new ideas in relation to the development of museum education in art museums, transferred these ideas into a conceptual framework of an art class, and delivered two art classes in two different art museums. This collaborative prototyping, using co-design by professionals in three different roles: artists, museum educators, and primary school teachers, in art museums, was examined in terms of what the benefits of this collaboration were, how this process responded to critical reflections on the problems in current museum education, and how this new form of collaboration worked within the current learning programmes: the LEOTC and Creatives in Schools. In response to the key findings of this research, six ideas for future research have arisen.

First, focusing on this collaboration prototype in art museums, further exploration could include a more long-term analysis of how this model is applied and delivered within museum education, and to examine whether the routine teaching and critical reflections on practice would be changed through the collaboration between the roles of artist, primary school teacher, and museum educator.

Second, this study focused on the roles and reflections of the adult participants. Outside of the scope of this study was data captured from the students, including their engagment in the art classes, their perspectives, and their learning outcomes. This would be an important next phase of analysis relating to this conceptual and design framework. In addition, with reference to

what the participants in this study put forward in the last concept in Chapter five, future research could include children having an exhibition in art museums and sharing the experience and artworks with whānau and others. Due to constraints of the workshops in this research, this was not fully explored. However, involving the whānau would provide a rich possibility for future research.

This study applied this collaboration prototyping in art museums. Another avenue highlighting a similar design could also be conducted in different environments such as galleries, historic parks, zoos, and science centres, all of which are in concert with the LEOTC programme's advocacy of learning experiences outside the classroom. Such an investigation in different institutions and locations would be useful for potentially attracting different professionals and engaging them in learning programmes, whilst, simultaneously, developing more possibilities of collaboration between different roles to test the collaboration prototype.

If different professionals engage in learning programmes, a further avenue would be to develop interdisciplinary learning through art. As reflected in this study, some artists and primary school teachers have noted the importance of interdisciplinary learning experience for students.

Last but not least, there is the prospect of the application of digital storytelling in art museums or galleries through the collaboration among artists, museum educators, and primary school teachers. Future research might adopt the Double Diamond design process from the users' perspective, to deeply explore the application of digital storytelling, develop a usable tool, and test it in art museums or galleries.

Epilogue

This is my PhD journey, involving the people I encountered and the experiences and stories I shared with them. Among all of the stories, I have one unforgettable story that I want to share with you. After delivering the first art class in one art museum, the participating primary school teacher thanked me for providing the opportunity for them to have a different art experience with the artist that they never had previously. Her students performed a Haka for me. In New Zealand, Hakas are performed to welcome distinguished guests, or to acknowledge great achievements, occasions, or funerals. I have seen a Haka a few times at my cousin's graduation ceremony and a rugby competition, but this time this Haka was only for me. Still now, when I close my eyes, I remember it vividly. I was standing in front of them. One girl started the lyrics and others harmonised with her. They danced with powerful actions and expressions. I know I should be strong but my tears welled up, and my mind travelled over how I contacted participants by email many times, how we discussed the processes, how we overcame and solved problems together, and how many times I felt frustrated and wanted to give up. At that moment, I knew all the effort was worth it because of these lovely students, and my contribution to improving museum education will be useful!

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Archive 3.2 Archives New Zealand. (1993). *New Zealand Educational Institute (1st April).* Wellington, New Zealand. Item ID: R7253841.

Archive 3.3 Archives New Zealand. (1993). *Gisborne Museum and Art Centre (15th April).* Wellington, New Zealand. Item ID: R22354225.

Archive 3.4 Archives New Zealand. (1993). *Gisborne Museum and Art Centre (19th April).* Wellington, New Zealand. Item ID: R22354225.

Archive 3.5 Archives New Zealand. (1993). *Canterbury Museum (22nd April).* Wellington, New Zealand. Item ID: R20557671.

Archive 3.6 Archives New Zealand. (1993). *Te Papa Tongarewa Museum (30th April).* Wellington, New Zealand. Item ID: R1930217.

Archive 4.1 Archives New Zealand. (1993). *Museum School Service Review (31st May).* Wellington, New Zealand. Item ID: R1930197.

Archive 5 In-service Training Course – Museum Artist-technicians

Archive 5.1 Archives New Zealand. (1963). *Wellington Education Board (23rd October).* Wellington, New Zealand. Item ID: R16866453.

