

# DEAR FUTURE,

■ Museum Learning  
in the Digital Age

SINGAPORE  
ART  
MUSEUM  
EDUCATION  
SYMPOSIUM

---

18 & 19  
JULY 2019

# WHAT DOES THE FUTURE HOLD FOR MUSEUM LEARNING IN A DIGITAL AGE, WHERE DIVERSE AUDIENCES HAVE UNLIMITED ACCESS TO ONLINE ARTS AND CULTURAL RESOURCES?

The Singapore Art Museum invites museum professionals and educators from France, Australia and the Southeast Asian Region to exchange perspectives and ideas on museum-based learning for tomorrow.

## TOPICS EXPLORED

### **INTERDISCIPLINARY LEARNING**

The museum as a space to rethink the future of pedagogies of teaching and learning with a focus on youths and preschoolers.

### **ALTERNATIVE LEARNING SPACE**

The Museum as a classroom.

### **UNDERSTANDING THE 22ND-CENTURY AUDIENCE**

Needs of youth audiences of future, and implications for museum learning.

### **TO TECH OR NOT TO TECH**

Possibilities and challenges of youth-focused and technology-enabled museum learning.

# DEAR FUTURE,

■ Museum Learning  
in the Digital Age

## SINGAPORE ART MUSEUM EDUCATION SYMPOSIUM

---

18 & 19  
JULY 2019

### DAY ONE

**Thursday, 18 July 2019**

Singapore Botanic Gardens  
Botany Centre, Level 1, Function Hall

#### SYMPOSIUM

- 01 Opening Remarks
- 04 Keynote Address
- 23 PANEL 1:**  
Understanding the  
22nd Century Audience
- 45 IN RESPONSE:**  
A Conversation with Our Future
- 46 PANEL 2:**  
To Tech or Not To Tech
- 73 PANEL 3:**  
An Alternative Learning Space
- 87 Closing Lectures
- 88 Closing Remarks

### DAY TWO

**Friday, 19 July 2019**

Dakota area  
ArtScience Museum  
Indian Heritage Centre

#### WORKSHOPS

- 91 WORKSHOP I:**  
Dakota Adventures [Tour]
  - 92 WORKSHOP II:**  
Tour of Future World Exhibition,  
Creative Aquarium + Play with  
Coding Workshop Snippets
  - 94 WORKSHOP III:**  
Designing Learning Experience  
using Museum Space
- 
- 95 About the Speakers
  - 105 Workshop Facilitators
  - 107 About the Organisers
  - 108 Acknowledgements

# OPENING REMARKS



## MR. KENNETH KWOK

Assistant Chief Executive,  
National Arts Council, Singapore

**G**ood morning everyone. I think I shan't go through the whole list of VIPs here, but, good morning Siak Ching, June, Ms. Leong Cheng Yee from the Singapore Botanic Gardens, Mr. Vincent Poussou, Mr. Terry Deen, distinguished guests, ladies and gentlemen, friends and colleagues. It is my great pleasure to welcome all of you this morning, on behalf of the National Arts Council (NAC) and the Singapore Art Museum (SAM), to ***Dear Future: Museum Learning in the Digital Age***. SAM, as the leading museum in Singapore for contemporary Singaporean and Southeast Asian art, plays a key role in developing the visual arts landscape; not only through its collections, but also through its various education and access programmes. The NAC is very happy to be supporting them in presenting the two-day symposium for museum professionals and educators. I would also like to thank the Singapore Botanic Gardens for joining us as our venue partner, and Ngee Ann Polytechnic which has come on board as our programme partner.

In October last year, NAC launched ***Our SG Arts Plan*** which details the focus areas for Singapore's literary, performing and visual arts sectors over the next five years. In the plan, building diverse capabilities in the arts sector and optimising digital technology to enhance audience engagement were both identified as some of our priorities. Part of NAC's recent efforts in the digital space will be the relaunched Stamford Arts Centre, which features augmented reality and virtual reality experiences for visitors—a very deliberate decision by the NAC because of the venue's identity as a centre for traditional arts, and all the misconceptions that may form around the idea of traditional arts. Today, we will benefit from the expertise of speakers from renowned overseas institutions, namely the Grand Palais, Queensland Art Gallery, as well as from arts and culture institutions in Singapore. Beyond the museum landscape, we will also have presenters from the digital community. We also have among our speakers: professional artists, present and former classroom educators, and school principals—and I count myself as one of them having been a secondary school teacher previously. I'm confident that together they will spark in you new ideas for how technology can be used in your work and generate new insights into how audiences growing up in this digital age can be better engaged. I'm especially heartened to know

## DAY ONE: KEYNOTE SPEECH

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium

that we have a panel of students who will be sharing with us later today as well. I'm of the generation that learnt to use the computer, the email, the internet, then smartphones, then apps. But many of our audiences and visitors were born, and are going to be born, in a world where technology is just the norm for them. It is not something they have to learn; it is part of their everyday life. And, in fact, some of the technology that we use today, that we know today, may not be around in the future. So, we need to think about what's new; we need to think about what's next. Earlier this week, I attended a talk about the intersections between art and technology in the context of the disability sector, and it reinforced for me the idea that, beyond talking about people with what society defines as having disabilities, technology can transform the way the arts are experienced by anyone of us—by everyone of us. I think when we think about how people can make art, experience art, or appreciate art, we need to look at really different ways because of the opportunities that technology afford us. It is not just about what is new, but also: who is it for? It is not just about ways of doing. It is also about ways of thinking about the world around us and asking ourselves: what mindsets do we need to change? What practices, what behaviours need to change, as museum professionals and as educators? We need to look both at what is around us, and what lies ahead.



Our keynote speaker today, Mr. Vincent Possou will present on the need for museums to shift from being collection focused per se, to prioritising the visitor experience, as well as the impact of the changing world on museums in areas such as conservation, sustainability and education. We know our museums do a broad base of work. We will also discuss possible new audience profiles, and the role of museums in the future. In our first panel, ***Understanding the 22nd-century Audience***, we will hear perspectives from Australia, thanks to Mr. Terry Deen. And we will also hear from Ms. Luanne Poh, director of the Artground, who will share her thoughts on the future needs of children and youth audiences and the implications that may have for museum learning. Launched in 2017 the Artground was jointly developed by The Ground Company Limited and the NAC as a dedicated multidisciplinary art space, catering to children from zero to 12 (And when we mean zero, we mean, below the age of one, because The Artground also has some baby programmes in its space). So special thanks to Luanne who is a new mother, and who is in fact on maternity leave today. That she is here today shows her passion for young people and the arts. So, thank you, Luanne. In panel 2, ***To Tech or Not To Tech***, the discussion will focus specifically on how museums can embrace digital transformation in the age of unprecedented levels of online arts and culture content; while panel 3, ***The Museum as a Classroom***, will discuss the learning opportunities that arise when museums are optimised

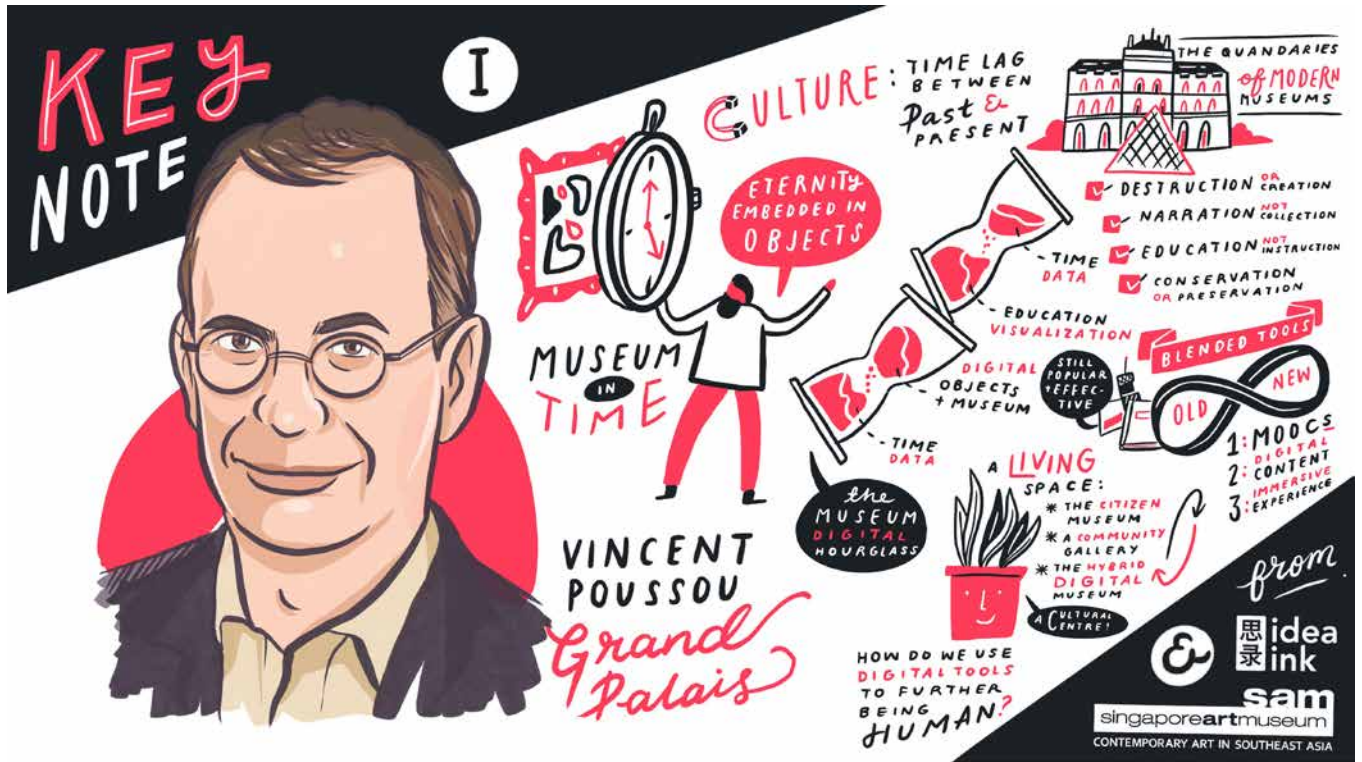
## DAY ONE: KEYNOTE SPEECH

as educational spaces. I'm especially happy that museum visits have now been identified as a core learning experience in the Ministry of Education's Primary school art syllabus. NAC is committed to our partnerships with both National Gallery Singapore and SAM, and the Ministry of Education to grow the capabilities of our Singapore art sector to support such museum-based learning efforts. Looking beyond Primary school education, NAC hopes to continue to deepen conversations surrounding museums as educational spaces, and the associated pedagogies required to provide authentic learning experiences for all ages in our visual arts institutions. This will hopefully result in more returning and lifelong visitors. The day will end with presentations by Ms. Samantha Lo from Culturement, and Mr. Cai Yinzhou from Citizen Adventures. Through their unique approaches, Samantha with her installations and Yinzhou with his tours, they focus on neighbourhoods as social ecosystems, highlighting the different perspectives within different communities and how our actions are interdependent on each other. Finally, thank you Dr. June Yap from SAM who will present the closing remarks, summarising what I'm sure will be a very exciting and enriching day, and leading us into the workshop series tomorrow.

I wish you an enriching day ahead and hope that this symposium serves as a springboard for future collaborations, future ideas and conversations in museum learning through the digital age. Thank you very much.



## DAY ONE: KEYNOTE SPEECH



# KEYNOTE SPEECH

## MR. VINCENT POUSSOU

Director of Audiences and Digital, Grand Palais

## MUSEUM IN TIME

Good morning everybody. I'm very pleased to be here today. I would like to first thank SAM and especially Ms. Chong, Mr. Kenneth Kwok and Dr. June Yap, and my colleague Ms. Dee Chia for giving me the opportunity to share with you my thoughts about the future of museums. I will speak in English. I am not totally fluent in English, but I'm very pleased to be able to share with you in this language. My name is Vincent Poussou, and I am in charge of digital and audiences at the Réunion des Musées Nationaux—Grand Palais in Paris. The Réunion des Musées Nationaux—Grand Palais is a public body linked to the French Ministry of Culture. It has 2 main missions:

First, we provide services to French national museums, such as publishing, bookshops, guides and exhibition production. Secondly, we are in charge of the Grand Palais itself. At this enormous venue constructed in 1900, strategically placed in the centre of Paris near the Champs Elysées, we organise major exhibitions with the national museums. International events like the International Paris Art Fair (FIAC) also take place at the Grand Palais.

My department includes 60 guides working full time in the main French museums who are all art historians who hold a Master in Art History. It also includes three other teams: digital, education, marketing and evaluation. This mix of digital, education and marketing with such an important team of guides, is very unique in France, and presents to us a lot of possibilities.

Prior to working at the Grand Palais, I was head of audiences and education at the Centre Pompidou, another huge and hybrid cultural venue in Paris, composed of the national modern art museum, a free public library, movie and conference halls, and theatres. Before that, I was the first head of

## DAY ONE: KEYNOTE SPEECH

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium

communication and audiences at the Parc de la Villette, a new cultural park in the north east of Paris, built on the site of a former slaughterhouse, which now includes a science museum, a music museum, and like the Pompidou center, concert and exhibition halls and theatres.

The title of my talk today is ***Museum in time***, because I think education is a long-term process and that education and museum professionals share this deep feeling that time is what gives sense to their mission.

I'd like to give you some perspective on the present and future of museums, focusing on education, digital, and audiences, both from a theoretical and practical point of view. As I know you all have experience of these issues, I look forward to hearing your comments and sharing with you during this conference. I would like to develop ideas from a global point of view, which can be relevant for different kinds of museums, whether they are science, art or historical museums, even if my experience is more in art museums.

In the first part of my talk, I'll focus on time, museum, and education, and present what I call the ***Museum Hourglass***. In the second part, I'll introduce the different forms of museums in changing times, and the social role of museums, with three cycles, the creation, the destruction, and the museum cycles. My third part will be centered on: how to attract more visitors, with content, education, and digital. As a conclusion, I'll present some examples that can be relevant for the future of museums.

## TIME, MUSEUM AND EDUCATION

I just arrived yesterday from France via Dubai, so I am sorry I am a bit jet lagged. In Paris it's midnight, and people have 6 more hours to live than we have here in Singapore. My first question is: where did those 6 hours I didn't live disappear to?

We often speak of culture but it's very difficult to define what culture is. So, let me introduce my own definition of culture as a time lag. Take for example this mask from the Musée d'Orsay, made by Jean Carriès in 1892 (Fig. 1).

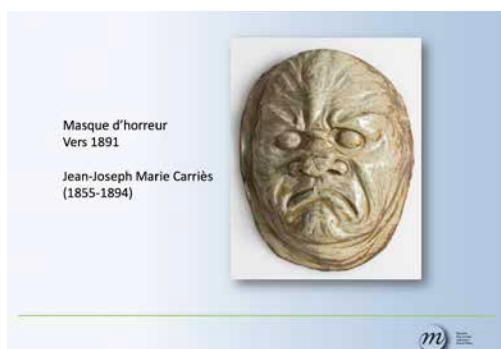


Fig. 1 – Vincent Poussou  
Slide 12



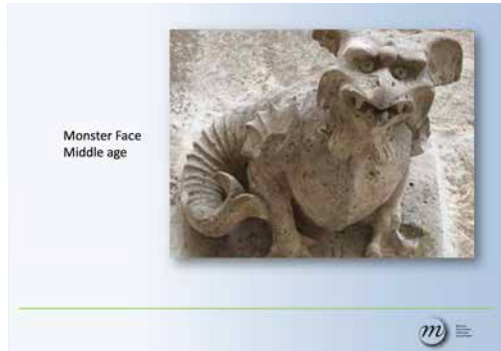


Fig. 2 – Vincent Poussou Slide 14

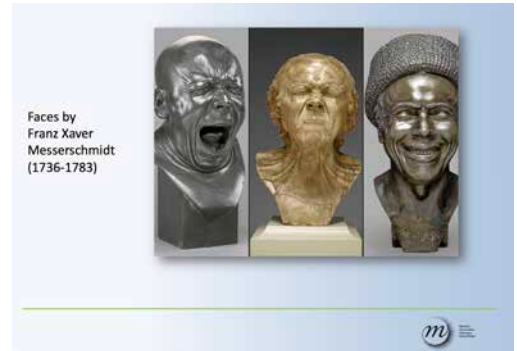


Fig. 3 – Vincent Poussou Slide 15

Various sources of inspiration can be seen: the Japanese Noh theatre, the western Middle Ages sculptures of monsters (Fig. 2), and Messerschmidt faces of emotions (Fig. 3).

What can we notice when this image appears in front of us?

Those different moments of time have been embedded in this mask: the western and Japanese middle ages, and of course the 19th Century. All these periods are now present in 2019, in a surprising coexistence.

Let's look at this time-line (Fig. 4): normally, 1892 and 2019 are two different periods of time, that are completely separated. It's impossible to go back to the past, or to jump into the future.

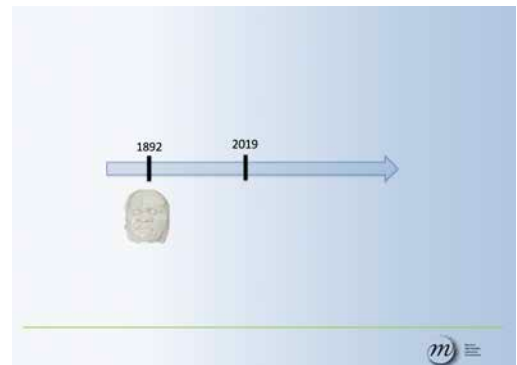


Fig. 4 – Vincent Poussou Slide 16

Nevertheless, with the appearance here, at this moment, of this artwork, 1892 and 2019 join: they are still on different timelines, but these two timelines coincide. The space between them is what I call *Culture*. *Culture* is the place where we discuss how time makes us human. And how humans deal with time. How we deal with our limited time on earth. Every form that expresses the specific human relationship between humanity and time, I call it *Culture*.

If we focus on museums, the question becomes: what specific relationship with time do museums have?

We know this relationship is both dense and complex: the museum is a place where humans fight against time. As museum professionals, we're supposed to maintain our collections for eternity. The Mona Lisa should still be there to be seen by human visitors in the year 3000. She's supposed to become 1500 years old, and even older...

But eternity is also what makes it difficult to reach audiences. Why should I go to a museum that will always be there?

## DAY ONE: KEYNOTE SPEECH

But you certainly know, eternity doesn't exist. There are just portions of time that are embedded in objects. As we fight to preserve the objects, we fight to preserve these portions of embedded time. This gives a sense of eternity: a past that hasn't disappeared. And, moreover, that can be projected in the future through generations.

But in order to introduce the past into the present, we have to reveal the past which is embedded in the object, we have to bring it out into the open.

There are many ways museums are developing the time that is embedded in their collections.

We develop this time by, for example, creating events that connect the time of the object with our time. Through creative works inspired by the objects. Through education, transmission of knowledge, and information.

In France, a 2002 law compelled each of the 1200 French museums to have at least one person in charge of developing audience, whether by developing education or marketing. Recently, I participated in a mission organised by the French Ministry of culture, entitled **Museum of the 21st Century**. What did we observe? We observed that everywhere in France, whether big or small museums, teams were fighting to develop audiences: some organised speed dating at night within the museum. Others partnered with film festivals, or organised concerts inside the museums. Almost all have education workshops, and strong links with local schools. These activities are key activities to keep the museums opened, to get subsidies, to enable the museums to get closer to the population they rely on.

The recommendation of the team **Museum 21** was to go further, to make museums even more inclusive, more collaborative. To change the way a museum is managed, in order to make museum organisations less vertical and more collaborative internally in order to be so externally.

What happens when we try to make the museum more connected with today's life?

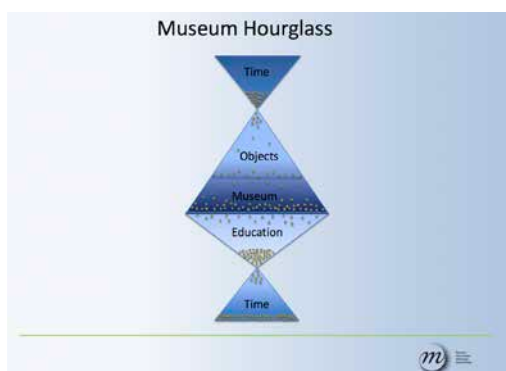


Fig. 5 – Vincent Poussou Slide 22

Let's have a look at what I call the **Museum Hourglass** (Fig. 5).

It's a kind of synthesis of what I just presented. Time is embedded in objects—any kind of objects, art works included. The objects are gathered in a museum, and we redevelop their embedded time through our creative or educational activities. So embedded time, through the processes of museums, produces present time. Past creates present. That is why heritage is so important.

# MUSEUM IN CHANGING TIME AND THE SOCIAL ROLE OF MUSEUMS

This is the first life cycle, the cycle of creation.

Life is creation; objects are the result of this creative process. Some of these objects go to museums, and we, museum professionals, recreate life from these objects.

This a creation cycle, but there is another cycle, the destruction cycle, which is also essential for museums for various reasons.

Why talk about destruction in the context of venues that have been created to prevent destruction?

Because as I already said, eternity doesn't exist. We know that aiming for eternity is utopian. We have to admit that: it's unlikely that Mona Lisa will still be there in the year 3000 to smile at human visitors. During the Second World War, the Mona Lisa was hidden in a castle in the south of France. Hitler ordered Paris to be destroyed. Many cities were bombed, and invaluable treasures were lost. Very recently, Islamic State bombed Palmyre in Beirut during the civil war. A sniper damaged a 2000-year-old ceramic to make a hole to aim his gun. In Paris only a few months ago, rioters tried to enter the Musée d'Orsay.

So, destruction threatens museums and their collections. We all know that.

But destruction is also part of what museums are.

I will tell you a very personal experience of my childhood.

My mother, who was a teacher, was raised on a small farm in the south of France. My grandfather was a soldier in the First World War, and he died in the 1980s when I finished college. So, I had time to know the real life of a farm that had hardly changed in over a century.

I remember one of my first visits to a museum. I was about 10 years old, and it was in my mother's native region. The museum was an "eco-museum", a new kind of museum that opened in the 1970s in France to show the different lifestyles that existed in the countryside.

I remember saying to myself: "Oh, my grandfather is in this museum", In fact, my grandfather was still alive at the time, working on his farm. And yet already in a museum, rebuilt by professionals, I found the house, the cows, all the elements of my grandfather's life. Professional curators, dressed like he was dressed, played his role in front of visitors. It made me realise as a child that this way of life, which I had considered normal, was in fact disappearing, and needed to be conserved in a museum.

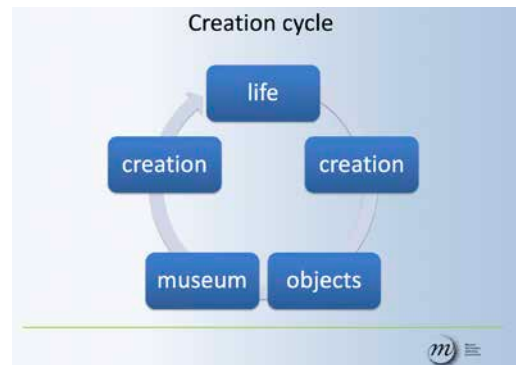


Fig. 6 – Vincent Poussou Slide 25

There are many other examples of how destruction is key in the birth of a museum

- for example, the National Museum of African American History and Culture in Washington shows the destruction of freedom because of slavery, and the fight for freedom of the Afro-Americans in the US
- the Quai Branly museum in Paris is linked to destruction for another reason: its collections contain objects from native cultures gathered at the time of colonialism,
- and many memorial museums are directly linked to destruction processes, like the Museum of Jewish Heritage in New York, or the Human Rights Museum in Santiago, in Chile.

I think this issue of destruction and disappearance has become increasingly important nowadays and is one of the prominent socio-political themes of our times.

Destruction of nature, disappearance of biodiversity, of species, of diversity of cultures. Destruction of heritage. It is life, it is the passing of time, but it is also the effect of wars, of economic growth, of social conflicts.

The museum is no longer a temple. But, should it become a refuge, to escape from the harsh realities of daily life? On the other hand, should the issue of conservation be put up for debate? What should be conserved and for whom? Should we conserve in a museum or should we preserve life? Is a museum a dead place for dead objects, the alibi to go on destroying, or is it a living place to protect diversity?

If so, what should it focus on?

We talked about creation, about destruction, about time and culture. In addition, we are now introducing the social role of the museum. How is the museum part of the city? That was another important issue of our work in France on the museum of the 21st century. The issue of what we called “the citizen museum”. Which values do we share? How do we work for a territory, how do we participate in the life of the community?

The place of the museum has changed over periods. The international council of museums is working on a new definition of museums, which focuses on the challenges of the 21st Century. These challenges have been defined by the environmental crisis, the presence of deep societal inequalities, the different world-views on what museums are and, finally, the commitment to be meaningful meeting places.

So, let us have a look at what I call the ***Museum Cycle***.

Life produces objects. A community decides to conserve some of them in places that were at the beginning not yet named museums.

Then a specialisation process occurred: the museum came to be considered as a tool to elevate society: it belongs to experts, who considered themselves as the only ones who could really appreciate it. This is the period of the museum “temple”. Visitors had to be specifically

educated to have enough manners and dignity to enter a museum. Within the museum, they had to behave like in a temple: "Don't shout! Don't run! Don't touch!" This process, which separates the museum from society, has been very well described in Lawrence Levine's book *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America* where he deals with a very specific American example.

At the end of the 19th century the cultural center museum appeared. In France, the Centre Pompidou was the first example of that. It's a fascinating venue, popular for both Parisians and tourists. The aim of the museum changes when it becomes a cultural center: its model is the Greek Agora, a place where the citizens debate city policies. The focus is less on embedding time; it's more on enlightening our time with the experience and knowledge of not only past, but present time as well. Of course, it's a new utopia, and the goal is never achieved, but it gives a direction.

What will be the next step for museums in the future? I think we have to consider two ideas: the idea of the hybrid or mixed museum, and the idea of the digital museum.

A hybrid museum is a museum that gives priority to narration instead of collection. For an art museum, that means that you can feel free to use reproductions, if necessary, in your narration, and mix them with original artworks. One example I have in mind is the MUDA, a small didactic art museum, in a small village in Redu, Belgium. This is a private museum created by a collector whose aim is to teach visitors the history of art. Therefore, he organised a chronological narration mixing digital or non-digital reproductions of artworks with the original artworks of his own collection. The MUDA also offers young visitors playful interactions. It's possible for a group of children to visit the museum alone, or in small groups. I think this kind of museum, specifically designed for education from the outset, can contribute to a national art education policy.

Now, as I introduced the idea of a digital museum, you are probably asking yourselves: what is a digital museum?

I will answer this question gradually, with examples and trends, and focus on the core theme of our symposium: education and digital.

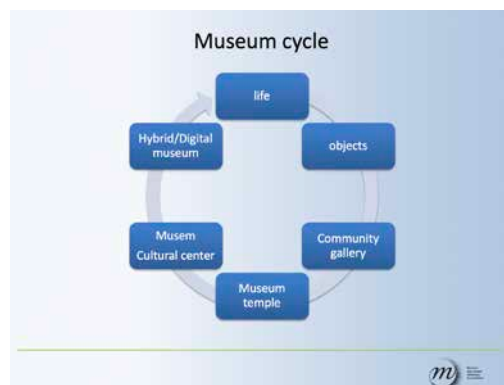


Fig. 7 – Vincent Poussou  
Slide 29

## HOW TO ATTRACT MORE VISITORS? CONTENT, EDUCATION AND DIGITAL

However, we cannot develop this issue if we don't consider what I think are the two main visitor-related issues for heritage today: the problem of overcrowding of the main tourist sites, and the lack of audience in many museums.

It is sometimes said that there is a new "madness for museums". For example, in France, I hear from journalists that museums have become trendy and attract more visitors than ever.

That is true for the important museums that are on the mainstream tourist tracks. More than 70% of the 10 million who visit the Louvre every year are foreign tourists. It is the same for museums like d'Orsay and Versailles. A bit less for the Pompidou Centre. But that's all.

In fact, it's much more common for a museum to have not enough visitors than to have too many. Even in the Louvre, kilometers of galleries are almost empty. And the main problem that museum managements face is very often how to increase audiences.

So, how do we attract more visitors?

There is no obvious and simple solution.

You can't ignore the impact of some general phenomena:

- First, there is an intimate correlation between the percentage of college-educated people and museum visitors. This first point concerns the dramatic effect of the growing education level of a population.
- Second, developing museum offerings, either by building more museums or by increasing the number of exhibitions, do increase the overall number of visitors in general because the same visitors come more often. Rarely do you really attract new visitors to museums in general.
- Third, two factors are important to trigger a museum visit—we did a national inquiry on this issue in France very recently: children, and tourism. Many French people visit museums only during holidays, and only in another city than the one they live in. In addition, opening the mind of their children is a main reason for the visit.

Therefore, this seems to confirm the idea that education is key to increasing audiences.

That is true in theory, but all the studies we have conducted show that it's secondary to programming and content.

At the Grand Palais, we program at least six major art exhibitions a year. And we always get the same answer when we ask visitors what attracted them to an exhibition: the theme. We always get the same answer when we ask them what we can improve: they want more comprehensible explanations.

As far as content is concerned, for an art museum which has the opportunity to program exhibitions, the question could be whether you focus on an artist or on a universal theme. Many argue that a theme linked to contemporary issues is more able to attract large audiences, but from our experience at the Grand Palais that is not true. A well-known artist or period, like Monet, or Impressionism, always attracts more visitors than a thematic exhibition.

This does not mean that you should not program a thematic exhibition. At la Villette, we presented exhibitions on issues such as Genocides, Love and sex, Being Muslim, all very complex issues in France. We have understood that you can present any issue, even ones that seem very risky, and attract or touch new visitors. However, audience number tends to be reduced, and audiences seem more reluctant to pay for these kinds of themes.

Perhaps you are asking yourselves: what can I do with my permanent collections? I can't change the content! But you can choose the stories you tell with this content. Narration has become key for getting audiences to visit permanent collections. I saw yesterday at the National Gallery in Singapore this presentation named *Between Declarations and Dreams*, which is a kind of narration, as I understood it, comprising art works in the national permanent collection alongside gifts from other museums.

So as content is the basis on which everything relies, if you want to attract new visitors, and have the opportunity to change or complete your contents, choose a more accessible one if you can. Perhaps we should not separate art and entertainment as much, as most people are reluctant to go to museums, but they like to be entertained. The question is not only to transform a museum into a "living venue", as we say in France, with a nice café and wifi. The question is to present exhibits and events that are not only accessible, but attractive for a large percentage of the population. Personally, I have no problem with themes linked to popular culture, like comics or video games. We did a very successful exhibition on video games at the Grand Palais, for example. I also have no problems with new ways of presenting artworks using digital technology. I will show more of this at the end of this presentation.

If education is secondary to content, it is still one of the main expectations of the visitor to museums, and one that audiences often demands to be improved. So, let's share some insights on this issue.

Of course, education is a key issue concerning the lack of diversity within audiences. We are convinced in France that the only solution to get more diversity of ages and social backgrounds is art education starting in primary school. And as this goal has not been achieved, and doesn't depend on the museums themselves but on a global policy of the Ministry of Education, we at the museums do all that we can, organising as many visits for pupils and students, developing workshops, and giving free passes, for example, to families of children who have previously visited an exhibition with their school.

Secondly, education is also key for the contemporary issue of destruction, such as the disappearance of diversity, cultural and bio diversity, or global warming: the museum should do as much as it can to raise awareness. Nevertheless, its priority should be first to be clear on the way it presents its collections, and how its collections have been formed. It is a prominent issue for example for the Quai Branly Museum in Paris. The Quai Branly museum collections have been in a large part gathered in the context of French colonialism. Should the museum give them back? Should it focus less on aesthetics and more on political issues in its presentation of artworks?

Cultural diversity is also a key issue for other art collections, for example, the 19th century collection of the Musée d'Orsay. This museum focused recently on the representation of black people, with its exhibition *The Black Model*. Who were these "black models" who are represented in such famous paintings, like Manet's Olympia? What was their life really like? Similarly, in an exhibition called "Splendour and Misery", the same museum had previously focused on prostitution, stressing the fact that many nude models were prostitutes and giving information on the life of prostitutes during the 19th century.

However, the issue of education does not only deal with the goal and theme of the education process. The main issue is the process itself.

Art history is not art. Knowledge transmission is not education. We are often too focused on knowledge transmission and not enough on the most important: how do you learn to learn? This issue becomes prominent with digital, as information is everywhere at any time.

Nowadays, educators feel that it's becoming more and more difficult to teach. We have to reinvent urgently different ways of teaching. Art in this way is a blessing. Creation is a blessing. With art, you have to focus on what you are most interested in, but in a way that is oriented to sharing. You have to focus your attention on the form you want to give in order to share with others exactly what you feel. It can be a complex feeling and a complex form, but you have to be honest. We don't think that everybody is an artist and every creation is an artwork. But a museum should be the place for artistic work made by non-artists.

I remember the Kanazawa Contemporary Art Museum in Japan, where one gallery was dedicated to creative works made by pupils at school. I think here, in Singapore, you also do that. That's great! The museum shouldn't be a place of strict borders between art and non-art.

When I was 20, I had a passion for photography. I practiced photography intensively for years and almost decided to become a professional photographer. Art helped me to know myself better, to develop better relationships with others, and to investigate society. I understood that art was an alternative to formal education.



That is the reason why we always work with artists when we want to convince isolated populations that our institution is open to them. We don't focus on art history, we focus on art. And we ask artists to introduce art history in their creative works. For example, we work in a suburb of Paris called Gonesse which has a high crime rate: we developed a five-year education programme based on creative workshops proposed by artists. The inhabitants of all ages who participate visit at least one museum and come to the Grand Palais where we organise the restitution of their work, like a real exhibition, in one of our galleries.



What about digital and education?

When I created the digital and audience department 7 years ago, we aimed to develop digital in education. We experimented as often as possible. We tried smart-glasses to replace audio guides, we experimented drawing on iPad instead of paper during workshops with pupils, we worked with Microsoft in their new digital classroom, we launched a new website to share 500 000 pictures of artworks, we developed four MOOC, on *Picasso*, *Impressionism*, *Art History* and *Photography*, with a total of 100,000 online participants.

What did we learn?

Firstly, about the smart-glasses:

- This device did not attract new visitors: the users of smart-glasses were those familiar with audio guides, but families with teenagers were the most interested and satisfied by the smart-glasses.
- 48% of users were unhappy because of technical and ergonomic problems: visitors wanted more content (videos, images) which do not exist for all works and in particular they found that the screen, even if they were integrated with the glasses, interfered with the viewing of the works on display.
- Finally, visitors were less satisfied with the smart-glasses than with the simple audio guide and the device was not used again.

Secondly, with regard to the education workshops, using an iPad seven years ago was very attractive for children because they didn't have one at home. This, of course, has changed, and we had a lot of technical issues. Even at Microsoft, a permanent engineer is required to make its digital classroom work. But should we put our resources in tech or in human interaction?

Third point, with our image website, we realised as well that we needed to invest resources in continuous promotion and creative interactions with the audience. If not, we don't achieve our aim of developing an online relationship with art. I will develop this more in the panel this afternoon.

Lastly, perhaps most interesting, with regards to the MOOC (Massive Online Classes):

- The satisfaction ratings were very high: 8.7 out of 10 for the average recommendation rating.
- The MOOCs have allowed us to reach a more distant audience, which is very important for us, since 52% of the participants lived outside of the Paris region, whereas this demographic only represents 28% of those visiting our exhibitions. It enables us to reach people who are isolated and cannot travel.
- The educational level of participants however, is just as high as at the Grand Palais.
- The MOOCs have encouraged the people who followed the online course to visit the exhibitions and attend conferences at the Grand Palais: 47% to 53% were very keen.
- They are not popular among young people (4% of users were under 27) yet are very popular among older people (79% are over 44 years old).

Therefore, my opinion on digital in education is twofold.

Obviously, digital is important in the future of education. However, human relationships will still be the key factor.

Actually, digital first reveals the kind of human relationship that doesn't work anymore in education: the vertical relationship that confuses education with instruction.

That is what we learned from our work in the Microsoft classroom: we had to divide the 30 pupils in four groups, each of them working creatively with a specific digital interaction, with specifically designed furniture. All these changes of methods and conditions of work proved to be more important than the digital technology itself.

Certainly, digital is and will become more and more important to widespread online educational content. One of our MOOCs titled *A Short History of Art*, is a great success online with 23,000 participants. It has been adapted from a 5-session lesson to the stage at the Grand Palais. However, on stage, almost 100% of the 300 participants attended the 5-sessions, but only 10%, around 230, followed the MOOC until the end.

Of course, museum are very interesting venues for education innovation. It's easier to be more creative, to experiment using a large diversity of resources and methods, to be closer to people's needs, when you target a small number of children, who generally come from wealthy families. Or when you invest a lot of resources in programmes aimed at a specific community. Or when you can benefit from specially trained educators, with specific background and personality. At the Centre Pompidou, the majority of the education team were artists; many have been educated with alternative methods, like Montessori method, and put creativity in first. Therefore, the hands-on proposals are very rich and diverse as they are inspired from the diversity of modern and contemporary art. All that I have seen in Singapore are fantastic in this way.

But if you target educating a whole population, it's difficult to dream as much. I remember a particular meeting with the number 2 of the French Ministry of Education. He is in charge of almost 1 million teachers, and 10 million pupils. One of the shared aims between the Ministry of Culture, and the Ministry of Education, is what we call "artistic and cultural education". During this meeting, I proposed two kind of resources. A digital one: the creation of a platform where pupils could become curators of their own exhibition; and a physical one: an educational box full of art games and images. Guess which one interested him most? The educational box! Because not every school on the territory is fully equipped to work with digital, and not all teachers are skilled to work with digital.

I think it's interesting to say a little more about the educational boxes. We already developed 2, 1 for children between 7 and 12, about portraits in art. And the second one, on the object in art, for children between 3 and 6 who can't yet read.



An educational box looks perhaps a little old fashioned, and not very original. Many museums have produced some, and generally don't produce any more because although they give them to educators, they are not really used. But we at RMN-Grand Palais sell them, and we've already sold more than half of the 1,500 produced. The feedback is very good. They are aimed not only at professional educators, but also for anyone who has a moment to spend with a group of children. Our most experienced guide-educators, who spend their life in direct interaction with the audience, have designed them in creative sessions. They are based on play, and all the material is printed to a very high quality.

We are now developing two more, one on countryside in art, the other on animals. Then we want to adapt them to digital for individual interaction on tablets. I think this way to reinvest practical knowledge acquired in everyday educational work in galleries in a box and then in digital, is very positive. In addition, it is a clear example that the technology is less essential than the quality of content.

I would like to give another insight on the importance of play, through one very interesting experience of the National Museum of Art in Quebec, Montreal. They compared two different ways groups of teenagers visited their museum: one with a content on a tablet, designed as a game with a challenge between various teams; and another one with a professional guide. With the guide, 300m<sup>2</sup> of the museum was seen, with the tablets, 1400m<sup>2</sup>; with the guide, 6 artworks were commented; with the tablet, they discovered 80. When the teens were asked which visit they preferred, the majority preferred the one with tablets, because they were autonomous and felt free, while with a guide, it was more similar to school; but they felt

## DAY ONE: KEYNOTE SPEECH

that they learnt more with the guide, and appreciated being able to ask questions. The teenagers' conclusion was that the ideal visit would be a mix of both, with tablets and a guide.

The National Museum of Art in Quebec is also one of the leading museums in introducing art-therapy in its programme. The museum becomes not only a place to educate, but also a place to heal. They conducted a fascinating experiment measuring with eye-tracking devices the way two categories of visitors look at paintings. A group of visitors with Autism Spectrum Disorders (ASD), and a neuro-typical group of visitors. There was little difference between them except on one point: people with ASD spontaneously do not look into the eyes of the models represented in the paintings. But this changes after a first visit, and after participating in creative workshops. This is proving by scientific investigation what we experience every day when we work creatively with visitors: visitors become more creative, and more open to socialisation.

## **EXAMPLES FOR THE FUTURE OF MUSEUMS**

I would like now, as a conclusion, to come back to the two questions of overcrowded heritage sites, and empty museums, and the way digital can help.

What we have experienced is that including new digital interaction and devices is not enough to attract new audiences. But that's different when digital content is the core of an exhibition, it really can attract new visitors. For example, we presented a new form of digital exhibition on archeology, called *Eternal Sites*. We used large projections of images of Palmyre, the Damas Mesquita, the Iraki Site of Khorsabad, and the Krak des Chevaliers, all fragile heritage sites threatened by wars or already destroyed as in the case of Palmyre. Of course, many of the visitors were archeology fans. But we also had new visitors who never go to "classical" exhibitions but appreciated this new exhibition form.

Therefore, we decided to develop these new forms. We were more confident since we had seen the success of the *Light workshop*, or *Atelier des Lumières* in French, which opened in Paris two years ago with a presentation of Klimt's works, and receives almost 4,000 visitors a day, many of whom never go to museums or exhibitions.

Of course, as museum professions we do not like these kinds of presentations because we think that there is no content. Many doubt that these new forms will last long. They believe that visitors will always expect more visual effects and give up if they are disappointed.

But I think the possibilities of digital in terms of scenography and content are significant and still to be explored. The ability to mix media through the same material, data, opens a way to renew the total art show, where music, performance and artworks are combined with interactivity. Look at the success of the Japanese collective teamLab, which proposes a real

new universe, which interacts with the visitor. In Paris it has been very successful. I know teamLab is also presented here, in Singapore, with great success.

At the RMN-Grand Palais, we are currently working on two new digital projects, one on the Mona Lisa, the other about Pompeii which will be presented at the Grand Palais next year. We believe that digital could be the answer to the limitation of the real sites. The famous Lascault and Chauvet caves with their spectacular original paintings have been closed to visitors and replaced by reproductions. With the huge number of visitors and their cameras, it is already almost impossible to enjoy the Mona Lisa at the Louvre. The number of Pompeii visitors is a threat for the site. So why shouldn't we try to reproduce the experience with digital?

I have seen almost every digital immersive exhibition presented in Europe in the past few years. And I believe that, as a public body, the RMN-Grand Palais can do better. By giving more content while remaining entertaining. By authorizing visitors to be more relaxed in this kind of experience: you can sit or lie on the floor, your children can move, run, jump but also interact with you more easily than in a "classical" exhibition.

On a more modest scale, we participated in a programme called *Micro-Folies*, which includes a part called "digital museum". The aim is to share with inhabitants of underprivileged neighbourhoods cultural content from the major Parisian museums. The so-called "digital museum" is a large screen where a selection of artworks and videos are shown. The audience interacts with the screen via a tablet and gets educational content. One of the interesting features is that the teacher can program this screen from home to get just the content he needs to develop his lesson with his class. The *Micro-Folies* initiative is becoming more and more popular. The mayors of many small towns want it, and the Ministry of Culture has decided to implement the project in 1000 locations within the French territory and abroad.

Another big issue is *Virtual Reality* (VR). VR can be an answer because everybody cannot travel to the real venues, to see the real artworks. My first VR experience was in Haïti, one of the poorest countries in the world. In 2012, they were already testing VR in order to give access to some of the island's inaccessible heritage sites.

A week ago, in Paris I did a fascinating VR visit of the Keops Pyramid of Egypt. The experience was developed by a group of scientists who wanted to share their project. It's fascinating because you feel like you're actually on the real site. You can use this incredible means of transportation that you have seen only in science fiction novels: teleportation. And you are not alone: you interact within a group, and you have a human guide in your virtual experience. With the guide, you can explore places where visits are strictly limited, you can access inaccessible sites, and experience the site as it was in the past.

Another of my favorite VR experiences is Dimoda, the Digital museum of digital art, which presents specific digital VR artworks in a digital VR environment. It's the first time I really experienced something new where the ambition to create a VR museum and VR art creation were really mixed.

To conclude on this point, and to conclude this talk, I would like to come back to what I called the **Museum Hourglass** (Fig. 5), with the aim of including digital in it.

Digital is information. Just like time, digital is a flow. Just like time, digital is embedded in objects. There are no objects now that cannot be digitised, and digital gives new life to objects.

We all feel, and many artists make artworks with this feeling, that our world is becoming more and more fluid. Digital information is like a flood that never stops and in which we are immersed. As we are immersed in time.

So, we guess that a new museum will perhaps appear. As at any other period, in it, past and future will be present at the same time. Heritage and creation will merge in new forms. Perhaps we, professionals, will share our jobs with robots, interact with *Artificial Intelligence*, and thereby contribute, surprisingly, to a more human education.

Thank you for your attention.



---

## QUESTION AND ANSWER

- 1 Do you think museum educators have sufficient training and collaborations with IT in order to know the potential that technology can enable our education? What are some platforms that you recommend?**

Thank you for this question. It's not easy to answer because there are so many different situations. In my experience, art educators in museums are not very keen to use technologies in general. But if you explain, and perhaps sometimes when you fight with them a bit, you will find that they include tech very easily, and they become very convinced with the use of technology. I told you that in my team, there are 60 guides-educators, and we introduced the use of tablets in their daily walk. They now always make visits with the students, the pupils, with the general visitors using a tablet. For example, when they need to show a colleague artwork, they use a tablet, and we also use the tablet to be in contact with them, because

they work in different museums in French territory and the Parisian region. So, I've been surprised, because I think 90% of them have adapted to tablets very easily, even though they may be reluctant. About the platform. Perhaps I need some precision on the question. Which kind of platform? Is it a platform to access content?

I don't know the platforms in English, I know the platforms in French more. I will speak this evening about 2 platforms we have developed, which are very successful. The digital education platform is what is called *History through Images (L'Histoire par l'image)*. It is a platform targeted at history teachers in schools, because it explains world history, and of course with more of French history, through art images. Art is not the main focus. It is focused more on history. But by explaining history through artworks, of course, they introduce art history. This platform was developed over more than 10 years. So, it really has a lot of content. But we have a more recent platform called *Panorama de l'art*, which is mainly made by our guide-educators, when they have free time, they write for this platform. This platform *Panorama de l'art* has only 300 artworks deeply commented on. It is really focused on the new art education programmes that the French Ministry of Education and Ministry of Culture have developed for schools. And so, to include the teachers, we decided to start this platform. It's less successful than the other one, because it has a narrower focus. But audience number is increasing rapidly.

## **2 How do you balance educating your audiences versus giving them what they want (entertainment)?**

Thank you for the question. I was sure I would get this question. Especially with this audience of museum professionals and educators. One of my foci over the decades working in this field are the people who do not go to museums. We put a lot of energy to welcome, and to be smart and relevant for all the people who come to museums. Education is very, very important. Because we welcome students and pupils we have a diversity of audiences. But 50% of the French population never goes to a museum. I'm very engaged with this question. The main point is not only the image of museum as a too serious venue, or a venue that will always be there for eternity—a point I developed in my talk. It is also because it's too difficult. It's a very, very easy point that people make. When I speak about the *Atelier des Lumières*, this big show with images, it is very successful in France. But it's very interesting, because I shared a lot with the top museum professionals. And we all met and made the same point that we all have friends, friends who are really educated, and who go to museums, who go to our exhibitions, who go to the *Atelier des Lumières*, and they speak very, very positively of this exhibition, and they become return visitors to *Atelier des Lumières*. When they receive friends who visit Paris and want to visit museums, they propose *Atelier des Lumières*. So, for us, it's really a question: why?