Archive 5.2 Archives New Zealand. (1963). *Department of Education, Wellington (20th September).* Wellington, New Zealand. Item ID: R18729658.

Archive 5.3 Archives New Zealand. (1963). *Department of Education, Wellington (2nd September).* Wellington, New Zealand. Item ID: R18729658.

Archive 6 Tasks of Education Officers, Associate Education Officers, and Artist-technicians

Archive 6.1 Archives New Zealand. (1975). *National Museum of New Zealand (June).* Wellington, New Zealand. Item ID: R14992151.

Archive 6.2 Archives New Zealand. (1975). *The Function of An Education Officer in An Art Gallery (31st October).* Wellington, New Zealand. Item ID: R14992151.

Archive 6.3 Archives New Zealand. (1974). *Ministry of Education (26th January).* Wellington, New Zealand. Item ID: R914710.

Archive 7 Request for Education Officers

Archive 7.1 Archives New Zealand. (1966). *Department of Education (1st February).* Wellington, New Zealand. Item ID: R2823167.

Archive 7.2 Archives New Zealand. (1964). *Taranaki Herald (5th May).* Wellington, New Zealand. Item ID: R4336684.

Archive 7.3 Archives New Zealand. (1965). *Taranaki Herald (30th April).* Wellington, New Zealand. Item ID: R4336684.

Archive 7.4 Archives New Zealand. (1965). *Otago Education Board (31st March).* Wellington, New Zealand. Item ID: R4336684.

Archive 7.5 Archives New Zealand. (1963). *Canterbury Museum (1st May).* Wellington, New Zealand. Item ID: R14992102.

Archive 7.6 Archives New Zealand. (1974). *Hawke's Bay Education Board (26th January).* Wellington, New Zealand. Item ID: R22352876.

Archive 7.7 Archives New Zealand. (1973). *Department of Education (9th May).* Wellington, New Zealand. Item ID: R181061.

Archive 7.8 Archives New Zealand. (1972). *Department of Education (30th August).* Wellington, New Zealand. Item ID: R16866492.

Archive 8.1 Archives New Zealand. (1974). *Department of Education (26th January).* Wellington, New Zealand. Item ID: R181061.

Archive 9 Education Reform – Tomorrow's Schools

Archive 9.1 Archives New Zealand. (n.d.). *Museum Education Association of New Zealand.* Wellington, New Zealand. Item ID: R683406.

Archive 9.2 Archives New Zealand. (1988). *Waikato Museum of Art and History (26th July).* Wellington, New Zealand. Item ID: R20588792.

Archive 9.3 Archives New Zealand. (1988). *Ministry of Education (15th September).* Wellington, New Zealand. Item ID: R20588759.

Archive 9.4 Archives New Zealand. (1988). *Ministry of Education (16th September).* Wellington, New Zealand. Item ID: R18849840.

Archive 9.5 Archives New Zealand. (1988). *Department of Education (19th October).* Wellington, New Zealand. Item ID: R18849840.

Archive 10.1 Archives New Zealand. (1988). *Museum of New Zealand: Report of the Interviews (22nd September).* Wellington, New Zealand. Item ID: R17049100.