I think the most important thing with the *Atelier des Lumières* is not that it attracts the 50%. In its audience there is always that 50% who would never

go to museums or exhibitions. But there are 50% who go to museums and exhibitions. Does that mean that these people go to our typical museums, to our exhibition, but are not completely satisfied? I think because going to a museum exhibition is a very difficult experience. You have to stand for two hours, you have to read difficult texts, you can't run, you can't shout. How many families have you encountered that, on Sunday morning, will be asked, "Well, what do you want to do this afternoon?" And the children will respond, "I want to go to a museum!" No that almost never happens. Perhaps in your family but not mine. So that's the point.

I once spoke with the president of the Louvre, because we were aiming to develop this project about *Mona Lisa*. And he said, "There is no bad ways to access art" I think it's a problem I want to address. And I think we have to do a very good job in education like we do in museums. It's very important, we don't have to change that overnight. We have to do it better and better. This symposium is a way to improve your ways of working. But we also have to take into account that our museum experience is in many ways too difficult for a lot of visitors, and to make it more attractive.

**3 It is great that digital implements attract nontraditional museum goers. But how do you propose to retain these audiences after the initial fad wears out? So now after we've attracted them, how do we retain the interest?**

Thank you for this question. Your question assumes that if we attract visitors for the first visit they will not come back. But why wouldn't they come back? I do not understand it precisely. Because if you have another attractive offer, why wouldn't they come back?

Of course, another way to address this question would be that we have very well-developed policies of membership. I will speak this afternoon a bit about our management of customer relations, because I think it's important. The way you maintain a database of your visitors, I think, is a key point for public institutions, especially because sometimes we don't have this in mind. And we rely on the global database that are not ours like Facebook, Google, etc. I think it's important to have our own database. But I think if we propose more attractive offers, we can change the image of the museum and we will have the opportunity to have more people close to the museum or become members. It is my second visit to Singapore, and I am always very happy and impressed by the work you do in museums. You are not just at the standard mark. You raise the standard. This is impressive for a country where you have a lot of new experiences. Yesterday, while at the National Gallery I saw the *Children's Biennale*. I think it is nice. I visited almost all of the presentations. And I think it's great. If you go on doing this, you will give a new image of museums. I think it depends on each country. I think I spoke about the iconic definition of museums, and this point about the different point of view and museums. I think the museum has a different role in each society. The role of the museum in your society is specific. The question of the museum in French society is specific for the world of French history. The role of the museum for Singaporean society is different.



**4 What advice do you have for educators who are not so confident or familiar with using digital technology? Do you have any advice?**

I have one very simple advice for anybody: it is to take action and to try it, test it.

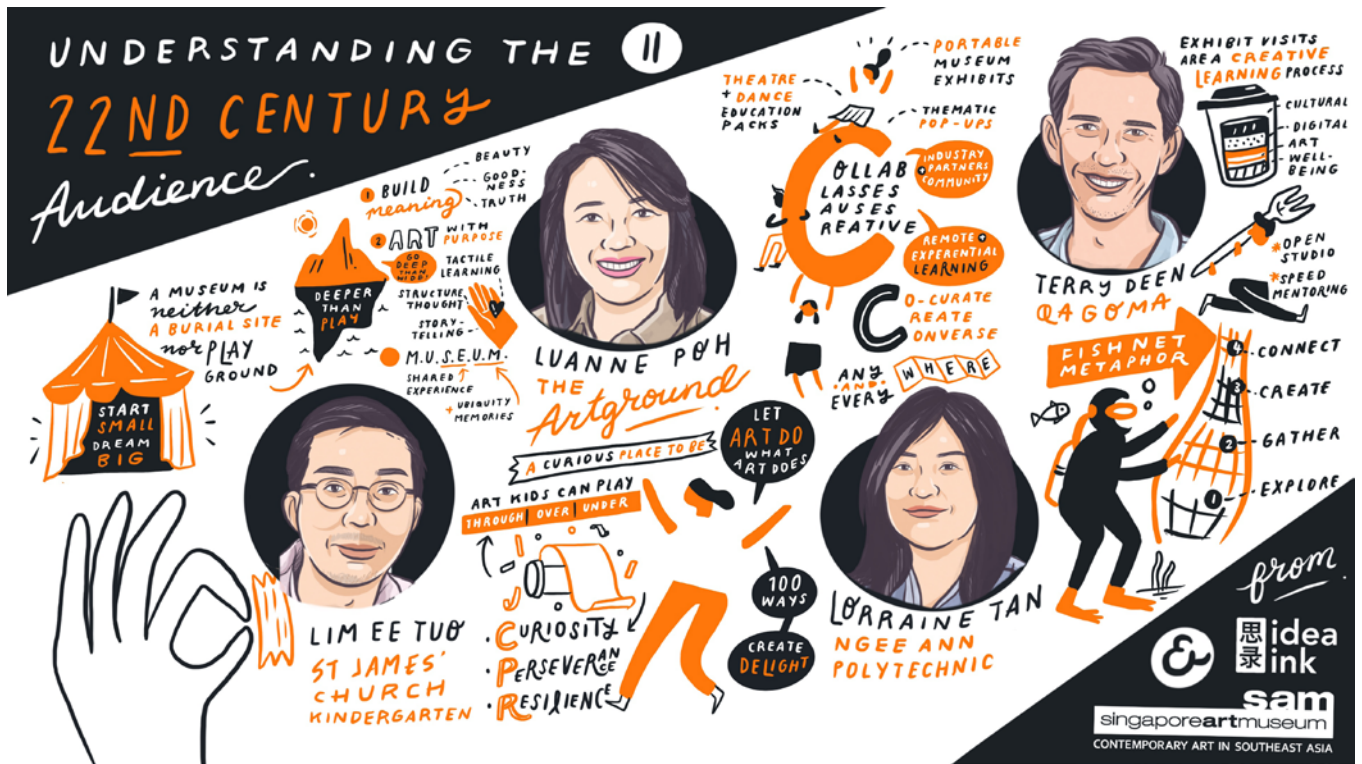
What we now call digital technology is a field where we have had no previous leading hint or suggestion. So, it is important to test and evaluate. You try, and you test. And you will feel happy or unhappy. If you don't like it, or you think it's not useful, you will not use it anymore; and if you think it's useful, there will be no problem, and you will forget that you were reluctant. That is what happened with our educators. They were very reluctant at the beginning. But now they have adapted to the tablet and if I say we'll take the tablets back they will ask, "why?" So just test them.

**5 What does it mean to be thinking about the future of museums in the era of the climate crisis? What responsibility do museums have to ensure we have a collection to preserve beyond 2050 at all?**

That is a very difficult point, because it's perhaps why I had doubts about speaking of destruction in this kind of symposium. But I wanted to because I think the young generation has the deep feeling that times are changing, and that perhaps heritage is threatened globally. Especially by global warming. A museum I think can do a lot about this issue. We all try to develop more responsible policies in our museums in France.

We have a special platform from the French Ministry of Culture. We have to try to measure the carbon dioxide emission for our missions etc. I think that's the first point. The second point is that we take all the measures we need to protect the artworks from the flood if the water level of the River Seine which flows into Paris, rises. So, the Louvre built a new reserves 100 kilometers from Paris where the artworks can be more protected.

But generally, on the question of how the museum can raise awareness on these problems, I have no global answer on that. I think the museums have to find ways to speak about this problem, and to try to do what it can to educate. What I developed in my talk is that we have 30 museums, each to decide on what to do with the collections we have. The programmes may not be on global warming, but it could be on contemporary news, issues of diversity, and respect for cultural diversity. I think it's a global move into a way of thinking, of which global warming is just a part of.



PANEL 1:

# UNDERSTANDING THE 22ND-CENTURY AUDIENCE

What are the needs of the children and youth of tomorrow? What are their priorities and passions? Why, what and how do museums prepare for the needs and wants of the 22nd-century audience? In this panel, speakers will explore implications for museum, on issues ranging from interdisciplinary learning, social-emotional development to mental health.

**MR. LIM EETUO**  
 Director, Admin-Operations  
 St. James' Church Kindergarten

**V**ery good morning to all of you. I think I'm not in a very good position to-day. It is never good to speak after as renowned a speaker as Mr. Poussou. That's the first reason. The second reason is I am not actually an artsy fartsy person. I'm trained as a mathematician, and this is the most colourful shirt I can find in my wardrobe. Thirdly today's topic is a rather challenging one. Earlier Mr. Poussou was speaking about the importance of play. Yet my title suggests that *The Museum Is Not A Burial Ground, But Don't Make It Into A Playground As Well*. So, I think I'm in trouble. But I would like to start by telling you two stories.

DAY ONE: PANEL 1

First of all, the *Start Small Dream Big* project: I had the opportunity to initiate this in 2015 as part of Singapore's 50th anniversary celebration. Our intention was to get 50 centres involved and 1,000 children. But the response was overwhelming. Today we have 40,000 children involved coming from 670 centres. One of the participants earlier asked: how we can meet the needs and wants of our children. What makes them come back year after year to take part in *Start Small Dream Big*? I hope later I can share with you some insights from my experience. I think many people do not know how this programme started. It started with a children's story book called *The Dot* by Peter Reynolds. It is about a child who learned how to draw. This little children's story inspired me to advocate for this "give back" movement that is now growing in Singapore. This tells us that art is a very powerful medium to reach out, and storytelling or narration, as Mr. Poussou mentioned, is also very powerful, and of course, success lies in the hands of our educators, which we also have in our museums.

I have three children. My oldest child is a girl. She is 25. Today, she is in Mongolia working as a missionary, so during the June holidays I had the opportunity to go to Mongolia. To prepare for this talk I said, "let's visit a museum there." So, I visited a museum there, expecting to see wonderful things. I ended up seeing a burial ground. Literally a burial ground. They dug up all the ancient artefacts from under the ground and showcased it to visitors like us, telling us the great story of Genghis Khan and Kublai Khan's great Mongolian empire. As I listened to the guide telling the great history and heritage of their country, I sensed this sadness and pride in her voice. It makes me wonder what kind of museums we have in Singapore. So, I am glad I took the quotation from the International Council of Museums. It says that the museum is in the service of society and its development. It holds the heritage of humanity and his environment for the purpose of education, study, and enjoyment:

So indeed, the museum is not a place to remember the past. It is a place to learn, and it is for enjoyment. This is the function. And if this is the function, surely the museum cannot be everything to everyone. We need to be very clear of the purpose, the function of a museum, so that we can move forward to play that role effectively. For a museum, how can we meet the needs and wants of the 22nd century youth and children? Where we talk about needs, I think I need to clarify that we're not talking about process needs. We all know that children need tactile experiences, they need hands-on experiences in order to understand and construct meaning.

At the moment, when we talk about these needs and wants, I think it goes beyond that. This means of learning is just a way to achieve the actual purpose. Very often, as early childhood educators we talk about the importance of play. But play itself is a means to achieve something greater. The needs and wants of our children, especially in the 22nd century, is



Fig. 8 – Lim Eetuo Slide 2

deeper than play. Recently, I've seen some of our museums in Singapore focusing very much on play, so much so that when children come into the museum it looks like a playground. They came in and within 10 minutes they bashed through all the display items. It looks like their objective is to destroy as much as they can within the 10 minutes they have before they go off. And then they say, "I've accomplished my mission." Unfortunately, I don't think that's how a museum should function. I think we should not be a touch and go playground, where you "tap" and then you "go". I think it should be more than that, because the needs of our children are not served when they go to a museum and let out their energy. They can do that outside in the playground of which our government has built plenty in the void deck spaces.



So, what do we need? What do the children need? Well, first of all, we need to recognise that our children are living in a postmodern, digitally saturated era. Information is out there. As young as they are two years old, they get exposed to the media. And we all know that today, we can't take the words that are found in the media as absolute truth. Somebody coined the word truthiness, "How true are the things that you read?" We must test the truthiness of the content. Our children's mind is a space, which is now a battleground. They are in a world where everyone is trying to fill it with all sorts of information. There's this advocacy campaign that is going on right now. It claims that our senses and perceptions are subjective. That sounds right. And everything that we see is based on our senses and perceptions. Definitely, sounds right. So collectively, everything that we know is subjective. We are living in a world that is full of subjectivity. As a result, there is no standard that children can look up to. They find it hard to understand what is moral, what is true. And here, we talk about art. Is that something subjective? Absolutely subjective? Or is there some objectivity in it? Here our children's mind is a battleground and I think we do a great disservice to them if we continue to serve them with playgrounds only.

Howard Gardner wrote a book about the disciplined mind. He advocated for these three pillars of education and foundations of society: truth, beauty, and goodness. And these are the needs and wants of our children and our youth. He defined truth as accuracy of statements and propositions. And he said beauty is an experience that evokes interest, that are memorable, and invites the person to want to come back again. I believe this is an answer to some of our museums: how do we bring people back? There must be beauty in the museum, then people will come back. There must also be goodness, it is that quality of relationship amongst human beings near or far. So, truth, beauty and goodness are some things that we need to promote and put in place. Not just in schools, not just in our society, but also in our museums, which is a function of our society. So how can the museum play the role of promoting truth, beauty and goodness? To me, I think the museum is really like a time machine. It brings 200–300 years of history together at one place at one point. It allows us to travel across time and space to see new perspectives.

If you walked across the corridor just now, there is a very interesting room, over on the right-hand side, called the shaker room. That's where they shake the plant tissues to prevent it from taking root and growing shoots. Shaking expands the tissue components, so that when it is ready, it'll grow deeper roots and stronger shoots. Likewise, the museum plays that role. It gives the children new perspectives. They come in and say, "Oh, I didn't see it that way. Now I have a new perspective." And how can we do that? When they go to the museum, they must find meaning. It must be meaningful to them. Then they will feel that: "Hey, I'm connected to something larger than myself." They must have understanding: "Why is this important?" "How can I contribute to it?" The museum experience then becomes a shared experience. I believe we should go to a museum as a group, as a school. So that there is a shared experience. And that shared experience must not stop at the museum. There must be ubiquity. So that when they go out of the museum, they can continue to see the elements of the museum in everywhere that they go: the elements of beauty, truth and goodness, so that they can continue this connection. Very often, when the children leave the museum, their relationship with the museum ends and they go back to a different world. We need to create this ubiquity across worlds and experiences.

Last but not least, we must have memories that we leave with the children— Of course together this (*Meaning, Understanding, Shared Experience, Ubiquity, Memories*) forms an acronym that spells MUSEUM. Essentially, I think by doing it, we can change the battleground to become a common ground: a ground where the children can come together to have shared understanding, shared experience, and memories.

---

## QUESTION AND ANSWER

### 1 **Can you share any good examples of museum exhibitions you have experienced that are suitable for children, and that are more than just a touch and go playground?**

To me a guide plays an important role in the storytelling. A good museum is one that has good guides, and give something that children can take away, and do likewise at home. I was just sharing one of the participants: wouldn't it be great if all our children started creating their little museums at home? To illustrate: when they go to a museum, they get to see the grandpas, the good old stuff. Then when they go back to school, the teacher says something like, "you know, when I was growing up, I created my own museum with the toys that I played with." The children can then also create their own museum and start sharing their experience. To me this extension of learning about heritage, learning that we are part of this whole community in which we share this same time line and history despite our differences, is a great example. Give the children something that they can take back from the museum and recreate at their own place.

**2 What's your approach for children with special needs and visually impaired? Especially in the museum?**

I'm not an expert on special needs and visual impairment, but my personal take is: I think less is more. Sometimes we overwhelm children when they go to the museum. I believe it is good to be focused, especially for special needs children. Bring them to just one exhibit or just one room for them to experience certain things. Going deep is better than going wide.

**3 How would you advise we create the ubiquity after the museum tour? Can this be fostered after the museum tour?**

I think the example I gave earlier was one way to create this ubiquity of experience. The whole museum experience is not just contained in the museum but extended across places. You can be at home or in schools. I think that provides a platform for the children to start asking themselves, "How can I present this in a way that is meaningful?" That's where the curation comes in. That's where the different art forms help children to create their structure to present it more meaningfully.

**MS. LUANNE POH**  
Director  
The Artground—  
A Curious Place  
to Be

**J**ust a little disclaimer. I don't have a fanciful deck of slides. I'm a real, IT tech noob. I'm terrible at these things. Furthermore, I just had a pair of twins seven weeks ago. So like Kenneth said I am really sleep deprived. I am really excited to be here. And I really wanted to make it here even though I just had my babies back in after six weeks of being in ICU on Saturday. So yeah, but all that aside, I'm going to try to do my best. If I'm incoherent, I ask in advance for your forgiveness.

But the reason I'm so excited to share what we do at The Artground is because we feel really honoured and surprised that we're invited, and we feel that there could not be a much better platform to share what we do. Unlike Eetuo who has done such amazing works, we have only been in existence for the last two years. So Artground only opened in July 2017. But we are so excited as a newcomer to see whether what we have been doing can be of interest or relevance to what you guys are doing in your line of work.

So just to share a little bit on The Artground, since we are still so young. We are very aware that a lot of people might not know about us yet. The Artground basically plays on the word "playground" because we wanted to children to be able to enjoy and engage in the arts in a way that's natural to them. Because we all know how children learn: they learn through play. But how do we do it in a way that is meaningful, and that will have memories as they come with their families, or with their children? How do we make each experience memorable? We wanted to do it through the arts. And here I would like to share the vision of The Artground. I'm sure as educators, sometimes as museum curators, you're often questioned, why do we have to do the arts? Why are the arts important? Why do we have to play? Why

do we have to go to the museum? Why do we have to do arts and crafts, dance, music, and we never asked a child, somebody: Why is it important to feed a child? Why is it important to give them shelter? And I feel like we would love to come to a time when we no longer question the value of the arts. And that just understanding that art is important as it is. And it is just enough. The vision at the Artground is to “Just let art do, what art does”. Because we believe that just having the art making experience is good enough. It is not a very typical vision of most centres and institutions. But we feel like that really speaks to us. And I wanted to share that so that we kind of understand our position here in this big landscape. The Artground is really about creating experiences that allow the child to grow and develop in a way that is physically and cognitively appropriate for them. And we use the arts as the main platform. We all recognise that the world is going to change. You know, the idea of the 22nd century child, I cannot imagine the world my two girls are going to grow up into. We talked about the last 10 years: apps, iPhones. I cannot imagine how, what kind of world they will inherit from us. But I think what is really important is for us to continue to share and create memories, where they can learn values that will stay in their hearts and stay in their minds. And we hope that that is enough. What we’re really interested to do is then use the arts in a museum space to create experiences that also scaffolds, and you know, introduce these values-based learning; that allows them to continue to enjoy the beauty of life, regardless of the life they may have, in a world that may change.

I was watching this video called *The Beginning of Life*. It is a research about children, how they learn and grow. And there was this interesting thing that, I think, reminds us of how a child sees the world. They talked about having a 10-month old baby sitting on the lap of a mother. She was facing, across the table, another lady who had a little beeping machine. Whenever she pressed the button, the machine made a loud shrill noise, “eeee”. And the lady who pressed it will make an expression of delight. She did it again, and then she had an expression of delight. The child starts to pick up these social cues. This child is 10-months old, just sitting on the lap of the mother. The mother is not doing anything but just holding onto the child. After a while this lady gives the child the device and the child learns to reach for the button and presses it with some prompting. But when she does it, the lady had the same expression of delight. They did this a couple of times. The child learns the social cue. Another lady comes in. She sits next to the first lady. And whenever the first lady presses the button, she had her moment of delight while the other lady went “rrrr” at the lady, not the child. They do this a couple of times. And then after that the lady pushes the machine to the child, and the child no longer tries to touch it. She moves her finger towards it, she looks at the second lady, then the first, then she pulls back. And you do this a couple of times. And what this research shows us is that a child is able to learn social cues from experiences around them.

Mind you, the lady who was upset wasn’t upset with the child. She was upset with the other lady. But somehow the child was able to interpret that as: I will cause distress in the environment around me. Even if it is not at me. They understand their position in the social world. And that really

made me think about the kind of experiences we want to create. Whether in the home environment, the school environment, in a museum or culture environment: how do we create experiences where children can pick up social cues, learn how to create and engage in delightful experiences for themselves, and then create and recreate other delightful experiences for the people around them. And I feel that is what cultural institutions, museums, art-makers and curators can do. That is what is important. In terms of thinking about what a child might need in the 22nd century, and what their passions and desires will be, I can only venture a guess. I will tell you more after this video because I am reminded by my notes to show you a video of what The Artground looks like, because most of you might have never seen it before:



Fig. 9 – Luanne Poh video screenshot

This is a festival video that we did last year when we had our first festival last year. It was called *100 and 100 More*. The Artground is based on this poem called “The Hundred Languages of Children”. It talks about how a child has a hundred ways of laughing, of singing, of dancing, of imagining and of crying. But the world sometimes takes away the 99 and tells the child to not cry, to not laugh unless spoken to, or to only have joy at Easter and at Christmas. And to not speak until they are spoken to and we want to give back the 99 voices to the children so that they can continue

to find all these other delightful ways of being. So, the festival was called *100 and 100 More* because we wanted to use artists, hopefully to find delightful ways to engage the children.

This is The Artground. We occupied an old school hall. We create different play spaces for children and changes every 4 months. This exhibition was called *Rolling*, where the artist believed that children enjoy life best on inclined planes and rolling up and down places. There were no flat surfaces in this art space.

Like I mentioned The Artground is a play space, our exhibition space changes three times a year. Each exhibition runs about four months. And this allows the children to come in and experience art as the artists would have liked them to be. What we tell all artists who come, when they develop a work here, is that you have to develop an exhibition where a child can run through, over and under. And that’s it. The reason we say that is because, as we mentioned before, we want a child to be able to play and explore in a way that’s natural to them. And the only way a child can learn is by doing that. We hope that through experiencing the space in this embodied manner, when we introduce programmes with visual artists, with dance artists, performance and theatre artists, they will then get to learn.

I very quickly want to share with you 3 things that we think a child might like, to know their needs for the 22nd century. I termed it as the “CPR”. First, *Curiosity*. They need to have a strong desire to want to learn, and what



we try to do at The Artground is we never really give them an exhibition, or play experience, that is fully encompassing. We give them something, and then we hope that it encourages them to want to do more. We want to develop curiosity, because in this century where they can have any sort of information at their fingertips, we need to develop their curiosity to want to find out more things on their own. Then, “P” for *Perseverance*. *Perseverance* is the persistence of always wanting to do more and learn more on their own because a lot of times, children these days give up so easily because everything’s handed to them on a silver spoon. How do we teach them perseverance? How do we create experiences where they can do something, and it is scaffolded? It is a little bit difficult, but we scaffold it so they can do it a little bit more, and a little bit better each time. And even if they have difficulties, they have the perseverance in their heart to want to continue. And lastly, *Resilience*. *Resilience* is the idea of being able to spring back from a difficulty. The idea of being able to, if you hit an obstacle, to be able to spring back and continue again.



So how do we teach our children *Resilience* in institutions? How do we create exhibitions where they can have challenges, and how do they spring back and learn more from that? For us, we imagine that children need “CPR”. *Curiosity*, *Perseverance* and *Resilience*. And what we hope to do, in cultural spaces like the Artground, is to be able to give them “AIR”, which is what we hope is “A” for *Age-appropriateness*—activities that are age-appropriate. If you’re working with children from birth, you will know that they are very different from someone who is 12 months, from 18 months, to 2 1/2, to 5. So How do we present age appropriate programmes to all the audiences that you might have visit your centre? For us at The Artground, because we deal with children from birth to 12-years old, that is a big thing for us. Even when you’re dealing with adults, even within each community, there are still different things that might be appropriate to them. “I” stands for *Integrated Experience*. Obviously, here, we’re talking about technology and digital media and all that. But how do we also make sure that we always keep in mind dance, music, theatre, the story-telling narratives? You know, how do we make sure that we create this In-tegrated experience so that they get the whole package without thinking this is just visual arts and this is just dance. We know that now everything melds and fuses together in a multidisciplinary manner.

Lastly, and I cannot say this enough, *Relevance*. I think, Eetuo also mentioned it, I think it is really important that we continue to make sure that what we present is relevant to our audiences. A lot of times, I think the educators in the room will know, when you tell a child to draw a house, they will typically draw a square and a triangle on top with a little chimney and a door. But in Singapore, most of us do not live in houses like this. We live in tall flats that are scraping the sky. But why is it that that is what the child learns? And where’s the relevance in that? And how do we present things that are relevant? So after we have a museum experience, in an

institution, they can go back and continue and say that, “hey, I picked this up, because I saw it in a museum and I can bring it home and show it to my grandparents, or whoever”, and continue to create what Eetuo says: museums in your own environment, because it is relevant. The thing that we want to do is to bridge these experiences that they have in the cultural institution to back home and then back to their environment. And then hopefully, the ripple effect of these wonderful memories will continue.

I will conclude by saying this: one thing that Mr. Poussou said earlier, was that while the digital is important, the human relationship is more important. The facilitators, the educators, the curators, the people who work in the museum who brings you on these museum walks: how do we make sure that they have the passion, knowledge and the human touch, so that experiences that you might have in the museum can be made relevant. Because you can have the most beautiful exhibition, but if it's not relevant to the child, they will leave it at the doorstep of the museum as they leave, won't they? I guess I'll conclude by saying that what we really hope is that, while we're all here and wanting to do meaningful work, we hope that we'll be able to continue to partner and talk to each other and learn from each other. And then hopefully, we will be able to give the children a much better world than what they can inherit from us. And they will imagine one that's more beautiful than what we think it could be now.

Lastly I would like to show you our Instagram link: <https://www.instagram.com/theartground/>. If you go to our Instagram page, all our videos are there. We are an operational play space. Children and families come to us. It is free of charge. We have drop-in programmes at \$10 for a parent-child pair to engage in. If you go to our Instagram page, which I will click for you now, this is where you will find all the videos of what we do, of our exhibition play spaces, of our programmes. These are all in there. I didn't have an opportunity to show you but if you would like to go in and see for yourself, at your time and leisure, that'd be great. Thank you.

---

## QUESTION AND ANSWER

- 1 What are the elements of a good experience for children that you've discovered in the past two years through The Artground? Do focus on the unintuitive ones. Thank you.**

What are the elements of a good experience? When I work with artists, I always tell them that when we work and do stuff, create experiences with children, what we want is that “eureka” moment for the child. If you are able to create an experience that you can get that gasp from the child, “Wow! I didn't know I could do that!” I think then we've done it. I think it is the most magical thing. If you've never seen one, come to The Artground. Maybe you will chance upon it one day. And I think that for me is the unexplainable, ephemeral thing that we want. And that's what memories are made of, you know. I'm sure all of us have some memory of us being young and watching our first theatre performance, going to our first museum exhibition,

watching plants, of flowers sprouting for the first time in a garden, or rain coming down. There's that moment where all time stands still, and you have that moment of gasp. I think that is unexplainable, and the hardest thing to create. There's almost no formula for it. But I believe that if artists and cultural makers are really keen, it is just getting to the ground and creating those experiences. So unfortunately, I don't have an answer for you. I think heart. Whenever people ask, "how do you guys select the artists that you work with?" We look for artists who have the heart. Because a lot of artists are not familiar with our field of work, the idea of creating a play space for children. We say "oh, you have to create an exhibition that a child can run through, over and under. And they will go, "Huh, where are my cue poles, where is the yellow line?" And I tell them," no, there is no queue poles, there's no yellow line. Children are not going to stand behind them. They are going to go through, over and under. So, you are not creating an artwork, per se, but you are creating and designing an experience. How do we do that? We look for creators who have the heart for children, who want to make that happen. I don't think that answers your question. But I hope it suffices.

**2 Does your art ground include special needs children? (Oh, this question keeps coming up) If Yes, how do you do it? If no, how do you think you might do it?**

Well just to give you a background. The Artground is an old school hall that we have converted. Half of it is where the exhibition takes place. What I would say is that we are not universally designed. In the sense that when we have children with special needs, physical and cognitive, we cannot say that we are designed for them. But what we do say is that we have an open-door policy, which means once you're in here, we will do our best to accommodate, to make sure that you can enjoy the exhibition as it is. Having said that, we have ramps, we have made sure that we have enough spaces in between. And we do have in-between structures for wheelchair users. But having said that, for programmes, we always also work with artists who also have the heart to want to make sure that the work also is relevant to children with special needs and additional needs. And that is such a wide and varied space these days. We have programmes for babies. We created this work called *Baby Space*, and you can see it on the Instagram. Because it was for babies, we realised that if we had a child with special needs with cerebral palsy and some mobility issues, we found it useful to say that this *Baby Space* show is for children who are not yet walking. So as long as your baby is not yet walking, you can come and experience this because of the way it was designed. If you are a five-year old with cerebral palsy, and you're not walking, you can also then come into *Baby Space* because this is what the show is for. It is not what the show is not for. In that sense our programme talks about a lot about what the show is suitable for cognitively and developmentally. And if it was a dance programme and you would need some physical mobility to be able to do that, that's what we will say. But then we will also talk about all the other programmes that you can enjoy. Age Appropriateness and cognitive development appropriateness is really taken at what the

programme requires and is able to accommodate. And we always try to accommodate everybody. We are quite happy to say that we have quite a nice group of children who comes in from the special needs school, Cerebral Palsy Alliance School. It is a school that supports children with cerebral palsy in Singapore. They brought their children to The Artground and we closed the centre. Well, they came on a day when the centre was closed, so that we could have the entire centre open just for them. It was half the cohort, which was only 85 kids, but we had the centre for them and they had their Children's Day celebration there. We brought in artists, and we had music and dance programmes for them to enjoy. These are the little initiatives that we do to try to keep our doors open. Hope that answers your question as well.

**MS.  
LORRAINE TAN**  
Senior Manager,  
Learning and  
Development  
School of  
Humanities &  
Social Sciences  
Ngee Ann  
Polytechnic (NP)

**H**i, I'm Lorraine, and I'm an educator. I understand that there are a lot of educators in this room. I teach the Arts Business Management Diploma at Ngee Ann Polytechnic. As it happens my students will graduate and become arts managers, which means that they might fight with you for your rice bowls in the future. But more likely they will be working with you. I think some of them are in fact volunteering here today.

In our polytechnic, for my diploma, we focus mainly on the experiential learning model. This is our signature pedagogy. But then the modules I teach, which are very IT and design related, it means that I also use a lot of remote learning models as well. I'll share a little bit about all of these things as I go along. I do have slides, I hope they're not overwhelming, because I'm a lecturer. I hope I'm not preaching right now.

Just like our previous speakers, because as Singaporeans we love our acronyms, I must also have the 4Cs. But the 4Cs here are not cash related they are the aspects I will talk about in terms of our learners. In addition to AIR and MUSEUM, now we have 4Cs. We are talking about *Collaborate*, *Causes*, *Creative* as well as the *Classes*, which means the lessons that they take on. We talked about the IGen, the Gen Z. But really, let's not pigeonhole them. I feel there's a lot of commonality in the way that we address the arts as well as how youths address the arts. I'm going to talk about the common ground here. As adults, we collaborate on projects. But as students, they also collaborate a lot on projects in school. They start young. I'm going to show you some examples of the projects that they did, I hope that people can see. This is an example of a pop-up exhibition called *Sunset Sungei*. This was when Sungei Road Thieves market was going to close. I think the students felt strongly about it. So, there was a spin-off from this. They had an online petition going as well. As for the activities that they put out for the exhibition: it was a photography exhibition in conjunction with some activities that they felt would sync with the crowd. The crowd here will be the Ngee Ann Polytechnic students on campus. If you look, there's a number of items. The one on the bottom-right, I wanted to just point out that they engaged their own family members. One of the

student's own grandfather was the owner of that song book over there. He sang songs in his youth. I feel that a lot of the projects that we do on campus are a way of reaching out intergenerationally. That's what we're trying to do. Community collaborating: that's all part of the whole package.

This is another exhibition from that same vein. It is called *Trade-Away*. It was about disappearing trades. I'm not sure if you're familiar with the trade of knife-sharpening. Some of us may not be aware. I think there are only one or two people in Singapore who can do it. Kind of certified, but not WSQ. We also have the traditional barber whom you find in the traditional alleyways behind shop houses. And that is something that students felt very endearing. You'd be surprised that they know a lot of things. They are quite in-tuned. And of course, there's that Kacang Putih thing that you see on the right. I was quite surprised that people took the snacks because they were left there overnight. Fun fact. Another example here is the tailor shop. So again, they created a fictitious tailor. And then they called it something like, *A Prestigious Thomas* or something like that. And then they used like, artefacts, for instance, the paper bags over here that they associate with the tailor shops. If you make a suit, you collect it and carry its weight in a bag. They invite people to write messages on it. Again, they are doing something that syncs with the kind of activities that they feel are part of the trade.



This is a little bit different, earlier we were more focused on heritage. Now this one is called *Atlas, What Weighs You Down*. It's more inward-looking. It is about students looking within themselves and finding out, you know, what kind of stories they can share. And then they also encourage other people to share as well. What weighs you down, meaning what kind of challenges you face because everyone has emotional issues these days, especially among the youth. This was about them reaching out.

Our students are very creative as learners, they *Create*. We also have a theatre module, where our students learn about the basic forms of theatre. It is also paired with an assignment that I do, which is in design. The students had to design an activity pack or an educational pack. This was meant for very young audiences, maybe lower secondary. We're looking at a crowd which doesn't really know much about theatre, so they had to package theatre in a fun way, create something that is very interactive, very engaging. I'm not sure if you guys are familiar with Henrik Ibsen. This is the *Doll's House*. They literally built a doll-house from scratch. This is about the size of an A4 photocopy paper box, this one. They also created activities that were supposed to be fun for users. This is Brecht, another playwright. Because his era was during the Second World War, and he was a medic, students tried to use certain props to help explain his existence, his style, how he came

into being, and why he wrote about what he wrote. This is a rather interesting example. Okay, and this: I don't know if you want to guess which playwright. Anyone wants to guess? Coffin? Death? Tragedy? Shakespeare! Yes, this is alluding to *Romeo and Juliet*. It is a coffin. Although it is not full-sized, it is fairly big. It occupies a lot of space in my cubicle. They included a shroud over the coffin, which was made by hand. So of course, they had the potions and they tried to have messages as well. They accompanied this with a booklet. For a lot of these things, they take into account how interesting it would be for someone who is not into in-tune with literature or are totally uninterested, and how they can be engaged.

Coming back to the whole idea about 22nd century learners and museums: what I have shown you means that the museum can be brought to youth in their schools, in their classrooms. And I think that youths themselves have a good sense of what can possibly go into that.



Fig. 10 – Lorraine Tan Slide 13

Another example (Fig. 10): this is a dance outreach activity, as well as posters that they designed. I try not to show the students' faces in case it is unglamorous, so I cut it out. This is an exhibition on Indian dance, where they showed and explained the mudras as well, so that participants could join in. Okay, this was for Malay dance, *Zapin*, I believe, Again, they have to deal with things like the origins, the history, the instruments, the music,

the props for the dance. These were all exhibited in the form of posters, and they also did demonstrations on site. Again, this is done on campus, so the target audience is around their age. By the way, my students are aged about 17–22 years-old. Sometimes we do have students who are older. This is for dragon dance. Again, I cropped out the people on top. And again, it's about interactivity. You realise that—by the way, they're not given a budget or money to execute all of this, so all this came out of their own pocket. But they were told to be more resourceful. A lot of them use things like cardboard or recycled items or from past exhibitions that you saw earlier, the pop-up exhibitions. They got stuff from their house, literally lifted, let's say a sofa, from their house, and then brought it to campus using someone's van. So, I mean, these are projects that engage their resourceful and imaginative side.

As youth, they also like to *Collaborate*, so they collaborate with a number of partners. I'm not sure if Malay Heritage Centre is here. But at that point in time, we were both starting out. And we decided that we will work on a project called the *Passport Singapura*. These are our students, of course, from our second or third cohort. They created an activity kit for parents as well as teachers, which was executed so you can actually find copies of this kit in Malay Heritage Centre. So do drop by and visit. It started out as part of a school assignment, but it was pretty well done, and I think our partners were quite pleased of it, so it got executed.

## DAY ONE: PANEL 1

Okay, this one is quite interesting. SAM is the organiser of the symposium, so I should point out that this was done in conjunction with them for one of their Istana Art Events. Our students were volunteering for the event. But at the same time, we also got our students to create an activity that will resonate with visitors, because it was a very general audience. So, they conceptualised a pocket exhibition. Basically, you have little stamps that you then stick on this little bookmark. And so, you create your own mini exhibition and carry it around. I guess the idea is like I said, the museum doesn't need to be contained, it is something that is portable, it is everywhere, and yet nowhere as well.

Maybe I will do a little sales pitch as well. We have this arts festival that our students run every year in December. This year is happening as usual. It's called *Verve Arts Festival*. It has evolved over the years. If you look on screen, we have had 7, no 8, editions already. Our latest one was called *Rasa Sayang*. The very first one was not called *Verve*, it was called *ACID*, about celebrating artists, celebrating diversity. Over the years, the students have learned about working in groups—the *Collaborating* part, and how and what it takes to run an arts festival as art managers. One of the key things really is

about connecting communities. And we do this through *Overdrive*, which is one of the outreach efforts that the students do 2 times leading up to the festival. They create their own items. By the way, these are all self, they're all created by the students. Some of them managed to get printing sponsors. In addition to that, they got quite a lot of money, at least for some of the cohorts. Reaching out to communities, we were looking at things like open calls which they introduced halfway through. We didn't have this initially, but we got people from the community to come in, because now we have our *Verve Art Festival* at the Bukit Batok East Community Club. We are getting people from the neighbourhoods as well to participate. And then of course, partnerships with artists, as well as the volunteers and outreach to schools. If you see there are quite a lot of things that our students do, and I think that the sky's the limit, really.



Let's talk about the stuff that I do then. A little bit that I can share about what this generation does. Do you think they like classes where they do things face to face, or do you think remote, as in they don't see me, I don't see them? They give stuff to me. And that's it? What do you think? Who thinks that it's more face to face? Anyone? Anyone thinks that it's face to face?

Oh, that is not many. Who thinks that they like remote learning classes, that means you don't have to come to school?

Okay, interesting. This is quite indicative. It is a 50/50. Initially, by the way, when we first started on remote learning, the students really did not want remote learning. They really want to see you face to face. They say that without you, how am I going to do my assignment? How am I going to my

project? There was this idea of fear. But as we got them used to the idea of remote learning, I think they began to rely more on their friends when they have problems, apart from the lecturers and the teachers. And also, Mr. Google of course. They love Google, and they tend to like to find materials that resonate with their learning style. These are some of the items that we have under the remote learning package. We do have consults, done more via an asynchronous style. Meaning that: let's say they give me something. I comment on that, and we then return it to them. Sometimes it will be via Facebook chat or something like that. But then again, this generation does not check Facebook. All right. Neither do they check WhatsApp apparently, sometimes. There's also critiques and then mock-ups, meaning they create something as a draft, they submit it, and then of course, tutorials. I think I'm going to run out of time. So, I'm going to just quickly end. I think our students and our learners, they are young, they like museums that are everywhere and anywhere; co-curated, and somewhere they can create and converse.

---

## QUESTION AND ANSWER

### 1 **How do you assess whether the resources created by your students appeal to their target audience?**

Target audience is something that is inbuilt in the creative process that our students do throughout all three years. It is part of the assessment criteria, so to speak, for those of us who are educators. But along the line, I think we need to scaffold, meaning we need to guide them and find out; ask the right questions to the right people. If they are going to create something for a very young crowd, then they should test it on younger crowds. For the Malay Heritage Centre, we did a test run with a focus group. I think it will be a very similar model if we were to collaborate on other projects.

### 2 **Which student project do you think has been the most successful and prepares them for the future?**

I have to say *Verve Arts Festival*. Because it is the second year we are running it. It is what we call the flagship programme, and it stretches across 10 different modules. Student grades are basically hanging on the line. But don't worry: if no one comes to the festival, it doesn't mean they get 0. It is based on a number of factors and it is more about the process, we believe, rather than the end product. The endproduct is nice to have, but the process of learning is I think more important.



**MR.  
TERRY DEEN**  
Head of Learning  
Queensland Art  
Gallery, Gallery  
of Modern Art  
(QAGOMA)

**F**irstly, I want to begin by expressing my gratitude, and thanks to the Singapore Art Museum. And, Kenneth Kwok and the National Arts Council for putting on this event, but also for enabling me to attend. It's a great privilege to visit Singapore, and to be involved in this dialogue and spend some time with people who are practicing in my field. Particularly fantastic to spend time with Vincent yesterday, somebody so experienced in the same industry that I'm only relatively fresh in. So, a great learning opportunity; I feel very privileged to be here. I do have quite a lot of slides. I think I gave the organisers a bit of a fright, because I sent so many through. But I'm really communicating through the visuals: you've got the data and visual overload. In terms of looking at the needs of 22nd century youth, I didn't want to get too deep and academic on that. This is a room full of educators, so I really wanted to give you a sense of what we do. And hopefully there might be some inspiration that could be practically applied to what you do.

Firstly, as the Head of Learning, my role covers those 3 key deliverables: access, education and regional services. Also, one of the key things that we're working towards, is developing a two-level space that you can see here. We are converting that into a dedicated learning space. Everything's changing. It's an evolving, relatively blank canvas. But we're in this period of testing out a whole range of ideas. To give you some context, Brisbane is where our gallery is based. And regional services mean that we do work all around the state of Queensland. To give you some further context, this is the comparative kind of scale of Brisbane to Singapore. Obviously, that's geography, not population. But we do cover quite vast distances as a state gallery.

I do want to touch on process. Essentially, process is the underlying thing I want to discuss, as the other speakers in this panel have. For me, I came from being a visual arts educator, as well as a design educator, and we spend so much time working with process. And as the students get older, they begin to understand that process of developing meta-language and learning about learning. And really, that's what I think responds to the question. But coming into the museum sector, I then started to see that there's also a process that takes place when people visit the gallery, or even before they do, and when they go back home, or back to the classroom. So, we essentially mirror the way-finding approach that galleries and museums take to planning, to mapping out the experience of visiting a gallery, and put that against the creative process, or whatever creative processes you work with. This is so that the actual visit to a museum is a creative process; it's an active process. So really drawing on that point, look to the next slides to just visualise that in a whole range of ways. But also given that we're looking at digital, really look at how the digital is present within the process, within the experience. It's not the heading, it's not the main event. It's integrated. We focus on 4 fields that are interdisciplinary, the first being arts-learning. That is about asking what is essential about learning in the arts, in ways that you can't really say is essential to other disciplines. So instead of focusing on the trans-disciplinary, we ask: what is essential and uniquely important about the arts? If we want to advocate for it, we need to understand why it's fundamentally important.



Fig. 11 – Terry Deen Slide 9

One of the projects that's really fresh that I want to share with you is a project called *Open Studio* (Fig. 11). It's one where it's about exposing the process of the artist. The artists are able to select from our collection, and that becomes almost like a visual diary, works that are inspiring to them. Then you can see a facsimile of their studio. They have drawing stations where you're able to draw in response to the subject matter they set up. And, the artist can come in and run workshops in this space. It's a gallery exhibition space, but it's also a programming space, and schools can now book-in for artist led workshops during their visit, which they've never been able to do before in a distinct gallery space. They go through a process, they are able to experiment, develop ideas and resolve ideas all within 45 minutes.



Fig. 12 – Terry Deen Slide 13

Another programme that's quite different (Fig. 12). This is a Q&A for secondary school students where we asked the students to ask us the questions rather than having to answer them. The resilience it takes for a young person to stand up and ask a senior artist like Patricia Piccinini a question is astounding. We also have an annual exhibition of students from around Queensland. All over the state, they come and have their own exhibition. This is them about to enter (Fig. 13).



Fig. 13 – Terry Deen Slide 16



Fig. 14 – Terry Deen Slide 17

There is leadership in this photo (Fig. 14)—this is our education minister. Our museum is a space for learning, family and togetherness, and realising that these are the citizens of our future.

We also have an in-residence model of that same programme that welcomes students in from all over the State.

## DAY ONE: PANEL 1

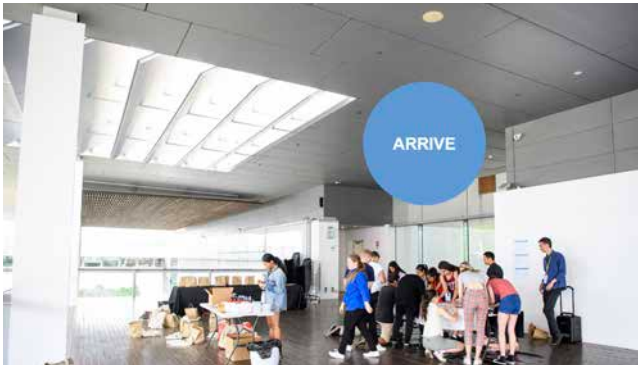


Fig. 15 – Terry Deen Slide 22



Fig. 16 – Terry Deen Slide 26



Fig. 17 – Terry Deen Slide 62

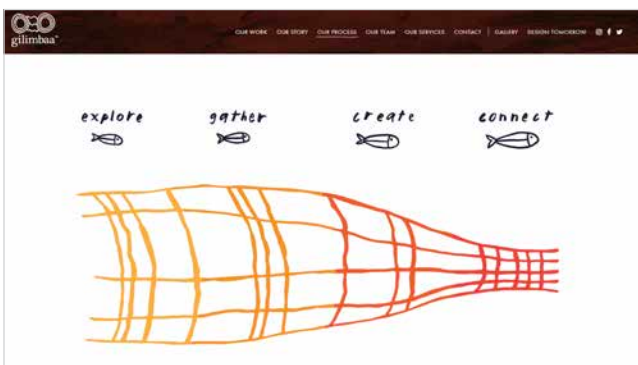


Fig. 18 – Terry Deen Slide 64

The process here is such that as soon as they arrive and put their bag down, they are starting to make (Fig. 15). They are starting to experiment. They go back into the gallery, they immerse, they have dialogue. They reflect. Here's a picture of the artist, Jakkai Siributr, with our audiences (Fig. 16). He was in APT9 – our flagship exhibition. He is a Thai artist. And we started with textiles because that is his medium. But then from the textile, they experiment again. They tear it up, they rearrange it, and then they pull patterns out of that. And we headed to a local university, where their patterns were cut either into acrylic or timber. And then they either make sculpture or do printmaking. So, the process goes on. Then they resolve. But also, very importantly, they go back, they experiment further. Then they develop further, and then that gets resolved. But very importantly, they reflect. There is time for critical dialogue and feedback. These students are coming from very remote places, and then they head back to all the different corners of Queensland where we hope, now that they are in year 11, that they will be top of the class.

Cultural learning is very similar to arts learning, but it is really focusing on the value of learning about and through culture, whether it's your own or someone else's.

*Design Tracks* is probably our key programme for this (Fig. 17). This is a programme for Indigenous Australian youth from all over Queensland. It is a 3-day residency. It ties into the national curriculum in Australia—a priority area across all curriculum areas is Aboriginal and Torres Strait Islander history. This is a different process. But we work with a design agency (Gilimbaa), and we work with their process. Their creative process is an indigenous process looking at fish traps. And In this case, it is *Explore, Gather, Create, Connect* (Fig. 18).



Fig. 19 – Terry Deen Slide 66



Fig. 20 – Terry Deen Slide 69



Fig. 21 – Terry Deen Slide 70



Fig. 22 – Terry Deen Slide 71

Now let's visually see how that works. So, a senior artist and an emerging artist lead by sharing their practice. They go in, they gather ideas, and get straight into making (Fig. 19).

There's a programme that opens for the 20 participants that do the 3 days. Right in the middle we opened it up to 100 who come from all around.

At each of these tables there is an artist, there is an architect, there is a designer, there's a creative, there is an artistic director, there's all sorts of indigenous practitioners who have made it with their careers. And these young people, about 100 of them, can sit down and ask them questions. It's kind of like speed dating, but it is speed mentoring. You get seven minutes.

At the end there is a Q&A with a senior artist and my colleague the curator of indigenous Australian art (Fig. 22).