Appendices

Appendix A

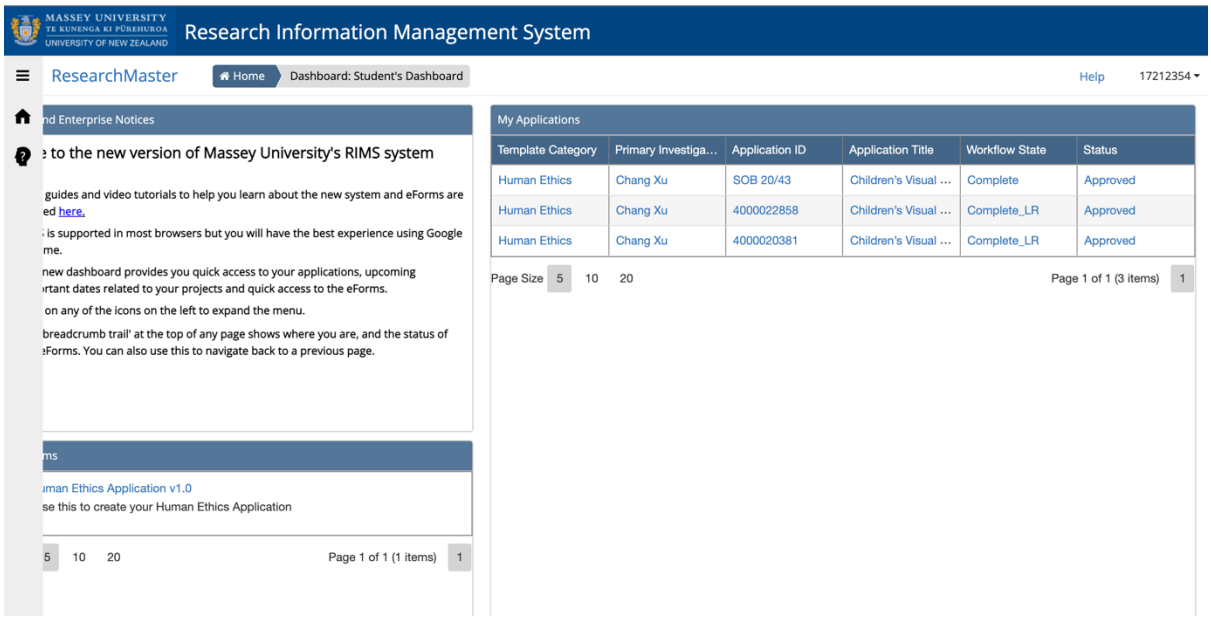


Figure A1: Approved Massey Human Ethics Applications

Appendix B

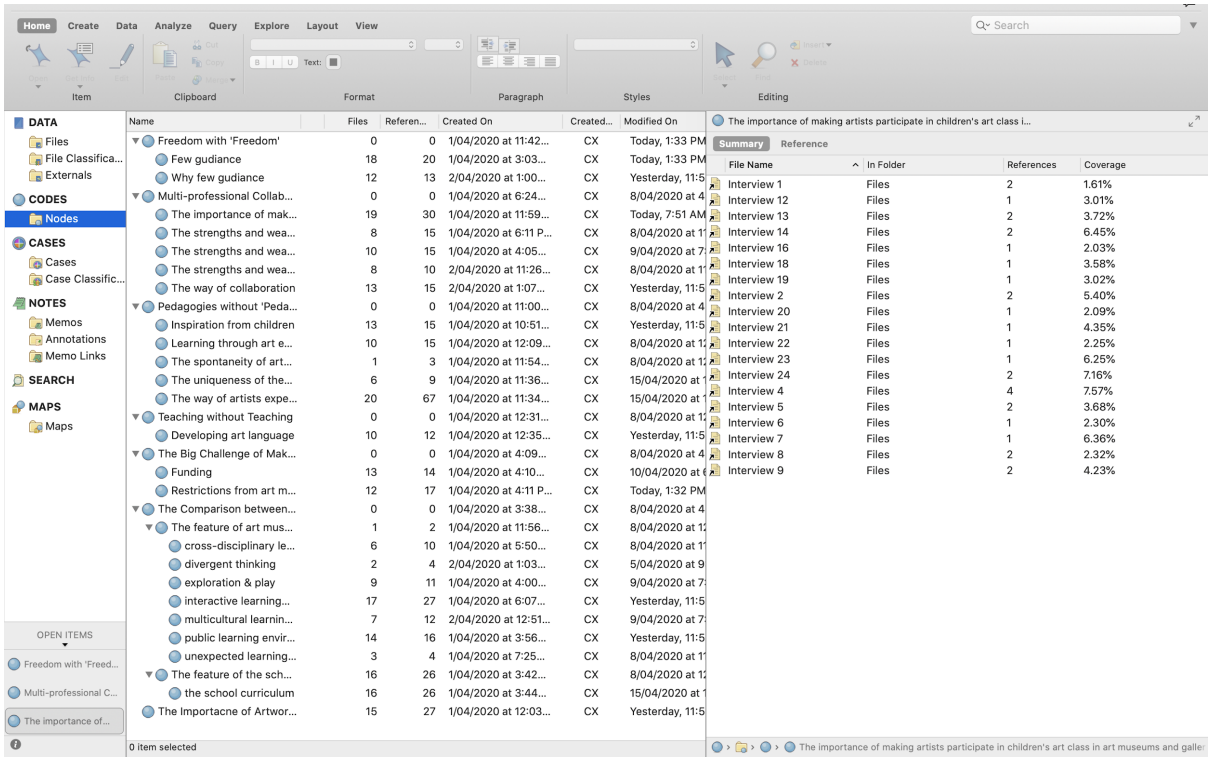


Figure B1: Saved Data in NVivo

Appendix C

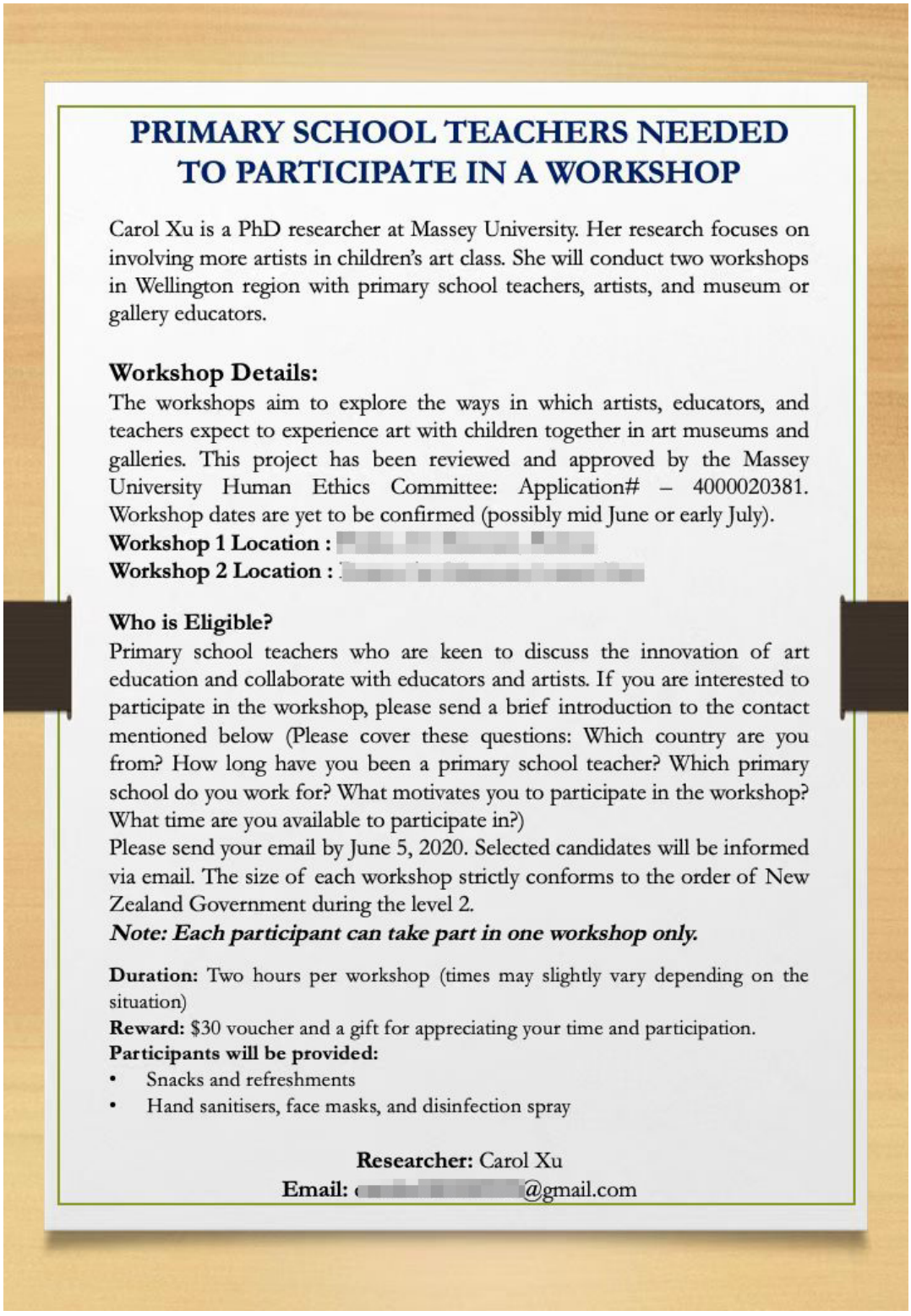
Original data	Open coding	Selective coding
Reference 1 - 1.01% Coverage A1: I think artists have different ideas when they engage with children and they are not restricted by some school rules.	Artists can bring different ideas and are not limited to school rules.	Different ideas More freedom (artists per se)
Files\\Interview 2 - § 2 references coded [5.40% Coverage] Reference 1 - 3.04% Coverage A2: I think it would be very good for children if some artists would love to engage in their art classes. Learning from artists directly is better than learning from the second person (museum and gallery educators) because they can ask them directly some questions like why did you do that?	Not all artists prefer to participate in children's art classes. Learning with artists directly is better than studying with educators.	Why? Direct learning experience with artists
Reference 2 - 2.36% Coverage A2: Art museum and gallery educators merely can answer basic questions such as the fundamental information about the artist, what are elements in the artwork, what are materials used in the artwork. However, I do not believe they could answer some personal questions such as why the artist created this artwork, where did the artist get the inspiration to create this artwork, what did the artist feel when he or she made this artwork. I think it would be better if children engage in children's art classes to share	Artists, compared with art museum and gallery educators, provide and share more real experiences with children directly and emotionally.	Direct learning experience with artists