## DAY ONE: PANEL 1



Fig. 23 – Terry Deen Slide 72



Fig. 24 – Terry Deen Slide 73



Fig. 25 – Terry Deen Slide 87



Fig. 26 – Terry Deen Slide 88

They go back into the gallery, they gather more information, they get back into creating with their individual mentors, in smaller groups.

And they connect. At the end they have to present—almost like a kind of a talent show like X-Factor, through which they get their feedback. So, there's professional learning there.

Now in terms of digital, I didn't want to focus specifically on the digital. But for us, the digital is particularly important when looking at our collection and how we can make that accessible to young people. But making sure that the digital offering is integrated, as I said, into the process. So, we developed some testing apps for the students to go in and use as a journal—as a kind of visual diary where they collect images. But before this happens, there's a lot of talk, a lot of workshopping. And then after they're finished, they come back together and share that information. The actual experience of going into the galleries with the iPad is not the main event—it is just part of the process.

The important thing there is that they are working in teams as well. It's not isolated, there's a togetherness about that.

Also, then we take the digital out around Queensland. Thinking about the scale, we did consultation around 16, now 17 new regions. The time it takes to travel out to these places and do this consultation is considerable, but our gallery has a very strong remit and a long heritage of servicing regional Queensland. They gave me the great opportunity to do this. We do work with the students, and we give them iPads that we bring out.

At this particular community, the teacher was telling me that they will have blackouts, maybe twice a week. They didn't have enough digital infrastructure for the students to actually save their files so that they can go back and work on it the next day. So, giving the students iPads was really important. But what we did was we built it within that creative process. We asked them first to engage with works from our collection, then we took them through a few cognitive leaps to relate a work from our collection to their experience living in their region. And then from that they created a visual story about their experience of living where they are.

As we go around to all those different regions then we collected those stories, and gave the students living in very different places an opportunity to hear from each other. To understand that they have a voice and they have an audience. The digital is just a tool for that.

## DAY ONE: PANEL 1

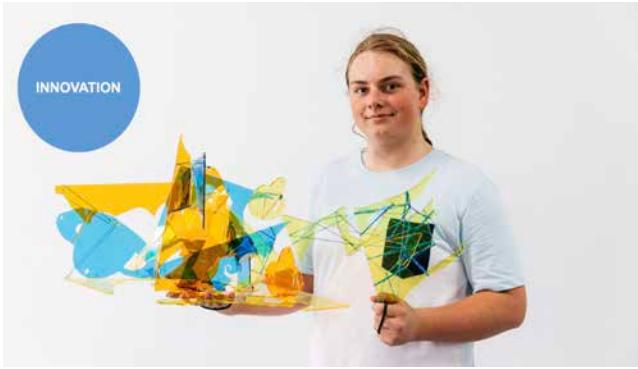


Fig. 27 – Terry Deen Slide 72

Lastly, I just wanted to touch on arts and well-being. It's great to hear that there have been a few access-related questions. This is an area for great improvement, I think in our sector globally. We are doing a lot of benchmarking around this. Particularly with that 2-level massive development coming. We do a lot of access work with older audiences. But we don't do enough with younger audiences. And I can talk about that more, I guess, in the questions. But I really wanted to touch on this because yes, it's not just about process. It is that higher-order calling of museums and galleries that I think my fellow panelists have spoken about. And that is that idea of bringing people together across generations, making people feel like they are connected when they can play in a space that's quite big and intimidating. Even the idea of friendships being forged through our programme, of the idea of mentorship, collaboration—being such a key part of the employability of these young kids in the future. The resilience to stand up and be heard. Creative exercise, just giving it a go. Recognising innovation in the product. This young man's face is also part of what it's all about (Fig. 27). And just celebrating being creative and successful in the arts. Most importantly, I think it's connecting. And again, I really love that statement about human relationships being paramount: connecting out of the gallery, connecting out in the regions. These happy photos, to me, is what it's all about. Thank you.



## DAY ONE: PANEL 1

## QUESTION AND ANSWER

### 1 **Your work is awesome! Was it difficult to advocate for resources to run these projects? How did you do that?**

Before I started, we didn't run any of those programmes. I'm only in my fourth year. So, the impetus is significant. The support is significant. My director used to be an Education Officer at my gallery in the 1980s. The board – there are members who are educators (on our Board of Trustees). The support for what we do is significant. And, the history of the Queensland Art Gallery. Some of our founding figures were artists as well as educators. I'm very fortunate to have that opportunity. But we also do a lot (across a large State) with the what we have. I was a teacher in public schools for 10 years. So, I know how to make something out of very little. As I'm sure a lot of you do as well.

### 2 **Is there another demographic you have to reach out to and how do you make art more accessible for the visually challenged?**

I think that is the kind of key. I think the thing that will set this learning centre apart is that the conversations I've been having with colleagues and key stakeholders have not been primarily about art education. It's also about wellbeing. And wellbeing for all. It is very utopian as an idea. But it is of fundamental importance. The transformation we're undertaking is significant, because at the gallery where I work it means a lot to a lot of people, so I need to get it right. But for me, if we can design for people who have very specific challenges, or very specific needs, then the overall experience is better for everyone. If we try and design for everyone, it will be good for no one. So, starting with the access community is something that I'm really motivated to do.

**IN RESPONSE: A CONVERSATION WITH OUR FUTURE**

**ART SHOULD BE:**  
 ✓ AFFORDABLE  
 ✓ ACCESSIBLE  
 ✓ RELEVANT!

**HAPPY PURPOSE**

**1 INSPIRES AWE**  
**2 FRESH CHANGE FROM SCHOOL CURRICULUM**  
 DRY + BORING PLAIN

**A MUSEUM'S PAIN POINTS!**

**1 TOO SERIOUS FOR KIDS**  
**2 TOO TECHNICAL FOR TEENAGERS**  
**3 TOO "FANCY" FOR GENERAL PUBLIC**

**SOLUTIONS**

**2 CREATE INTERESTING EXPERIENCES**  
 LESS LIBRARY-LIKE RULES  
 SOCIAL MEDIA FRIENDLY

**1 BUILD Memories**  
 IN-SCHOOL EXPERIENCES  
 HANDS-ON LEARNING  
 CONTEXTUAL HISTORY

MODERATED BY **CLIFFORD CHUA STAR\*MOE**

from **idea ink sam**  
 singaporeartmuseum  
 CONTEMPORARY ART IN SOUTHEAST ASIA

## IN RESPONSE: A CONVERSATION WITH OUR FUTURE

Insights from the trenches! Do our youth love or hate museums?  
 Listen to first-hand accounts of what intrigues or inspired them.

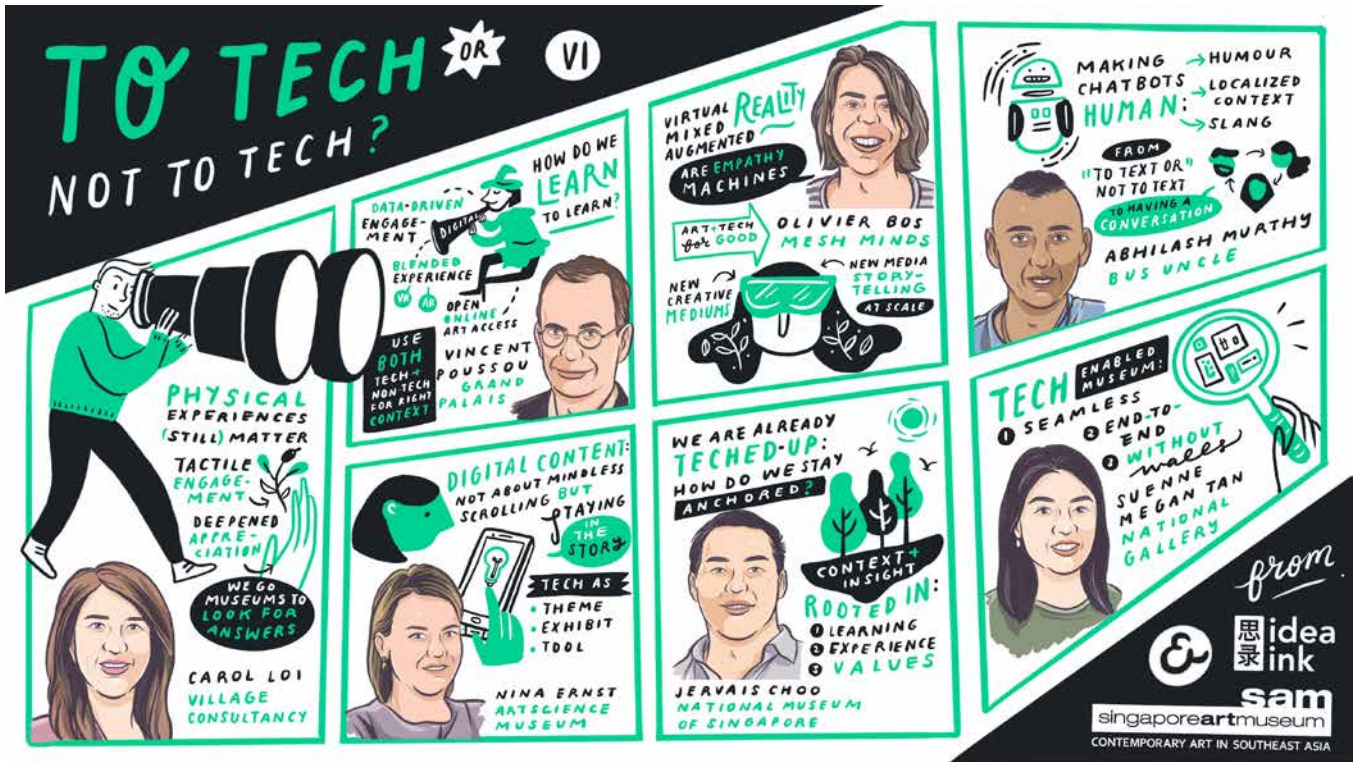
*Due to contextual concerns, the transcript of this panel discussion will not be published.*



### DAY ONE: IN RESPONSE

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium





**PANEL 2:**  
**TO TECH OR NOT TO TECH**

Audiences today have immediate access to unprecedented levels of online information on arts and culture. Should museums embrace this digital transformation? Where do we draw the line, what is too little or too much tech for education, enjoyment and mental health?



Fig. 28 – Vincent Poussou Slide 4

**MR. VINCENT POUSSOU**

Director of Audiences and Digital Grand Palais

will try to add some comments to what I explained this morning. For two decades, we have not been able to take a step back with regards to digital because we had to run to keep up with new developments and share as much as we could on social media. We learned how to swim in the gigabytes. We did a lot in order to tech.



Fig. 29 – Vincent Poussou Slide 5

We needed digital content to complement audience visits, and this is one of our apps. Something we did on an application during the exhibition on Georges Braque, a Cubist painter. In order to help the visitor to understand what Cubism is, the visitor could take a picture of the painting, a selfie, and the picture will change in a cubist frame.



Fig. 30 – Vincent Poussou Slide 6

This is a *Niki De Saint Phalle* exhibition, where the app allows audiences to use stickers to play with the paintings digitally.



Fig. 31 – Vincent Poussou Slide 7

This was our last exhibition about Soviet Art after the Russian Revolution. Audiences were able to take a selfie with a starter image as background. We experimented with mixed and augmented reality. We have used smart glasses, which you have already seen.

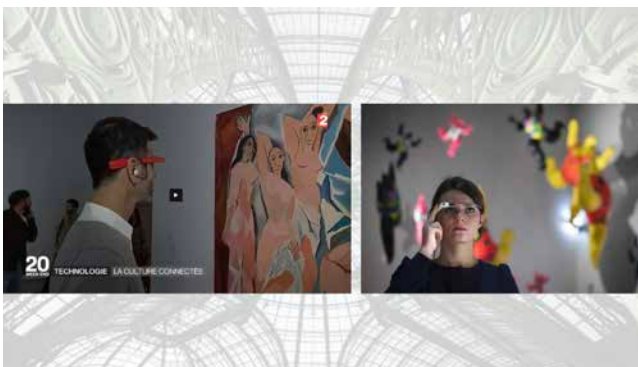


Fig. 32 – Vincent Poussou Slide 9

This is on an exhibition, *Eternal Sites*. Something we did with Google was to use augmented reality to see Palmyra, before it was destroyed.

## DAY ONE: PANEL 2



Fig. 33 – Vincent Poussou Slide 10

This is in one of our last exhibitions on Venice. Audiences take a picture of a painting and they will be able to see the place that was on the painting, as it is in Venice today.



Fig. 34 – Vincent Poussou Slide 13

Engagement with the audience is of course one of our main aims. This (selfies with Venice filters) is on Snapshot. We use any kind of social media.

This is what we did for the exhibition *Red* (In French, *Rouge*), about Soviet Art.

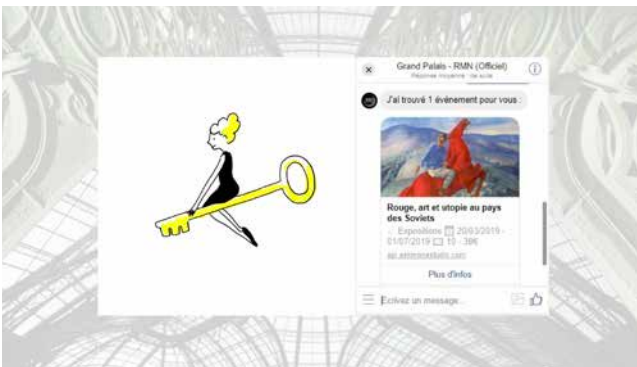


Fig. 35 – Vincent Poussou Slide 14

This is the game we made on *Moon*, the exhibition that is still going on at the Grand Palais.



Fig. 36 – Vincent Poussou Slide 15

This is a story on Instagram.

## DAY ONE: PANEL 2



Fig. 37 – Vincent Poussou Slide 18

This is a podcast about *La Lune*.



Fig. 38 – Vincent Poussou Slide 19

And this is on *Micro-folies*, which you have seen earlier.



Fig. 39 – Vincent Poussou Slide 21

And this is the last event we made at the Nave of the Grand Palais. Wim Wenders, the German filmmaker, made a montage of his films, did digital projector mapping on the walls of the main space of the Grand Palais.



Fig. 40 – Vincent Poussou Slide 22

This is the exhibition I presented this morning on projects of immersive exhibition.

My point was not to fully present to you our work at the Grand Palais, but to comment on them. Because we can say that on one hand, developing new digital content has been successful. The portion of visitors that use our digital content is continuously increasing. We now have 52% of our visitors visiting our main Grand Palais website. There were only 35% in 2012. 15% follow us on social media, 5% on app. 20% of visitors engage during their visit taking pictures, and 11% share these pictures on social networks during the visit.

**DAY ONE: PANEL 2**

But there are also clear limits to the success. Sexy digital content shared on social media is not enough to make a serious exhibition sexy. For example, together with the Louvre we presented an exhibition at the Grand Palais on Augustus, the Roman emperor. We designed a very innovative social media campaign using someone dressed as Augustus and entering the Grand Palais, taking pictures and telling them stories about the exhibition. The campaign was shared on Louvre, but the audience remained limited to archaeology fans. It did not change the number of visitors.

Social media communication can be very efficient when combined with a real price offer. For example, twice a year we organise a free night opening for youngsters, and of course its success is boosted by social media. In general, customer relationship management and digital marketing are as important for promotion as posters in the subway or articles in newspapers. *Big Data* really helps to make marketing more focused.

But I want to say that the general atmosphere has changed. Seven years ago, we had to tech. Less than 10% of our visitors owned a smartphone. Now it is 90%. Museums on social media was beginning, having more fans than others were our ambition. Digital was a keyword to engage more visitors and change not only the relationship with the audience, not only the image of the museum, but the museum itself. We were already cautious on working with the GAFAs, the big American companies Google, Apple, Facebook and Amazon., especially Google, but we had a lot of pressure from our top management.

Now we can think before teching. And I recently met someone who asked me to collaborate on workshop to educate children on the risks of spending too much time on screens. The GAFAs are no more seen as kind but considered as dangerous for private life and freedom. So, we are proud to have worked hard in order to conserve our data on visitors, as now our CRM is a strategic asset and we are not only dependent on other's data.

I already shared with you this morning what we have learnt about digital and education. And about what we still expect from technologies, for example from VR. We know that industrial and financial choices push technologies, and we have to select which ones and in which way, we have to adopt and work with. The museum has still an old-fashioned image that to tech, seemed during the last decade, one of the ways to change it to a more modern and trendier image.

What I like with "teching", is that it forces us to experiment and innovate. It moves the walls, makes different teams work together more, with new audiences- online audiences, audiences that you wouldn't have reached in any other way...

I focused this morning on the importance of content vs technology, but I shall add that techs obliged us to produce new content we wouldn't have produced if not, for example stories on Instagram, or content for Podcasts. Perhaps it does not motivate users of these contents to go to museums or exhibitions, but we could also consider these audiences have participated in a different way to our mission.



I would like now to come back to the question I introduced in my keynote: how do you learn to learn?

A French philosopher, Jacques Rancière, in a famous book called *The Ignorant Master* described how a French speaking teacher who did not speak flamish, taught French to flamish pupils who did not speak French, only using a bilingual translation of a book.

It shows that education is not transboarding information from a full brain to an empty one, but a process where knowledge is produced mobilizing intelligence.

I would like to connect this idea with the idea of community, and the debate on the open access to images of artworks.

We, at the RMN-Grand palais, are in charge of producing the general data base of pictures of artworks from the national collections. There is free access to these images only in low definition because we want to control and have revenue from the high definition uses. The French ministry of culture is wondering if we shouldn't give free access in high definition. The question is: would it help to develop new uses and help to spread art knowledge globally?

We actually know that free access to art resources on line is not enough to engage audiences: our two education websites, « *History by images* » and « *Panorama of art* », explain only a few hundred or thousands of images, but they are more successful than another of our website, *Images d'art*, were you can have access to at least 500 000 images but without content.

In the future, we could also imagine a wiki process: a community of users would develop content on each artwork. We will never achieve a complete 500 000 commented artworks if we do it alone. We would have to rely on collective intelligence, and on a community of art fans.

At the same time, the ministry of culture opens another strategic issue: it is wondering if French national museums should maintain an internal staff of guides or should the national museums better contract with private companies and self-employed guides.

Thanks to our internal staff of professional guides, we have been able to develop a new program of art history lessons, MOOCs, educational boxes... We have trained our guides to welcome specific audiences, like Alzheimer patients, or people in jail.

What will occur if museums contract with a guide just when needed for a visit, without any long-term commitment?

I wanted to share with you these two internal debates within the French ministry of culture, and the RMN-Grand palais, because I think they illustrate our issue.

On one hand, the decision to rely or not on highly skilled permanent staff of art educators for one of the core missions of museums, educating to art.

On the second hand, the decision to give free web access to high definition pictures of artworks or not, for another of the core mission of museums, presenting the artworks.

On a national level, we can see that giving priority to tech, or not to tech, is a strategic decision. And we know that the best decision is a mix of both: we need human resources to get the digital ones accessible to many. And we need digital devices to help human educators to augment the impact of their actions, as we've seen this morning with the example of our colleagues in Montreal who used a discovery game on tablets, and guided visits and compared both effects.

I suggest forgetting the global question **To Tech or Not To Tech**. The right way is to mix tech with no tech depending on each specific educational issue.

**MS. NINA ERNST**  
Associate Director,  
Programmes  
ArtScience Museum

*Due to contextual concerns, the transcript of this presentation will not be published.*

**MR. OLIVIER BOS**  
Chief Inspiration  
Officer  
MeshMinds

**T**hank you all for having me over here for the opportunity to tell you more about MeshMinds. I am the Chief Inspiration Officer. MeshMinds is the only creative technology studio based in Asia that is partnered with the United Nations Environment Programme. We're focused on bringing the arts and technology together for a greater good. We create interactive and engaging experiences using immersive media such as virtual reality, augmented reality, 3D printing, and also mixed reality. This topic **To Tech or Not To Tech** aligns well with our mission statement. We also run The MeshMinds Foundation – a not-for-profit organization that is focused on arts incubation and teaching artists how to use new technologies. Through the Foundation we did a wonderful collaboration with ArtScience Museum 2 years ago which resulted in our first showcase, *MeshMinds 1.0: Art and Tech for Good*. And we just finished our second showcase which closed this year in March with over 10,000 visitors. But I'll talk to you a bit more about that later.

We are always focused on the UN Sustainable Development Goals. We're trying to harness this kind of this messaging: everybody has his or her own responsibility to achieve these goals by 2030. Then the question actually is: why would we use immersive technologies like *Virtual Reality (VR)* and

*Augmented Reality (AR)*? The reason for us is that it builds more empathy. With more empathy levels, then you're more inclined to take action towards the Goals. Countless research has shown as well that VR and AR will help with this kind of messaging and to encourage action. VR and AR are new mediums for storytelling. Of course, storytelling can be interpreted in many different ways. VR and AR make a difference by actually transporting audiences to a location they have never been before. It is the same with AR. You can imagine your dreams in front of you by just using your smartphone nowadays. And that's what technology means to us: to actually make your dreams happen in reality. It offers new types of experiences. But nowadays, the barriers for creators have become very, very low. You have simple tools to create augmented reality effects using *Spark AR Studio*. It is a development tool made by Facebook. Using that tool, everybody who has a smartphone can actually access augmented reality. So, creators nowadays do not need knowledge of coding, for example. It has become much easier to create seemingly difficult experiences.

Industries where AR and VR has been used include: travel, health care and so on. VR has been used in pain management with kids, which is a great thing. This is the reason why we want to work with technology, because it can support a greater good. Isn't it amazing just to see that these kinds of technologies can help kids without using any other medication that could pose some other diagnostic setbacks? We think that technology will lend itself well to other industries to support similar good outcomes. So, if you look at the creative industries, you already see that VR and AR will have tremendous growth:

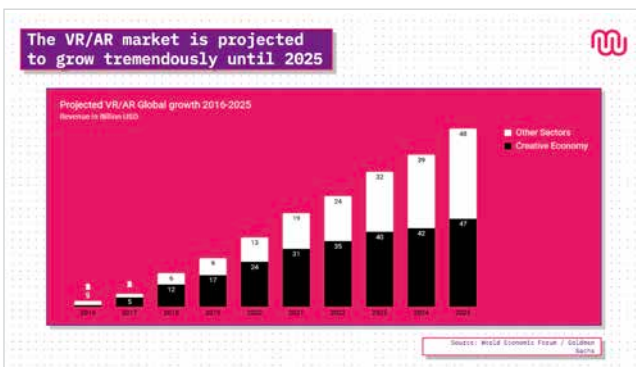


Fig. 41 – Olivier Bos Slide 9

By 2025, it has been projected that AR and VR will account for \$80 billion of the economic activity, including software and hardware. Nowadays, off the top of my head, I think the AR addressable market is only \$0.5 billion. But in 2025, it will be over \$90 billion US dollars. There is a great push as well, if you see all different kinds of industries, to harness creative technology. Here's a simple graph that will explain a bit more (Fig. 41). The

World Economic Forum is investing heavily in new creative technologies. Even the United Nations has started up their own virtual reality platform. But here in Asia, let's not get left behind. I do highly recommend that you check out these virtual reality experiences. They really can transport you to different environments, and let you understand the problems of other people that you may otherwise never have imagined. That's what Virtual Reality does with people, and it builds more empathy. It always comes back to the story: what story do you want to tell in virtual reality?

So now a bit about MeshMinds and what we've achieved. You see here a rough timeline across the last two years. We started off with a beautiful exhibition at ArtScience Museum where we showcased a now award-winning virtual reality experience called *Oceans we Make by Warrior9*.



It's a simple, ride-and-catch type of game. You dive into a hyper-realistic ocean, and you have then three minutes to collect as much plastic as you can. Well, we've been showcasing this in many different places, and I've literally seen over 10 people cry. It's really horrific to see that, at the end, you cannot finish the game because there's so much plastic in the ocean. And that drives people to action. From there, for our second technology seeding programme we collaborated with several tech partners to select local artists to focus on new technologies and on the UN Sustainable Development Goals. We saw really high levels of engagement from this year's exhibition, where every single artist, over 20 plus of them, had a focus on one or more of the UN Sustainable Development Goals. Here's a simple video of the launch party, you'll hear Kay Vasey, the founder of the company and my business partner, talk about the exhibition:

Video hyperlink: [www.youtube.com/watch?v=0YjZQpAt4V4](http://www.youtube.com/watch?v=0YjZQpAt4V4)

That was just a little snippet basically of our 10-day showcase. Here are some of the outcomes we have shown during that showcase.



Fig. 42 – Olivier Bos Slide 15

This is a *Virtual Reality* art piece by Adeline Tan, one of the artists here in Singapore. She is also known as Mightyyellow. She did a lot of research on micro-plastics. She got inspired by her son. And from there on, she created this beautiful art of a life-form called *Tardigrades*. These are little microorganisms that live everywhere and ingest micro-plastics because we are not recycling right. You can step inside a virtual human stomach, and you have 60 seconds to shoot as many micro-plastics as possible. It educates you as well, on where these kinds of micro-plastics come from. And when you're done with the one-minute experience, you see what you can do to take action. Again, to educate the people around us who don't know how to actually make a change.



Fig. 43 – Olivier Bos Slide 16

We also have one of our star artists, André Wee. He created his future worlds in 3D-modelling software. You see the future of our HDB buildings and different kind of properties or landmarks. From there on, he used *Augmented Reality* to see the beautiful transformation of a normal building into a more sustainable one. With car parks shrinking, with electrical-car charging points popping up, solar panels. This is to give people an understanding of how a sustainable future could look like in beautiful way. But you only see that when you use augmented reality effects. So again, this technology helps us to rethink narratives and to help us understand it more.



Fig. 44 – Olivier Bos Slide 17

We also featured *Hold my Gaze*, by Andrew Loh. This work is focused on deforestation. Once you look at the camera, you have this beautiful rainforest artwork around you. But once you look away, you see that your face starts to burn in flames. And so, when you look back you get an idea of what's currently happening due to deforestation. This again helps people to understand what's happening around the world.



Fig. 45 – Olivier Bos Slide 18

We also had *The Mount Keeps Growing* by DPLMT, an awesome local street art collective who were working on an augmented reality piece that you've maybe seen in the video. Once you put up your smartphone close to the artwork, then by simply scanning the QR code and opening up a Facebook application, you see the artwork come to life. You see a Malay folklore based on the Malay goddess of nature, which also tells you story.



Fig. 46 – Olivier Bos Slide 19

*OceansScrub* is platform game also focused on marine pollution where you have to avoid the plastic trash and eat the fish around you. It's a collaborative game where you can also score points and elect new characters.



Fig. 47 – Olivier Bos Slide 21

We also do our own in-house content creation. We use communication tools, and we mainly focus on sustainable messaging. So here we have an augmented reality-based communication tool that will tell audiences more about the production of sustainable shoes in the Philippines. We showed this recently. It has been really successful. It seems that having many interactive parts fitted together draws people into the story.



Fig. 48 – Olivier Bos Slide 22

This AR navigation tool was done with National Design Centre. We collaborated with an artist on public murals. Using the tool, you can also see the artwork come to life. It also focuses on inclusive design elements for the visually impaired. If your friend is there and is not able to see anything, you can simply toggle the speaker function so you can hear the narrative behind the stories of the art pieces. In this way we also focus on human-centred and inclusive design.

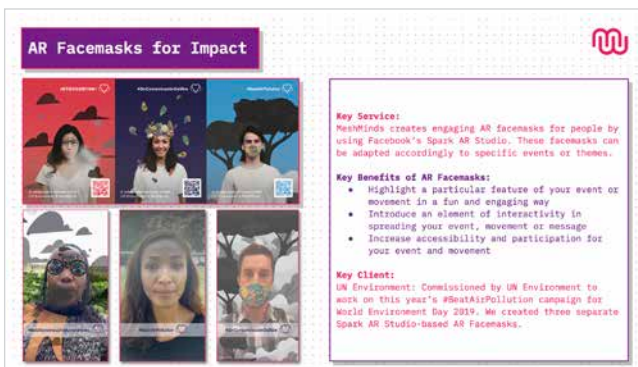


Fig. 49 – Olivier Bos Slide 23

This is most recent collaboration with UN Environment where we focused on 3 facemasks for a global campaign to teach people about air pollution. We have three simple actions: taking the bike more, smile to reveal your vegan crown to have more vegan diets, and to plant trees and communities by simply blowing to the camera. So, this will educate on what you can do to beat air pollution.



Fig. 50 – Olivier Bos Slide 24

These are some other recent art works made together with the Singapore Tourism Board and local artists. These are giveaways for audiences to share the exhibition with families who were not able to attend.



Fig. 51 – Olivier Bos Slide 25

Again, this is the World Environment Day mask. Please ask me about it because I can share some secrets with you later. Because you can try it out yourself.

The beauty of it all is we also have the data analytics.

It has never been seen before: for all the exhibitions, for tour operators. Because people are using their smartphone with AR, artists and producers can see what kind of engagement levels they have. This is really valuable for a lot of different museums to operate. You can see how you can improve your

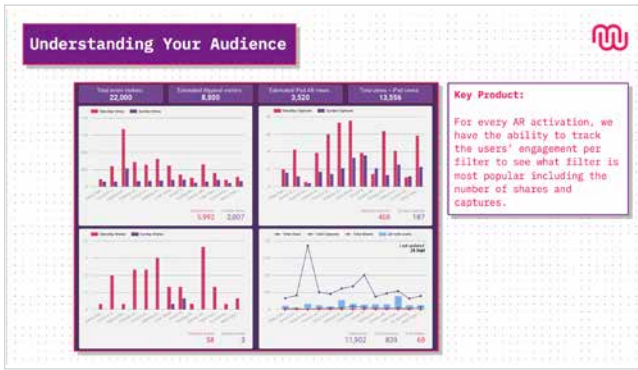


Fig. 52 – Olivier Bos Slide 28

programmes: where the highest engagement points are. We also do interactive workshops focused on educating kids and schools, art schools on Augmented Reality. We really try to see the interactive part of Augmented Reality and creative tech to reach new engagement levels. These are some of the partners that we have worked together with.

So, to return to the question, **To Tech or Not To Tech**: for us, we really want to enable the people around us to think more of how to use technology. Don't use tech for tech sake but find a purpose for it. And then we can move forward to educate the next generation.

**MR. JERVAIS CHOO**  
Deputy Director,  
Organisational  
Design and  
Innovation  
National Museum  
of Singapore (NMS)

**T**hank you. I have been with the National Museum for about five years. Recently, I transited into a different portfolio, basically looking at digital transformation across the National Heritage Board (NHB). NHB runs 9 different museums and institutions, of which the National Museum is the largest and oldest.

Straight into the topic: I think we're talking about **Dear Future** and whether, **To Tech or Not To Tech**. I think what I wanted to do then was to understand the current context of where we are today. And I thought it was useful to look back 50 years ago, what people were saying about what will happen today. So, this is just kind of a quote that I think echoes what Vincent had actually mentioned earlier in the today's session:

*The new education must teach the individual how to classify and reclassify information, how to evaluate its veracity, how to change categories when necessary, how to move from the concrete to the abstract and back, how to look at problems from a new direction—how to teach himself. Tomorrow's illiterate will not be the man who can't read; he will be the man who has not learned how to learn. —Herbert Gerjuoy (1970)*

It is about learning how to learn. This was a quote taken from 1970, really exploring the idea that the new education must be about teaching people how to learn and relearn. This quote has often been wrongly attributed to Alvin Toffler, who quoted Herbert Gerjuoy on this particular one. He is really saying that tomorrow's illiterate will not be the man who can't read, but basically, he will be the man who has not learnt how to learn. Let's overlay that with this particular quote from Alvin Toffler himself and his book, *The Third Wave* in 1980, about 40 years back:

*A new civilisation is emerging in our lives, and blind men everywhere are trying to suppress it. This new civilization brings with it new family styles; changed ways of working, loving, and living; a new economy; new political conflicts; and beyond all this an altered consciousness as well... The dawn of this new civilization is the single most explosive fact of our lifetimes. —Alvin Toffler (1980) "The Third Wave"*

**DAY ONE: PANEL 2**



Fig. 53 – Jervais Choo Slide 4



Fig. 54 – Jervais Choo Slide 8

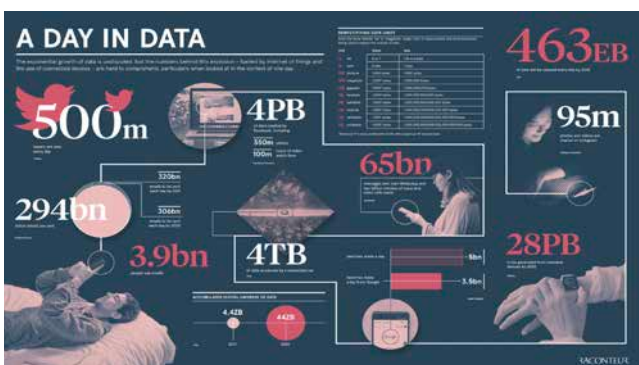


Fig. 55 – Jervais Choo Slide 9

It's really saying that a new civilization is emerging in our lives. Essentially, there's a whole new dynamic that is being introduced to society by the advent of technologies, changing the way we work, the way we love, the way we live, new economies, new political dimensions, new challenges and opportunities alike. I wanted to kind of raise this as a way of looking back to say, hey, people were saying this about today, 40 or 50 years ago. What are we saying about tomorrow, right now? And I think that's an important point. Because at that point in time, when this quote came up, it probably reached a small segment of people who were looking ahead. But right now, we are living in this particular moment. So, when we come to this question of, **To Tech or Not To Tech**, I don't interpret that question as whether museums should tech up. Should we go fully digital? Should we introduce a lot more immersive realities or stuff like that. But I think the question is really asking us, what are the considerations when it comes to education, when it comes to the missions of the museum, in order to understand and to be able to responsibly react and respond to the emergence of tech and, in that case, what are the options for museums moving forward?

This is a rather disturbing image. I think we have had some conversations over lunch, some with friends as well saying that, "hey, kids nowadays are growing up in a very different world from us, right?" Completely dystopian, in our view. But it is their reality today. That's not my daughter, it is just a stock image. But I could very well put my daughter's image there. To give you some statistics, extending from Nina's presentation today: we have about 5 billion searches per day; 65 billion WhatsApp messages per day; 295 billion emails sent per day.

Okay, who can make a guess what this says (Fig. 55)? It is no longer gigabytes. It is 28 petabytes of data from wearable devices alone per day, projected towards 2020. That's an indication of some trends.

This is really a very helpful chart that I pulled off the internet. It really shows the deluge of data that is being exchanged today from various means. If you put this in context, the question of **To Tech or Not To Tech** becomes almost moot in the sense that everybody and everything else is been "teched up". The question is, "how should we respond to it, as an educator, as a museum?" I don't think the answer is simply to engage or not to engage tech. I think it lies somewhere in between: how do we want to go about it? How should we responsibly engage with the trends of today knowing that audiences of tomorrow?

Future generations will have shifted their modes of consumption, their ways of engaging with content and understanding the world around them. We were having an interesting conversation over lunch earlier, saying, "Hey,

people are glued to their devices. They are no longer social. They don't talk face to face, and they can't relate to each other." But if you look at it from a different perspective, this is how people today relate: by going online, by messaging each other, by going on social media. That's how they actually gain their exchanges. That's how they interpret the world, and if you look at it from a positive point of view, they are actually interacting, engaging and being more social with a much wider audience. It's not interpersonal, in terms of one-to-one—yes, to them it is not one-to-one, but one-to-many. And so, the dynamics have changed a little bit. I think this offers us an opportunity to re-look the traditional definitions of what we mean by social engagement, what we mean by all these values that we're trying to transmit. Because that is, of course, problematic. Today we don't have clearly defined boundaries. We can no longer say, "You are only restricted to this particular social circle and are only able to shape the values within this particular circumference of friends and families you engage with." The reality is today social circles are much wider. So how do we cope with that? I think we need to understand.



The basic question for us is really: are we ready for this future? Because it is not the future. It is the emerging present. For myself, I ventured into this area sometime in 2016. It was more of an interest at that point. I wanted to explore a little bit in the areas of technology, arts and culture, and along the way, I built up some understanding of what it means to "tech up". We felt that, in our approach with tech, we will have to be very clear of the "why": "why and how we apply technology." One of the things that we in the museums said is that technology has to be rooted: it has to be rooted in learning, it has to be rooted in values, it has to be rooted in experiences; reasons for why we choose to go tech, rather than other methods. And it's not a zero-sum game: it is not one or the other. It is how you have a blended learning approach to this. We also say that technology should be contextual, it needs to be thoughtful, it needs to be insightful, and it should promote understanding. Not technology for technology's sake. Rather, we ask if it adds something to somebody's understanding of that particular situation, object, or content. If it doesn't, and if the objective is just as well served by reading a book, watching a video, then why not do that since it is simpler? Technology has to serve a purpose.

We want to use technology that is responsible: that promotes empathy,—VR and AR are examples, as Olivier mentioned—inclusive, and accessible. Technology offers us many opportunities to make our content, to reach out to different and wider audiences, to be able to promote good values like empathy, get people to resonate with each other, understand where each other is coming from, and make sense of the world and people around them.

We also want to use technology that is relevant, that is better, connected and shared. This points to a couple of points that we always held as we

were developing some of our projects for technology that is relevant. It is really about increasing the amount of connections that one has, whether it is in terms of perspectives of other people. It also boils down to the central notion of sharing. The very basis of what's happening today in social media, in the way that people are engaging technology, is sharing. It's a sharing economy. It's about being connected to each other, being connected to things, to talk about developments in Internet of Things, for instance. It's about being connected to the objects around us and responding to each other in a different way.

And, of course, we want to use technology that inspires: technology that inspires play. It is very important, I don't think we can just neglect that. I think play is a very fundamental approach to how people learn. So, we want to use technology that inspires play. We also want to use technology to inspire creativity and action.

We at the National Museum and the NHB started the *Digimuse* programme in 2017. It was really an exploration for us to understand technologies better. I gave you the context in the earlier slides: we felt that, with things moving ahead so quickly, it would be remiss of us if we do not engage with tech, to understand the issues that might come out of this. If we consider the amount of data that is being transacted, how do we even make sense of the data as a collecting institution? Are we able to capture the nuances of what's happening in the world and present it for future generations, if we're not in tune with what's happening in a present where most of the things are transmitted digitally? Do we have a collection strategy for that, and do we have a display strategy for that? I think these were issues that formed the starting point for why we entered into this project. So, we started running a couple of projects, showcases and conferences to bring people who have worked in these areas to share with the local community. From there, we did an open call for projects. These in the slides were 10

projects that were supported as part that open call. These were prototype projects that were deployed for a period of about a month or so at the museum. They range, as you can see, from everything from Gigapixel to photography to VR/AR/mixed reality, social media, mixed-media installations, AI-integrated chatbots, behavioral analytics and, of course, just artistic practices that have been influenced by technologies. We worked with Abhi as well who will be the next speaker, for *Heritage Granny*. That was also under the ambit of *Digimuse*, just not from the open call.



I think what we are trying to say is that this was really our starting point to why we wish to engage with technology as a museum of learning and really to understand not just the audiences but ourselves and our roles and responsibilities within this particular climate. What do we need to do? What is our responsibility to our audiences and visitors and to the next generations as a collecting institution? That is all from me. Thank you.

## DAY ONE: PANEL 2

**MR. ABHILASH MURTHY**  
 Founder  
 Bus Uncle  
 Company

**F**or this talk I will not be talking about, **To Tech or Not To Tech**, but I'm going to be talking about **To Text or Not To Text**. It's essentially a focus on chatbots. So, let's begin. What is a chatbot? How many of you here are familiar with chatbots? Okay, so quite a few of us. That's really good. I can just keep this introduction brief. For those of you who aren't familiar, a chatbot is just a robot who chats with you. Really simply put. You text someone, and it automatically replies back to you, and that's actually a robot speaking to you. So that's a chatbot.

Chatbots are all the rage nowadays. Every company wants their own chatbots, every organization wants their own chatbots, every person wants their own virtual assistant to do things for them. But what we did differently with our chatbots was we tried to create human characters of them. What if chatbots were virtual humans instead? Two of our best showcases for these virtual human chatbots are *Bus Uncle* and *Heritage Granny*. Let me give you a brief introduction on them. *Bus Uncle* is a public bus timing service in Singapore, accessible on Facebook Messenger, Telegram and Google Assistant. The chatbot just gives you bus timings. You just ask it for your specific buses and your location, and he replies to you in a snarky way in very fluent Singlish, telling you exactly how long you need to wait for your bus and gives you directions to go anywhere in Singapore. We incorporated a lot of humour, fun, and "Singaporeanisms" inside *Bus Uncle*. All this actually contributed to *Bus Uncle* becoming Singapore's most popular chatbot today. So here are some examples of how people use *Bus Uncle*:

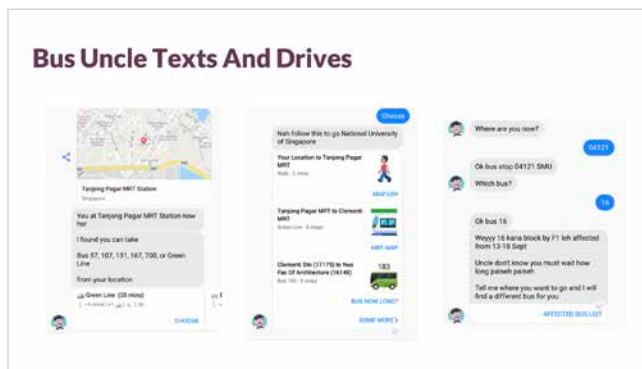


Fig. 56 – Abhilash Murthy Slide 5

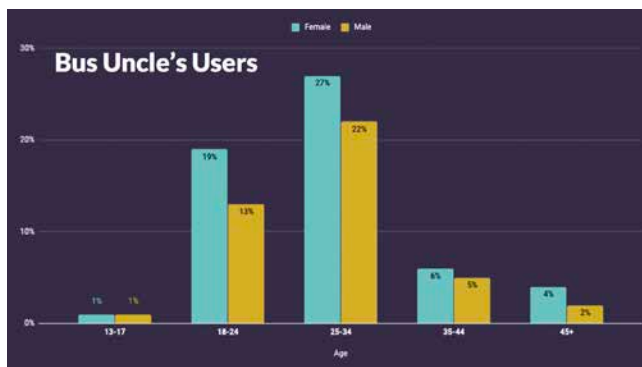


Fig. 57 – Abhilash Murthy Slide 6

On the left, you can see someone asking for directions to go to Changi Airport from Tanjong Pagar. He or she literally just asked: I want to get to Changi Airport, and he gave him step-by-step directions, bus and train lines to get there. In the middle screen, you can see those step-by-step directions, so that you can walk along as you text *Bus Uncle*. He also gives you information about bus disruptions in Singapore, such as during the F1 race period when a lot of roads were blocked or congested for buses. So, all around: an informative chatbot, *Bus Uncle* both texts and drives.

Just to give you some statistics on *Bus Uncle's* users: We have about 200,000 users across our three platforms. And the majority of these users actually happen to be between 25 to 34 years old: younger working adults, the majority of which being female, as well. That's something interesting that we found. What we've come to learn with this was, yes, Millennials, the younger generation, people who are just entering the workforce, are using chatbots, and they are happy to get their information directly through chat. We did this with *Bus Uncle*, and we wanted to explore how we could apply this concept of chatbots to other domains as well. And that's when we stumbled upon a project with Jervais. We created a new chatbot called *Heritage Granny* for the National Heritage board.

**DAY ONE: PANEL 2**



*Heritage Granny* is an old grandmother chatbot, who tells you about Singapore's history, almost in first person. She grew up with Singapore, so she knows every heritage site from its foundations. Essentially, we trans-coded the way history was written in textbooks to Granny's voice. If you message *Heritage Granny*, you can learn about Singaporean history from her perspective. We built *Heritage Granny* for the National Heritage board. Some of our functions today are: learn about heritage sites, museums, festivals, fun facts about the weather and national monuments. So, you get location-based stories with *Heritage Granny*.

You text *Heritage Granny*, you can send her your location, with the "send location" button on any of your messaging apps, and essentially, she gives you location-based heritage sites as well. She says, "oh, you're near this place, you gotta check out this heritage site." You can ask for monuments nearby, you can ask for stories. And we also did something interesting last year during *Singapore Night Festival*, when we made *Heritage Granny* talk about the different programmes during the festival. This is pretty interesting, because she actually talked about all the different programmes available and gave step-by-step directions to get to any of the programmes.

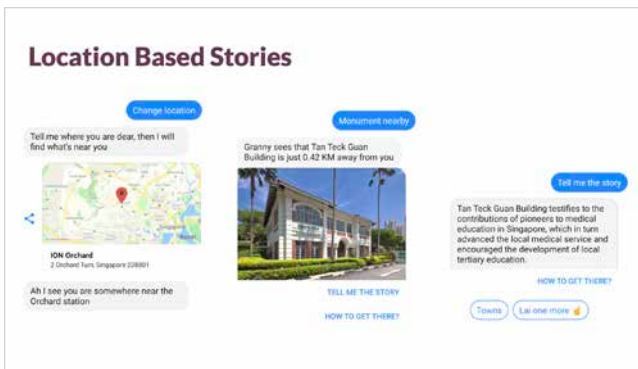


Fig. 58 – Abhilash Murthy Slide 8

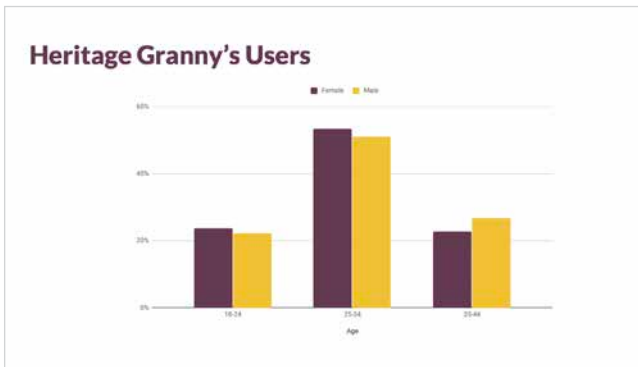


Fig. 59 – Abhilash Murthy Slide 9

**Just a bit on the aggregated statistics on Heritage Granny:** Again, you can see something similar. Here, the majority of users actually happened to be between 25 and 34 years old, People were actually speaking to this chatbot. People were comfortable. And they felt it was familiar, to be able to speak to *Heritage Granny* to learn about heritage sites, monuments and history around Singapore as well. Again, the majority are female, except for in the age range of 35 to 44, where the majority were male. So maybe there were like really older men who thought she was real.

From what we learnt on whether you should deploy AI chatbot technology to whatever you're trying to do. We learned that messaging does create a sense of familiarity for your users. You might have new apps, you might have websites, you might have whole new designs. But for all these different media, it does require a bit of learning on how to use this new technology. Messaging, on the other hand, does not require you to learn anything. You just need to know how to text and you can text your friends, you can text your family, you can text a chatbot. Characterisation also appeals to millennials and youths as we saw from the statistics.

Everyone says artificial intelligence is the next big thing and artificially intelligent chatbots are what's going to make chatbots amazing. But what we've come to learn through our experience of humanising these chatbots is artificial intelligence is great. It does serve a purpose, but it's only secondary to user experience.

So, the question **To Text, or Not To Text** isn't really a question. The answer is to have a conversation. Thank you.

**MS. SUENNE  
MEGAN TAN**  
Director, Audience  
Development &  
Engagement  
National Gallery  
Singapore (NGS)

**G**ood afternoon, everyone. It's really an honour to be here today. This afternoon, I'll be sharing the challenges that art and cultural institutions like the National Gallery, face in today's highly connected and digitalised world. I'll be drawing on my observations of the National Gallery in particular, for my sharing on this subject on technology in museums, **To Tech or Not To Tech**. The Gallery just been open for three years. And as a young museum, we knew from the onset that the current environment in which the Gallery operates in, would be different from that which could be envisaged prior to its opening. And with change being a constant, it has and continues to inform how we think about all that we do in the Gallery.