these private experiences directly, rather than (children) learning via an intermediary.		
Reference 2 - 3.05% Coverage A2: I suppose I bring my own experience as an artist and think from different angles. I focus more on children's creative process, rather than the result.	Artists bring different experiences and ideas compared to those of educators and pay more attention to children's creative process.	Different thinking and experiencing Process-oriented
Files\\Interview 4 - § 4 references coded [7.57% Coverage] Reference 1 - 2.12% Coverage A4: Um… I think expanding children's horizons to understand what art is for, and what the meaning of making art is because we have so many artists and they have different attitudes to the art. They will help students understand more about the art.	Artists help children understand art from different perspectives.	Different ways of understanding the art
Reference 2 - 1.61% Coverage A4: Making children feel welcome. I think it is better they(educators) involve artists instead of just educators talking in front of them. They will feel close to the artists.	Artists make children feel close to them.	Approachability
Reference 3 - 2.81% Coverage A4: I think when artists join in children's activities, they have different philosophical ideas. Their creations are in different areas. If children can have an interaction with artists and become part of the conversation about artwork,	Artists from different art fields bring different opinions.	Different thinking

artists can bring a kind of subjectivity back into the artwork.	Artists connect ideas with artworks.	Connection with artworks
Reference 2 - 1.43% Coverage A9: I think they can learn from artists' experience of creation.	Creative ideas of artworks are from artists.	Direct learning experience Creative ideas

Table C1: An Excerpt of Interviews' Coding and Analysis Process

Appendix D



PRIMARY SCHOOL TEACHERS NEEDED TO PARTICIPATE IN A WORKSHOP

Carol Xu is a PhD researcher at Massey University. Her research focuses on involving more artists in children's art class. She will conduct two workshops in Wellington region with primary school teachers, artists, and museum or gallery educators.

Workshop Details:

The workshops aim to explore the ways in which artists, educators, and teachers expect to experience art with children together in art museums and galleries. This project has been reviewed and approved by the Massey University Human Ethics Committee: Application# – 4000020381. Workshop dates are yet to be confirmed (possibly mid June or early July).

Workshop 1 Location :

Workshop 2 Location :

Who is Eligible?

Primary school teachers who are keen to discuss the innovation of art education and collaborate with educators and artists. If you are interested to participate in the workshop, please send a brief introduction to the contact mentioned below (Please cover these questions: Which country are you from? How long have you been a primary school teacher? Which primary school do you work for? What motivates you to participate in the workshop? What time are you available to participate in?)

Please send your email by June 5, 2020. Selected candidates will be informed via email. The size of each workshop strictly conforms to the order of New Zealand Government during the level 2.

Note: Each participant can take part in one workshop only.

Duration: Two hours per workshop (times may slightly vary depending on the situation)

Reward: $30 voucher and a gift for appreciating your time and participation.