As we can see, art is no stranger to disruption, and the trajectory of art history has seen artistic revolutions, with forms of art going through periodic, abrupt changes, pushed forward by examples of self-disruption to be replaced by new movements that are markedly different in striking ways. An artist constantly challenges societal norms questioning the practice of artists that come before them. And they continue to shape and disrupt the way that we see art. On this slide, you see an artwork titled *Mega Death* by Tatsuo Miyajima. It was recently exhibited in one of our exhibitions on Minimalism at the National Gallery. The title of this work *Mega Death* refers to the huge scale of lives that were lost in the 20th century due to war and conflict. The LED numbers on the panels count down from 9 to 1 skipping 0 before repeating the cycle again. And this parallels the Buddhist cycle of life, death and rebirth, with 0 being the void. It acts also as a reminder to us about the passing of time and the impermanence of life.

We live in an era of disruption, undoubtedly, a time of global uncertainty, a time where societies are becoming increasingly complex, polarised and divided. And this is characterised by the increased political and social economic instability, rising inequality, income disparity. And on top of that, we are also disrupted by the rapidly changing effects of technology: the revolution that is brought on by artificial intelligence and automation that has changed the way we



## DAY ONE: PANEL 2

live and work. Given the rising sentiments that we are witnessing around the world, can museums play a role in mitigating these conflicts and disruptions in our contemporary societies?

Disruptions have become the new norm today. And the digital revolution is the industrial revolution of our time, one that has disrupted everything from businesses to governments to ourselves and how we live our lives. We only need to look at the world around us to realise that technology has disrupted long-standing industries and business models. At the same time, new businesses have also emerged within this era of digital disruption. Given that disruptive innovation has changed the way we work, the question remains: how can museums like the Gallery respond to these changes?

We know that today's museum visitors are neither homogenous nor passive. Instead, we are looking at a diverse spectrum of empowered audiences with varied media and consumption habits. All the more, it becomes important for us to understand the motivations not only of those who come to the Gallery, but more importantly, those who are not yet museum attendees.



We know that technology has changed the way people access content. While there is understandable anxiety by museums in engaging audiences within this dynamically changing landscape. The truth is, we cannot fully control technology any more than we can control nature or each other. Audiences today have easy access to in-depth content online. They are also content creators and distributors of their own content. And similarly, the way cultures are thought about, conceived, presented and consumed have also gone through rapid changes within the last few years. We might not understand from the outset the full impact, as well as the unintended consequences resulting from new technologies, and might continue to struggle to deal with some of these long after. And yet we know that the most significant issues are most likely to be social in nature. And those are the ones perhaps that we need to also focus on.

## DAY ONE: PANEL 2

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium

One key point to be emphasised, is that innovation starts with people, not technology. As a museum, we believe that it is important to create learner-centred spaces and programmes in a human-centred organisation that can empower audiences in the way they access content. Technology enables the concept of a museum without walls. As such, we leverage on technology to create access to artworks that are not physically able to travel to the Gallery. A recent example being this national treasure of the Philippines, a painting titled *Spolarium* by Juan Luna. This monumental masterpiece by Juan Luna was unable to travel outside of the Philippines, due to its exceptional status. And because it was a necessary part of the exhibition narrative, the work was brought to visitors in a form of a mixed-reality 360-degree experience to complement the special exhibition *Between Worlds: Raden Saleh and Juan Luna*. Through technology, visitors can get a close-up view of this massive painting, which measures 4-by-7 metres, which currently resides in National Museum of the Philippines, Manila. When we talk about technology, we also think about what value-add does technology bring to our experience of viewing art. Technology never replaces the aura and experience of seeing the original version of the painting. Rather, we use technology to focus on the hyperreal layers (of a painting), the layers that are not picked up by the naked eye. With technology, visitors are able to zoom in close to look at the details, to and the brush strokes of the painting, as well as access additional digital resources such as a video explanation by curators and the artist about the artwork.

Artists today work in and respond to the global environment that is culturally diverse, technologically advancing and multi-faceted. *Unrealised* is an example in which 3 artists Heman Chong, Ho Tzu Nyen and Erika Tan, all Singaporean artists, work with digital media to create and present new layers of narratives that can stand on their own, as well as be seen as additional layers that interface with the exhibition narratives in the permanent exhibition galleries. Ho Tzu Nyen explores the motif of the tiger found in three artworks from our permanent collection—*Interrupted Road Surveying*, a work made at the start of the 19th century; *Tiger's Whip* by Tang Da Wu, which explores environmental issues and the way animals are regarded for their medicinal properties; and *Forest Fire* by Raden Saleh, a work which I will speak about later. *Unrealised* is an example of a type of digital art project, in which artists use technology to extend the experience beyond the physical walls of the gallery, in which technology becomes a new surface upon which many different visions can unfold.

As we navigate the digital, it is also important for museums to consider the learning needs of different audiences. Engaging children in art has always been a primary focus for the gallery, because we know that the young will become future museum-goers and cultural ambassadors. So right from the beginning, in designing our spaces and programmes, we had considered the needs of children. The inaugural *Gallery Children's Biennale*, which launched in 2017—and which its second edition is currently on show—was conceived to ignite the imagination and creativity of young audiences with art works that were specially commissioned. The Gallery worked with artists to create works with children in mind. If you have not seen it, I'd like to invite all of you to come see the exhibition. While the artworks in the exhibition

invite interaction, participation and engagement in an imaginative way, I wish to point out that not all the artworks involve the use of technology. Within the exhibition, children encounter artworks that embrace different aspects of our human experience. And every artwork in the *Children's Biennale* creates a safe space for self-expression and creative exploration. Through direct participation, art enables children to continue to engage with the world around us with shared values of acceptance, openness, and diversity.

In some instances, technology becomes a useful tool to enable a different type of connection with art. So here you see children trying their hand at creating and combining different colours and patterns to create their own virtual personas, which can be added to the digital landscape of this interactive exhibit, titled *Who's by the River*. The image you see here is inspired by a painting by one of Singapore's early artists, Liu Kang. The original work is titled, *Life by the River*, which is currently on display in our permanent exhibition. Through hands-on interaction with different aspects of content creation, technology can extend children's connection to the painting, and encourage them to explore the collection.

Technology has changed the way that we think about the museum experience. Today, we know that the museum experience begins even before the visitor steps into the gallery. With the goal of transforming the museum experience into one that is seamless and hassle-free as visitors embark on a journey which is guided by the individual's preference, we have also conducted exhibition concept-testing from the onset as we begin to plan and prepare for our exhibitions, to find out how visitors and non-visitors might respond to the exhibition. Through exhibition concept testing, we want to find out what the level of interest in the topic might be with different audience segments, the extent of prior knowledge they may have on the subject matter, how they might respond to certain artworks or even the exhibition title. All of this information helps us better understand how we might approach audience segmentation and value proposition, as well as deploy our marketing efforts to reach new segments of audiences.

As I mentioned earlier, innovation starts with people and not technology. And for creative organisations to remain agile, we can use technology to empower the way that we work to enable us to work more productively. With machine learning and artificial intelligence disrupting the way that we work, we also ask ourselves: how can these disruptions work in our favour? At the Gallery, we leverage on AI to augment our workforce and to seek new efficiencies. The virtual PA is something that we have deployed, to enable different teams in the Gallery to reduce the time that they need to do their own scheduling. And that frees up considerable amount of time to coordinate different schedules for meetings. Another aspect where we work with AI, is Saleswhale – which functions as an AI sales agent. This has been particularly useful for those of us who have smaller teams. In this instance, AI helps the team filter through the general enquiries; pre-select and pre-qualify more complex queries that the team can focus on, given our limited resources. And finally, we also use technology to enable us to understand audience behaviours in relation to the question of “beyond the entrance, where do they go?”, “which routes would they take?”, “which

rooms do they spend more time in?”, “how much time do they spend in each of these spaces?”. All of this information enables us to create a more seamless experience for audiences.

I would like to end my presentation by returning to the role of the museum, where learning has always been, and continues to be a key focus for us.

The Gallery's Keppel Centre for Art Education has received over 1.4 million children, students and youths, since we opened in 2015.

And in response to the question of **To Tech or Not To Tech**, I would describe the role of the Gallery as one that contributes towards being the “disruptive classroom” for the next generation, to prepare them as change leaders of tomorrow. And as we continue to ask ourselves these questions: “how can museums rethink their business model and structure to embrace rapid change in business and the cultural landscapes that we are situated in?”, I would like to close by offering this reflection: in confronting digital and new realities, cultural innovation through self-disruption also means not accepting the status quo. And for National Gallery, this means building an organisational culture that embraces open innovation in its varied dimensions, while also being able to harness the power of digital technology imaginatively and meaningfully; all of which ultimately enables us to cultivate a community that is inclusive, creative and thoughtful. And with this, I end my presentation. Thank you.

---

## QUESTION AND ANSWER

Moderator:  
**CAROL LOI**  
Founder  
Village Consultancy

Thank you so much, panel members, for such an eye-opening presentation. Can we give them a big round of applause?

I think many of you may be like me seeing many of these things for the first time. I never knew that AR could be used in this way in museums, right? I have also been talking to *Bus Uncle*. Sometimes he chats me up, out of nowhere. It feels so real and I as an aunty, I feel a little bit weird.

Yeah, so we have limited time, I don't want you to keep you from your tea break. We have time for the top two questions. If you're into Pigeonhole, you can take a look at the question in detail. But the two top questions seem to be related to the issue of accessibility:

**As we use technology, does it increase the cost of running stuff? And does the cost, for example, get transferred to the people? And does it mean that there might be some segment of society that may not have access to all the wonderful things that the museums are doing? So that's one aspect.**

**The other aspect is also does it impede, say, the older generation? As you shared with us, it is the younger people who seem to be more engaged.**

**Does it impede some of the older generations from accessing some of the wonderful things that are happening? Anyone would like to start first?**

## **JERVAIS CHOO**

Accessibility is a big focus in the sector right now. I can speak on behalf of the National Heritage Board. It's certainly an area that we're going to quite a bit, in terms of how technology can make content more accessible. So how can technology enable greater access and inclusivity? Those are two very different terms. Here are my thoughts:

Firstly, from a cost point of view, the question is really, in my mind the cost of doing business in the museum sector: how do you kind of create content to be able to connect to different audiences? About whether or not that is passed on to people? Well, I mean, right now, to be honest, looking at the current climate, the cost of tech-use in the putting up of an exhibition is probably small compared to the overall cost of the exhibition in terms of loans and showcases. Putting up great works of art, artefacts and objects alone involves high cost. I don't see a lot of that cost being passed on. At this point, in my mind, I think technology will get more accessible, more affordable in a way as we move forward. Of course, we're not looking at complicated tech, we're not talking about creating an entire holographic immersive projection of something. If you do choose to do that, then sure. I mean, that's a differentiated experience. But that's not really the connector if we think in terms of using technology to connect with audiences. So that's my sense of it.

## **OLIVIER BOS**

If you think about the accessibility of certain technologies used in the museums, we always think through every single step to consider how a visitor might experience this kind of digital experience. So that's why it still requires a human touch every single time you do virtual reality that's open for public. If it is open to the public, you need to have education: to have facilitators as you need a human touch to explain these new technologies. Many people have not used things like *Virtual Reality* or put up a headset. Personally, how I got into virtual reality was just by testing out with immobile elderly people back in Amsterdam. That required thorough research, understanding who they are, and what they do. This is all about the human interaction again, and about human-centered design. Thinking through the whole process is actually very important to make it more accessible for everyone, and not just think about the experience or like, "let's be cool, tech, tech, tech!" Everybody needs to enjoy it. And if you look at a cost of things, this really relies on partnerships. Some companies have different or same kind of missions. And I think that this is really where this can cover up most of the things. You can rely on partnerships to create impact with new technology, and also to enable other people to come together and learn in a more engaging way with new technologies. In that regard it is always education practice.

## JERVAIS CHOO

We ran a VR project as part of *Digimuse* actually, and we tested with audiences as well. We wanted to know whether the elderly and the kids take to that medium. We found that the elderly people who came in really enjoyed it, because it's something very different from what they are used to. So, I think we need to also kind of remove some of these lenses within our own minds: that the elderly does not engage with tech. A simple example: if you go to the park you will see a number of elderly people play *Pokemon Go*.

## SUENNE MEGAN TAN

Yes, I do agree. In fact, on this topic of Pokemon, I recently came across an article where this old uncle from Taiwan was on the bicycle. And he's got 30, 40, 50 screens installed on his bicycle. And he just goes around the city trying to catch all these Pokemon figures. But on a more serious and practical note, back to the gallery. We don't just go into technology for the sake of that. We always start with the problem statement: what problem is technology trying to solve? Whether technology is the best solution to solve this problem is also the flip-side of the question. And once we do that, we then go through a series of prototypes. And because we don't have all the expertise in the gallery, we rely a lot on working with partners. We believe that's also because complex problems require, you know, complex solutions, and it's best done through collaboration. So that's also the reason why we reach out to a lot of different partners. Some of the technology initiatives that I shared earlier were done through collaboration with private sector partners, institutions, universities and so on. Having said that, though, technology may not necessarily be the only solution to solve accessibility issues. For that we have a totally different access strategy. But it can come, at some point, on specific projects where we can measure the sort of neuro-reactions to particular works of art, and how that can enhance the experience for some segments that we are still trying to understand. So those are ongoing discussions. And we're still very early in this landscape. But very, very optimistic, and open to collaborations

## VINCENT POUSSOU

I just want to confirm that we work a lot in partnerships with private companies. The working processes are very often audience-tested and educational for us. As a museum with a very high symbolic value, we have a lot of proposals for partnerships with big companies. It's not really a problem. The problem for us is more whether we accept, to place our museum image alongside the brand image of some of these companies. About the question of accessibility, youth and the elderly, initially we thought that using technology will help us to reach out to more young people, but it didn't work in this way. It was just specific use of social media for social events that really helped us reach them. And sometimes it's older people whom we reach more, like for our massive online courses. Because they have more time to access art through this technology.



## NINA ERNST

I don't really have much to add to this. But I did think that one of the words that has come up a lot today has been "relevance". That we want to run our projects so that they remain relevant to what we're trying to say. And I do think there's a lot of scope for collaborations between the institutions as well in implementing solutions and working together on projects.

## CAROL LOI

Thank you. Another top question from the audience is:

**At the rate that we digitalise, do you foresee that physical museums will become irrelevant? Is that an issue? Because audiences can try all these things on their devices. What are your thoughts?**

## VINCENT POUSSOU

Physical museums won't become irrelevant. They are part of the current reality of museums, I think. My point is that it could be difficult to give access to everybody to museums in general. Especially to some museums and to some art works, to some specific sites.

If there are 8 billion inhabitants on Earth, many can't travel, don't have access to the big cities, for example, where the main exhibitions are. And if you want to share that with everybody, you have to accept that there will be several ways to access these realities in museums. For example, you can propose a simple TV programme. But you can also try to give the same rich sensations, to audiences, as if they were in the real museum. I think we will invent new forms of discovering the richness of heritage. It is perhaps the way to think about this issue: that it offers alternatives other than going to the museums overseas.

## SUENNE MEGAN TAN

I'll share my own personal anecdote. I don't think museums will be irrelevant in a heavy digitalised world. I will draw reference from my memory and experience of being in New York when 9/11 happened. I'm not sure where everyone was on that day or if you remember that event. But it was quite vivid for me because I was then a graduate student living in Manhattan. I saw the Twin Towers coming down. It was quite real and very confusing. But in the subsequent weeks that followed, what was really interesting was how people regarded museums. We know that the Met is a large encyclopedic Museum. Typically, the permanent sections of the museums were not as well visited, particularly the Islamic section. But in the weeks after 9/11, that section was packed. How we can understand this is that people go to museums to look for answers. And in a way, there is a public trust that museums carry these very important artefacts across time, they contextualise them. And that's how we make sense of the world. And that's really evidence of the past. And if we can't locate our past, we can't possibly understand what went on before, and we can't understand the future. So, I think in that sense, technology really is not going to be helping us to solve all these larger, bigger metaphysical questions. But I think museums and the role that they play today is a role that they will continue to play. It is a very, very special role in human civilization. So that is my answer and response to the question: why I don't think museums will ever be irrelevant.

## JERVAIS CHOO

I've used this phrase a lot of times, I think paraphrasing Carter Cleveland, the CEO for *Artsy*, he had stated in response to a similar question: just because people go on *Tinder* does not mean they do not want to meet the actual person for a date. In a way, I think the point here is really that technology in this case, enhances the access and appreciation, really, and that desire or interest in the object. And I think in that way, if you look at it... I've seen really, really good VR projects, VR museums. I've gone through a couple of these. And one of the things that technology does help us to do within the VR project, or VR Museum is that you can get really up-close to the painting. Something you cannot do, Ironically, in the physical museum. You have the physical art work there, you have to stay 1.5 meters behind a line. The object may be behind an enclosure, you cannot examine the details, you cannot get up close. But in a VR rendering of it, you actually can. You can even see what's behind the painting, the inscriptions that might be there that have been written by the artists and so on. So once again, it's a different medium altogether. It's not a zero-sum game. It's not either this or that. It is how the two can go together to help enhance the appreciation of museums even more, because what people crave are really the experiences, right? I'm going to watch *Aladdin*, I think next month, at the Marina Bay Sands, but I have seen *Aladdin* so many times in so many different renderings of it, whether on TV, Movie, cartoons, etc. But I am still going to watch the live action show. I don't think that changes: people crave experiences. And I think then the onus is really on us, as a museum, as a presenting institution, to make our content relevant and engaging.

## NINA ERNST

I agree with all the above points. I think it's really important to have multiple access points and to enhance our reach through digital avenues. But I think we heard from the mouth of the children earlier, when the children explained about their exciting experiences in museums, how it was a different kind of learning, how they are excited by an encounter and that sort of real moment of seeing something up close. So, I think there is a bit of both there. I think the two, art and tech, can co-exist.

## OLIVIER BOS

Yeah, I definitely think the same. It wouldn't go away. The virtual museum would just exist as an option alongside many other technologies that we use for now as well. For example, if we have a business meeting across the world, sometimes we just still choose to fly over there. Otherwise we could do a video conference call. The same would apply to museums as well. It's an experience that one can enjoy and appreciate objects and all the different kind of works of art that has been created. Technology will only give you the option, as you said as well. Getting a more in-depth experience, maybe. But it will definitely not go away. It will just exist alongside the other experiences with technologies that we now use. Because just like our mobile phones, or smartphones, those are not full extensions of ourselves. We still have the human interaction with each other. And we need to harness that as

well. So, I think that's also where we have to look out for all together: that we continue to harness organic human interaction with each other, and not just focus or rely on technology. And from there, we can just enjoy going to the museum together. And not being only in a virtual reality world. Also, to just mention that like many people were asking: what is virtual reality, what is this medium for? And basically, what it says is, it's what you want it to be. It is how you want to interpret reality. So yes, technology is definitely going to stay, and we fight for it to serve our human needs.

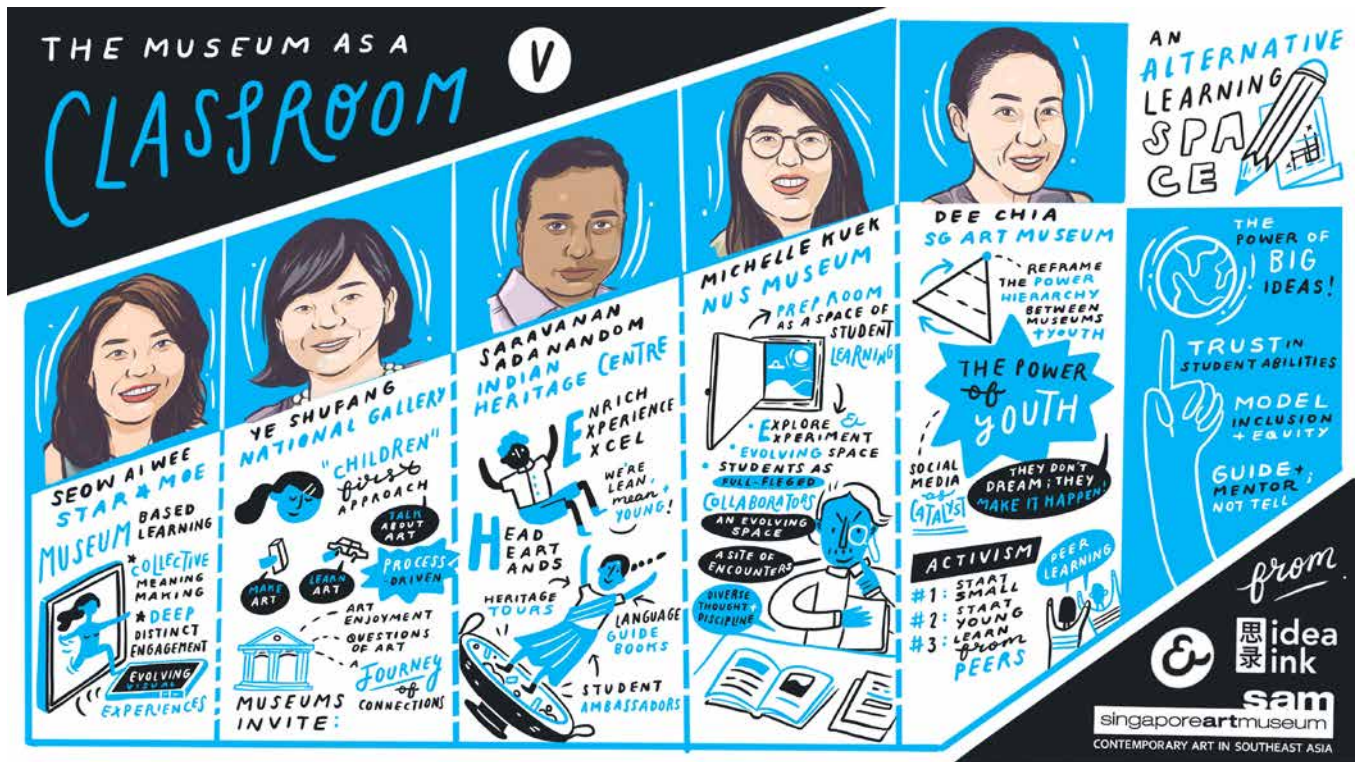
## CAROL LOI

Thank you so much. I am very sorry that we have to end our panel discussion. It is a very enriching panel.

We are in this together. Technology will always be with us. So, using Abhilash's ending slide, let the conversation begin. The issue is one that is really about a conversation. Technology will always be with us. It is a balance. We don't just use it for technology's sake.

So, thank you very much, once again. Enjoy your tea.  
Thank you so much panelists.





PANEL 3:

# AN ALTERNATIVE LEARNING SPACE

Recently, schools have begun to view museums as alternative learning spaces and embarked on many museum-based learning programmes across the island. How can the content offered by and the environment of a museum impact student learning? How do we utilise the potential offered by museums effectively for teaching and learning?

**MS. SEOW AI WEE**  
Deputy Director, Art  
Singapore Teachers' Academy  
for the aRts (STAR)  
Ministry of Education

**S**o, good afternoon, everyone. My name is Ai Wee and I am from the Singapore Teachers' Academy for the aRts. We have been told by Tingting to be high energy, and we're going to bring it! The ideas and opinions that I share here are informed by the work that I do in my current life, and also shaped by my experiences as a museum educator in my previous life, and my ongoing and never-ending life as a graduate student. Singapore Teachers' Academy for the Arts is part of the Ministry of Education. We are lovingly known as STAR and we are under the professional wing of MOE. We work closely with our colleagues from the curriculum division, so that teachers in schools not only know what to teach, but they also know how to teach. As mentioned just now, STAR designs a myriad of professional development programmes to meet the diverse needs of art and music teachers. We host large-scale

conferences, for about 1200 teachers, and we also conduct small scale multi-part programmes where we work with a small group of teachers over time. So that gives you a little background about what I do or what we do at STAR.