Participants will be provided:

- Snacks and refreshments
- Hand sanitisers, face masks, and disinfection spray

Researcher: Carol Xu

Email: @gmail.com

Figure D1: A Poster of Primary School Teacher Recruitment

Appendix E

Date: 01/11/2018 **Name of the School**: XXX School **Year**: 7-8 (12-13 years old) **Visiting Time**: 10:00am-11:30am **Place**: XX **No. of Visitors**: 17 Students, 2 Parents, 2 Teachers **Theme**: XX Tour and Workshop **Art educator**: XX	
Visiting Time	**The Process of the Art Class**
10:03am	● The school arrived XX. ● Students put clothes and schoolbags into the cloth bin.
10:05am	● Students seated on the ground and the educator informed visiting rules.
10:07am	● Going to the upstairs ● The educator introduced the exhibition with visiting. ● Q (gallery educator): What do you collect? ● A (students): Stamps, boxes, gadgets, small pens, stones, and so forth.
10:13am	● The educator asked students to observe the photos hanging on the wall with the question on what do you observe in these photos? ● A (students): reflection, on the water, same pattern. ● The educator explained what is the palindrome according to the exhibition.
10:18am	● Going to another exhibition hall ● Q (educator): What are the similarities of these photos? ● A (students): water, double, pointing towards right, twins, and so forth.
10:20am	● The educator encouraged students to observe details and discuss with each other.
10:40am	● Theme-related game ● Three students in a group ● The educator provided some photos for students, asking them to find the

	internal connection of items in photos and reorganise them.
10:57am	● The educator led students to visit each group's combination of photos and selected three groups to explain and share their ideas.
11:03am	● Completing the visit
11:06am	● Entering into the education room ● The educator informed the rules of the education room and the information of the hands-on activity. ● The theme of the activity was creating a theme museum. ● Three students in a group (one curator, one collection manager, and one photographer) ● The educator explained the task of each role.
11:20am	● Starting the hands-on activity ● Curators and collection managers were in charge of collecting the items which were relevant to their museums, and the educator taught the photographers how to use the camera.

Table E1: Detailed Descriptions of One Art Class in One Art Museum

Date: 07/11/2018 **Name of the School**: XXX School **Year**: 4-5 (9-10 years old) **Visiting Time**: 09:45am-10:45am **Place**: XX **No. of Visitors**: 27 Students, 4 Parents, 1 Teacher **Theme**: XXXX (one-hour quick tour) **Art educators**: XX & XX	
Visiting Time	**The Process of the Art Class**
09:46am	● The school arrived XX. ● Educators greeted students and asked them to put clothes and schoolbags into the cloth bin.

	● After preparing everything, educators led students to the exhibition hall and introduced artworks of the artist.
09:50am	● Educators explained the materials of two artworks and brought some books which had the similar textures to these two artworks.
09:54am	● Entering into the education room ● One of the educators introduced what is the cell based on the exhibition through PowerPoint.
10:01am	● Educators introduced how to use these art materials and showed an example.
10:07am	● Starting the hands-on activity ● Educators guided students how to make hands-on artworks when students practicing.
10:28am	● Completing the activity and collecting students' artworks
10:29am	● Educators concluded the art class.
10:32am	● Leaving the education room
11:30am	● Completing the activity ● Students filled in the paper in terms of the name of the museum, the inspiration of the design.

Table E2: Detailed Descriptions of Another Art Class in Another Art Museum

Appendix F

Year	M / AG	EO	AEO	AT
1960 - 1965	Auckland Institute and Museum	R. A. Scobie (M.A.)	1	J. McCaw
	Auckland War Memorial Museum	R. A. Scobie	B. H. Cadman (B.A.)	J. McCaw
	Dominion Museum (Wellington)	M. E. Stephenson	V. Driver (M.A.)	S. Skerman
	Canterbury Museum	J. H. Johnson	A. McEyles	L. J. Cappel
	Otago Museum	L. Lockerbie	1	C. Burrell
1966 - 1970	Auckland Institute and Museum	R. A. Scobie	1	J. McCaw
	Auckland War Memorial Museum	R. A. Scobie	B. H. Cadman A. F. van der Meijden (M.A)	J. Mc Caw
	Dominion Museum (Wellington)	M. E. Moreland	C.M.van Dooren	S. Skerman A.de Lange (relieving) – 1968
	Canterbury Museum	J. H. Johnson	A. McEyles	G. D. Bagot
	Otago Museum	L. Lockerbie	W. C. R. Stringer	C. W. Burell
	Wanganui Museum	1	C.C.Day	1
1971 - 1975	Auckland Institute and Museum	R. A. Scobie	1	J. McCaw
	Auckland War Memorial Museum	W. Berry	B. H. Cadman R. Watt	J. McCaw
	Dominion Museum (Wellington)	J. Christie	H. McCredie	R. Lyndan
	Canterbury Museum	J. Johnson	A. McEyles N. Major	V. Rows

	Otago Museum	L. Lockerbie	W. C. R. Stringer	C. W. Burell
	National Museum	J. A. Christie	H. J. McCredie	R. M. Cyndon
	National Art Gallery	J. E. Ritson	-	-
	Dunedin Public Art Gallery	A. Meeson		
1976 - 1980	Auckland Institute and Museum	R. A. Scobie	1	J. McCaw
	Auckland War Memorial Museum	W. Berry	B. H. Cadman R. Watt	J. McCaw
	Dominion Museum (Wellington)	J. Christie	H. McCredie	R. Lyndan
	Canterbury Museum	J. H. Johnson	A. McEyles N. Major	V. Rows
	Otago Museum	W. Stringer	S. Mackay	B. Weston
	National Museum	J. A. Christie	H. J. McCredie	R. M. Cyndon
	National Art Gallery	A. Drummond I. Hunter	-	-
	Wanganui Museum	B. McDonnell	1	1
	Nelson Museum	-	J. Ford (P/T)	-
	Napier Museum	-	N. Bartle (P/T)	-
	Gisborne Museum	-	B. Allum (P/T)	-

Table F1: List of Positions Employed in Museums and Public Art Galleries from 1960 to 1980

Notes:

M: Museum AG: Art Gallery

B.A.: Bachelor of Arts M.A.: Master of Arts

EO: Education Officer AEO: Assistant Education Officer AT: Artist-technician

P/T: Part-time 1: One EO/AEO/AT (Name Unknown) -: Unknown

Appendix G

Name of the Programme	Place of the Programme	Duration	Age Group	Features of the Programme
K-12	USA	Since 1969	5-18 years old	● Promoting socio-economic change. ● Breaking down social barriers. ● Providing authentic and quality school curriculum. ● Artists construe basic education pedagogies, the development and assessment of curriculum, the management of classrooms, and children's psychological development.
ATS	England	Since 1999	All age groups	● Collaboration with major galleries and museums. ● Collaboration with LJMA and WSA which provide part-time courses and MA for artist-teachers. ● Attempting to erode the boundary between the role of artists and art teachers.
Room 13	Scotland	Since 1994	5-12 years old	● Students run the studio as a business, raising funds to buy art materials and employ professional artist-in-residence to work with them. ● Artists in Room13 resist assessment-led and mechanical

				curricula in art education and encourage critical pedagogies.
Reggio Emilia	Italy	Since 1963	0-6 years old	● Reggio Emilia selects artists based on their motivation to work with children, previous experience, portfolio, and ability to combine artistic pedagogies. ● Each centre employs a pedagogical specialist to support artists working with children.
-	Australia	-	-	● Museum educators arrange facilities in advance and exert pedagogical tactics with artists, providing the professional knowledge of artworks.
LEOTC	New Zealand	Since 1989	5-12 years old	● Providing learning experiences outside the classroom for students. ● Providing authentic, hands-on, interactive learning experiences that complement and enhance classroom learning. ● Related to the national curriculum. ● Providers include zoos, museums, historic parks, art galleries and performing arts and science centres.

Creatives in schools	New Zealand	From 2020 to 2023	5-18 years old	● Providing new learning experiences for students with professional artists and creative practitioners. ● Providing employment opportunities for creatives. ● Other than the New Zealand Curriculum arts disciplines of visual arts, dance, drama, and music, it extends to other areas such as film making, game design, fashion design, spoken word and more.

Table G1: Key Features of Domestic and International Visual Art Education Programmes