In 2018, with the revised art syllabus for primary and lower secondary levels, we ask teachers to nurture our students as both artists and audience. Museum-based learning is recommended as a core learning experience, and art discussion is introduced as complementary to art-making. I shared this framework with a group of docents from SAM back in 2017 asked them kind of a trick question about museum-based learning: “Where do you think [museum-based learning] might be situated in this syllabus framework?” And it is a trick question, because after discussion, they noticed that museum-based learning really fits into every segment of this framework. So, it’s not an aside; it’s very much part of what we’re asking art teachers to do. So that’s the curriculum framework.

At STAR, we have a pedagogical framework, the *Learning Art through Inquiry* framework. Introduced by STAR, it asks teachers to design art learning experiences that privilege the students’ voice and encourage our students to share their lived experiences. In the past, art lessons were probably focused on ‘making’ alone. What we are asking teachers to do now is to focus on the process of art-making, which takes more time to unfold because it requires the students and the teachers to *Connect & Wonder* and *Investigate*, to allow time to *Express* and to *Reflect*.



I believe museum-based learning is situated nicely in the *Connect & Wonder* as well as the *Investigate* quadrants. Museum-based learning is not new work at STAR. Since we work very closely with our colleagues at MOE curriculum, we started work way ahead of time—even in 2011, when we were starting to talk about what the revised art syllabus might look like. With that in mind, we knew that we needed to prepare the teachers beforehand. So, we launched professional development programmes and resources that we have developed just to support the teachers both at the museum and in the classroom.

The following few slides will show a few questions that are meant to provoke dialogue, or even internal soul-searching for the museum educators among us. OK, so: Are museums really informal learning spaces for students on guided visits?

During a guided visit, what I observed, even when I was a museum educator and when I observed tours here in local museums, students are greeted by the museum educators, and the museum educator would go on for about 10 minutes telling them what not to do at the museum. “Don’t do this, don’t do this, don’t do this, and welcome to the museum.” And then

they will walk in two lines from one artwork to the next artwork. They walk, going to see artworks that were predetermined by the museum educator, telling them which artwork to look at, then they give them worksheets to do. And the worksheets need to be submitted to the teacher. My question is, this sounds pretty much like formal learning, right? How do we then provide opportunities, or more opportunities, for our students to participate in collective meaning-making while looking at a work of art, where the aesthetic experience is an evolving experience as they make sense of what they're looking at independently as well as collectively? One of the gurus in museum education in New York City is Rika Burnham and she has this to say in an article, which is dated 1994, more than 20 years ago.

*The objective of the aesthetic experience, then, is not the time-efficient transfer of information but the realignment of values wherein an evolving visual experience is of paramount importance. —Rika Burnham (1994) If You Don't Stop, You Don't See Anything*

The objective of the aesthetic experience, she reminds us, is not a time efficient transfer of information. You're not just downloading information to the students who are on a guided visit. But really the realignment of values wherein an evolving visual experience is of paramount importance.

My next question concerns this: can the artwork be anything you want it to be? In the museum education field, a lot of us talk about it. Maybe it is the Asian or the Singaporean in me that says, "no, the artwork cannot be anything you want it to be." Because personally, I feel it discounts the artist's intention and what the artist wants the artwork to be. Unless it is the artist's attention for the audience to make sense of the work however they want to. If a student was looking at this mural and say that the man at the bottom left-hand corner is selling satay. The student justifies it by saying that it looks like a grill, and it looks like he's holding sticks. For some of my colleagues in museum education, they will say that we should not correct the students because he or she provided visual evidence to support what he or she is looking at. So that's their school of thought. I do not know if you'll correct the students or not, but I would. But I'm not saying that. I'm going to outrightly say "No! You're wrong," or be so aggressive in saying that. I have personally encountered the museum educator goes "is it?" and they laughed out loud in my face. I'm not saying that we need to do that. How do we provide information that are important or critical so that the dialogue can continue in a way that will expand their experience, focused on the work of art. Another quote by Rika, which I am not going to read:

*We must always be able to provide accurate and pertinent art-historical and other contextual information. [However], we must think of such knowledge not as an end in itself but as a tool to be used for the larger purpose of enabling each visitor to have deep and distinctive experiences of specific works. —Rika Burnham & Elliott Kai-Ke (2011), Teaching in the Art Museum: Interpretation as Experience*

It's about how information will enable the larger purpose of enabling each visitor, all our students, to have deep and distinctive experiences on specific works of art. Learning about art and artists; I believe the main focus during a

museum visit should be to learn about the art and artists. Students should learn how an artist is an observer in the way that the artist created the still life painting; how the artists tell stories about our lived experiences; the creative ways that the artists experiment with materials or push boundaries about what art can be; and how artists make commentaries about contemporary issues. The issue is, I think, in our eagerness sometimes to collaborate with other subject areas to bring in more students, or to justify why the museum visit is necessary in the school curriculum, the museum visit might be more like an English class, the students are doing more writing than looking at a work of art. Or, it turns into a social studies class, where students are learning about historical context rather than how the artists capture the character, scene or setting.



Of course, I'm not saying that you can only learn about art and artists during a museum visit. There is other learning involved doing a museum visit where students look closely and listen to each other. They learn to consider different perspectives and embrace different viewpoints. They learn to share their thoughts using words. And also learn how to articulate their ideas visually, through drawing, painting, sculpture forms, and also installation.

I end my presentation, with this quote from a book by Professor Linda Darling-Hammond (2015) from Stanford Graduate School of Education. She spoke about how we need to address the opportunity gap, not just the performance gap - the cumulative differences in access to key educational resources. I am going to say that museums hold key educational resources, and that museum-based learning is a key educational experience. Because the students visited the museum, they learn the important role of the artist in our society; they learn that new and exciting works are being made now not just by dead artists; they learn that there are many career opportunities in museums beyond being a curator and studying art history.

I just want to acknowledge that my presentation—the quotes that are used during my presentation—are very America-centric. That is partly because I cannot find local or regional scholarship about museum-based learning, about informal learning, about museum -school partnership, so I'm going to ask us to come together and contribute to the scholarship in this area and share with the rest of the world how Singapore museums are championing learning from visitors of all ages. Thank you.

**MS. YE SHUFANG**

Deputy Director,  
Education  
National Gallery  
Singapore (NGS)

**G**ood afternoon. I am Shufang, and I head the education team at National Gallery Singapore. National Gallery Singapore is a visual art museum for Southeast Asia modern art. We have over 1000 pieces of artwork exhibited in our Gallery.

Our vision and mission is to create dialogue and connect the art of Singapore, Southeast Asia and the world through research, education and exhibitions; through our permanent exhibitions, special exhibitions and programmes. Today, I'm going to talk about education at our Gallery.

You will find that some of my terminology mirrors what Ai Wei talked about, and there was no prior planning. I think it stems from our background in education.

Education at National Gallery focuses on art and artists. We aim to nurture future generations of art-lovers, creative and critical thinkers.

We recognise that every learner has a diverse culture and history and we aim to provide a range of different programmes for different learning dispositions. We understand that when we develop in children now, an appreciation for art and artists, we are contributing to an inclusive society that recognises and values art, creativity and diversity.

As educators, we know that technology and social media have changed how children learn and how we teach. How does that impact museums and how we connect with our younger audiences? At National Gallery, we flipped the approach from thinking about 'what we think children need to know' and we started asking ourselves 'what do children want to know about art?'

Instead of downloading to children and students, a whole lot of information on the significance and importance of an artwork when they are at our gallery, we started paying attention to the questions that children were asking about art. Here are some questions we heard on the gallery tours that we conducted for students and children.

- Who owns the artworks in the Gallery ?
- What happens to the artworks after a long time, do they get thrown away?
- Why do the artists not smile in self-portraits?
- Why couldn't the artist name the painting?
- She looks like me when I am watching TV!
- I used to think that artists get their ideas from the internet. Now I think that artists in the past use their personal experiences for ideas.

Here's one of my favourite question: How does the painting fit into the frame?

The painting, *Forest Fire* by Raden Saleh, as you can see, has such rich narrative and dramatic imagery - red-hot flames, growling animals, lots of action, very action packed. When we asked students what questions they have about this work, a 10-year-old asked, "How does the painting



fit into the frame? And how did this painting fit through the door?" ... after all, this is one of the largest paintings in our Gallery.

In 2016, we worked with a few partner schools to organise and test-bed a programme that provided students with the opportunity to learn 'up-close and personal' with our curators, conservators and artwork installation team. 80 participating students were engaged through gallery tours and group discussions and worked together to come up with questions that they wanted to ask our museum specialists. On the last day of the programme, the students met with our curators, conservators and installation crew to ask their questions. Here you see Kelvin, one of our installation crew who installed *Forest Fire*. He is showing the students a part of the frame that was considered for framing *Forest Fire*. He shared insights with the students on how a frame not only enhances how you view an artwork, it also helps protect the artwork.



This is a list of questions that the students asked our conservators.

- What equipment/s do you usually need for artwork conservation?
- How does flash photograph effect an artwork?
- How much time do you normally take to conserve an artwork?
- Why must we conserve a painting?
- What if you accidentally damage the painting further when conserving?
- Are there paintings that could not be conserved?
- How do you repair a torn canvas?

This test-bed showed us the breadth and depth of children's curiosity and inquiry abilities when they are given the time and the space to think and to ask questions.

At National Gallery, we continue to ask ourselves, 'What makes museum education meaningful?' We understand that to nurture future generations of art lovers and creative thinkers, museums need to be places where children are welcomed, feel comfortable and are engaged. We need to adopt learning approaches that are wide-ranging, where children with different learning dispositions feel encouraged to talk, share and contribute. At our Gallery, we pay attention to children, we observe their behaviour, we listen to what they are asking. And we give them lots of time to discover and enjoy art. In a way we are saying to them, "When you leave the museum, you may not have all the answers...and that's fine; it takes time to engage with art." Or as our museum director, Dr. Eugene Tan seriously reminds us from time to time, "Can we make it fun for the kids?"

These are our learning objectives and how we scaffold over different age groups. For younger learners, we focus on developing curiosity and imagination. As children enter school age, we think it's important to develop different ways of seeing, thinking and to encourage personal responses to art. With teenagers and youths, we focus on developing inquiry skills leading to critical thinking. This sets the foundation for them to develop into young adults who value different viewpoints and perspectives of the world. For younger learners, we use approaches involving storytelling and role-playing, and we encourage them to ask questions. For the older learners, we focus on group discussions and encouraging new interpretations of art.

The Keppel Centre for Art Education is a place where children and families can explore art in a self-guided manner, at their own pace, they do not rush through their experiences, they have time to enjoy art together, to learn to make art as well as to learn to talk about art.

With our school programmes, we aim to cultivate a mindset change in the children and teachers - 'To search more for questions and less for model answers.' We work closely with curators and facilitators to create an exciting gallery tours that focus less on right answers, textbook answers or model answers, and to provide more time for children to ask questions. On the tour, for example, a facilitator may start by asking open-ended questions that encourage students to respond less with facts, and more with personal opinions, thoughts and emotions. In this way, we hope that as they mature and grow into teenagers, they will then have the disposition to self-learn and self-motivate. They begin to see the Gallery as a place where they can experience as independent individuals, not only through a school visit.

Let me share some of our test-bedding for this year. Through technology, we provide audiences with experiences that they otherwise may not have. We have an interactive '*Build-a-sculpture*' game that challenges children to build the tallest sculpture they can. We recognise that when children are engaged with digital games, the worry about something not being perfect is lessened because they can click "start" and start over again. We want to harness this aspect of technology in our education. For teenagers and youth, we are working with collaborators to bring autonomous experiences that develop independent and self-motivated learners. For example, using VR technology to enable the learning of bronze-casting.

We started with the question 'What do children want to know about art?' Here are some of the responses we've collected:

- ...I think that art has powerful powers
- I used to think Singapore has very little artists.
- ...now I think that art can contain history too.

The understanding and the awareness that comes as a result of visiting a museum may not always be art-centred. Sometimes the awareness could be something historical, or something about who they are and the country that they live in. For example, I think the realisation that Singapore has artists, whether many or "very little" is a really good learning outcome.

Here are some of our ongoing case studies and research projects. Through our education programmes, we aim to contribute new knowledge in these areas: 'the impact of learning through play', 'the role of artists in our society' and 'the role of museum educators and facilitators' and 'the unique experience that a museum provides in art education'.

**MR.  
SARAVANAN S/O  
SADANANDOM**  
General Manager  
Indian Heritage  
Centre

Indian Heritage Centre is a community focused museum. One of the heritage institutions under the auspice of the National Heritage Board, opened in 2015 and as part of the SG50 gift to the community. Work on the heritage centre started way before that, in 2008. Close to more than 50 engagement sessions with the community was conducted to gain their inputs for the permanent galleries' narrative. Today we will share our educational programmes. As a heritage institution under the National Heritage Board, our Education & Outreach (ECO) branch provide us with the overarching framework and the guidance for the educational programmes and continues to be the link between us and schools. With the assistance of ECO, we aligned our programmes more with the schools' curriculum. As a young museum we were at the stage where whilst we were very focused on setting up the galleries, we needed to also start looking at how we could also engage the schools and provide programmes where heritage education can be fun and engaging for the students. Schools' focus is on the student-centric and values-driven model and so we looked at how heritage education can complement the curriculum. We examined how we could tweak our programmes to meet the students' learning needs and at the same time achieve our heritage education goals. The programmes, were on a progressive mode: *Experience*, *Enrich* and *Excel* phases to provide a more holistic experience for the students. You will see that all the programmes have elements of head, heart and hand, and values that are aligned to schools' curriculum.

At the *Experience* stage we explored how students could learn from our regular gallery tours. We noticed that most of the school tours were vendor-led. We asked ourselves, "who knows the galleries better than ourselves?" So, we discussed with our docents and enticed them to take up more school tours. There were some initial reservations engaging children, but we managed to convince the docents. Then we went out to the schools and invited them to connect with us directly instead of going to the vendors as we would be able to tell a better story and it is free.



Apart from the regular guided tours, we also made the gallery tours more interactive, we collaborated with performing arts groups from the precinct to curate a gallery tour programme that is more interactive and immersive for the pupils. As a result, we have our dramatised tours which were very

### DAY ONE: PANEL 3

popular with lower primary students. Role-playing and colourful costumes were all added for the interactive experience.

Storytelling is another very powerful tool to impact students with knowledge and values. We invited accomplished local storytellers to narrate stories and anecdotes related to our gallery themes. This is accompanied with interactive hands-on activities. The environment and informal interaction increased the engagement level of the students.



IHC is situated at the heart of Little India. It is where the community meets. It is a hub for the Indian community. We have a rich, authentic canvas we can leverage upon and conduct very engaging programmes for students. Again, the schools usually visited the Little India precinct with vendors. There was already in existence a self-guided little India heritage trail done by ECO for the public. We took elements of it and worked with our docents to curate a trail for the schools. We identified traditional businesses, historical buildings and religious places within the precinct on this guided trail and infused hands

on activities. This connected well with the students. We created activity booklets to deepen their learning. They were colourful, attractive and eye catching for the pupils, with activities designed to be achievable and interactive-sticker games and folding activities that reinforced their learning and got students to reflect on their experience.

**Technology and interactives:** As museum space was limited, we leveraged on technology to expand the space to the virtual. Our interactive stations are very popular, and we infused them into the educational programmes to increase engagement levels. For e.g. with the Smartify app, students can simply scan the artefacts to call upon more information about it. It helps the students to make meaningful connections with the artefacts at their own time.

**Hands-On activities:** this is the enriching phase. We introduced Indian craft activities as part of the education programmes. They are designed not only to serve as entry points into the Indian culture, but also to entrench and reinforce some of the values they have learned in the galleries, especially at the *Pioneers' Gallery*. For example, they decorate traditional Indian Pongal pots (Pongal is a harvest festival) with their classmates, then they share them with them. The value of sharing related to Indian festivals and Pongal is then reinforced. The other hands-on activities are the heritage games, also to enrich the students' learning. Snakes and Ladders, Indian traditional games, are popular offerings to schools. They are not only fun, but also designed in a way to develop skill-sets such as critical thinking and concentration. Heritage hunt, a very popular programme with our students especially during *Children Season*. Young audience go on a learning journey around Little India precinct to interact with shopkeepers. They

learn and experience Indian culture in a very fun and an engaging manner. They also engage in hands-on activities such as flower-garland tying, prata flipping and muruku making. The stakeholders in the precinct serve as an authentic learning resource for this programme. We work closely with them and try to keep the cost down, so it is more affordable for schools to run this programme.

**Heritage Ambassadors:** This is part of the *Excel* phase. We train students from various schools to facilitate traditional Indian games & craft activities at their own school premise during school celebrations and events. We started this with the Special Assistance Programme (SAP) schools i.e. Ai Tong School, Nanyang Girls' High, etc, as they have a homogenous Chinese student population and therefore limited opportunities to connect with Indian culture and heritage. We invited the students over and trained them so that they can share these activities back in their own schools with their peers.



**Youth Invasion:** students are given opportunities to volunteer at IHC by co-developing educational activities and interacting with visitors. Through these initiatives, students gain deeper insights into the museum operations and experience public engagement. We gained a lot of positive feedback from students and volunteers, as they feel that they were getting empowered to contribute to the promotion of Indian heritage and culture.

Another exciting programme is our student guide training programme. Here we work with students to train them to become student guides for the permanent galleries. Our museum docents train them and after the training the students guide their peers for school events and the public during special occasions. Students who've completed the programme gave us very rich feedback in terms of gaining knowledge about Indian heritage and culture.

*Captions by Kids* is for primary school students. They pen their own interpretation of an artefact in the form of a caption. These captions are then displayed alongside the official captions during our *Children's Season*. Students go through a guided tour and learn of the significance of the artefact as part of the preparation process. We provide them with an experience that they might not get in a classroom. Coming to a museum and taking part in such activities enriches the experience and deepens their learning.

With the slew of educational programmes implemented, our student visitor-ship and in-depth student participation increased. More schools are coming to the precinct, and directly approaching us for learning journeys and educational programmes.

The positive feedback from our students, parents, and educators served as an affirmation that we are on the right track and that the museum & precinct can indeed be an authentic learning resource for schools.

**To sum it up:** IHC education team is lean but is able to adapt to students' needs, involve and connect with them. The precinct provides us with an authentic environment that is rich in resources and acts as an expansion of our gallery space.

Embracing future challenges: the museum space is limited. Budget remains tight while student programmes and visitorship has increased significantly over the years. We have to continuously look at very creative solutions to support the programmes and create new ones. As you know, the school's curriculum and syllabus are always changing. For heritage education to remain relevant our team has to constantly update themselves so that we can align our programmes with the schools.

Thank you.

**MS.  
MICHELLE KUEK**  
Manager, Outreach  
NUS Museum

**T**hank you, SAM, for inviting me today to speak at the symposium. I will show you guys a bit more about the NUS museum and reflect on how our environment has affected student learning, especially older tertiary-level students.

NUS Museum is a university museum, of course, whose mission is to contribute and facilitate the production, reception and preservation of knowledge through critical curatorial practice, and collections development. At present we manage about 8,000 artefacts and artworks across four collections, the South and Southeast Asian collection, which is a modern and contemporary Singapore and Southeast Asian art, Lee Kong Chian Chinese art collection, the Ng Eng Teng collection, which I'm sure most educators are familiar with, and our Straits Chinese collection, which is located at the NUS Baba house.

In particular today I would like to share about a very specific space within the museum known as the prep-room, and how it impacts student learning. Particularly for our student interns. As a university museum, we are constantly seeking and developing new strategies that may subject the museum to becoming a site of encounters. As you can see from this picture, it is very messy for a museum gallery, and I think in general. But this is where diversity, knowledges and publics can cross path, to transact with objects and artworks for meaningful engagement. That's what we believe in.

One of the strategies was the prep-room. It was conceived about 8 years ago, by the head of the museum, Ahmad Mashadi, and then our former curator Shabbir Hussain Mustafa. Together we envisioned the prep-room to be a space that will facilitate exploration and experimentation in developing content and display methods with a project right out in the public. As we begin without knowledge, as museum folks, we are inviting people to share

with us and to hopefully learn together as a museum and audience. So as a public gallery, the prep-room telegraphs the museum's research interests to visitors and potential collaborators. Hopefully it builds audience interest in the project's development. It includes various additional new voices in the accumulation of research, curatorial and design experiments, as the museum engages with researchers, interns, artists and audiences during a prep-room's lifespan. We don't exactly know how long a prep-room will last. It really depends on how the project develops. Some prep-rooms last for six months all the way up till two years.



Fig. 60 – Michelle Kuek Slide 6

The prep-room mainly uses archival materials as its tools of deployment, especially in the beginning. The artworks and artefacts are occasionally interspersed at various points, although they're more of a facilitator rather than a focus. So here you see the various methods that our curators, researchers and collaborators have used in the prep-room. The prep-room, being a space that not only tolerates but calls for experimenting, has always been a space in which we can entrust our student learners to work without a fear of failure or a lack of knowledge. Not surprisingly, the prep-room is, more than any other museum space or function, where students' contribution and potential can be most keenly felt by the public. I'm going to share with you some examples of how they have done so. For a prep-room that we had recently called *Buaya: The Making of a Non-Myth* on the history of crocodiles in Singapore, our interns Natalie Lie and David Low were asked to create a zine as part of figuring out new ways for audiences to interact with archival materials. So as part of this process, they not only had to familiarise themselves with the materials already gathered, look for more based on the direction that we wanted to take, and in so doing expand on the already existing research, brainstorm creative ways to organise the materials visually, and even learn new design software to produce it. This is them, in this work room working out the various ways of organizing the materials. And up here, sorry it is a bit small, is their finalised view. This was the state of the prep-room for public browsing. As an extension to the project they also put together a selected timeline on crocodile related activities in Singapore that would complement the main body of research. This is it. I hope you can see the shape. They worked very hard to get it into the shape of a crocodile.

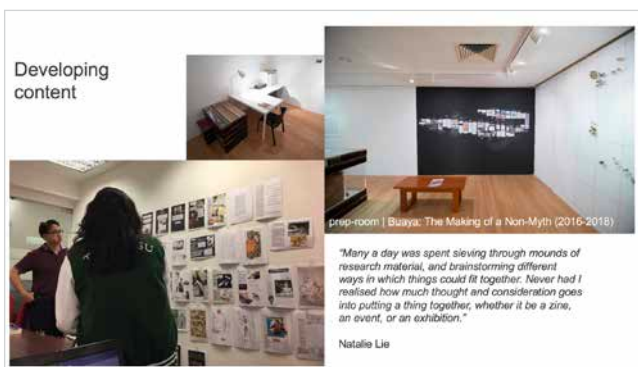


Fig. 61 – Michelle Kuek Slide 9

In another prep-room, called *After Ballads* with local artist Fyerool Darma, our interns Sara Lau and Harith Redzuan were assisting Fyerool with his research and experiments in the space. But over time, this working relationship actually evolved into them not just being interns or assistants, but full-fledged collaborators that they still converse with till this day on upcoming new projects. Arising from this, Sara and Harith actually conceptualised, produced and directed a video interview with Fyerool, documenting the project. This

## DAY ONE: PANEL 3

video was released publicly on the museum's social media. It serves as documentation as well as publicity for this prep-room. If you want to watch the video, you can scan a QR code. If not, go to the museum's Facebook page and look for it. It is there. This was actually the first video that we did for any prep-room. It was something that will kickstart video interviews as a productive form of project documentation for us, and Sara and Harith would go on to produce two more for other prep-rooms in the museum. One other thing that the video helped us to do was to give us insights from the artist at a particular juncture in the project. For this project was about two years within the museum space, and this video was dated to late 2018. And you can actually see the differences in how he began and how he ended. And for people who have not had the opportunity to visit the prep-room during these two years you can actually see in the video how it looked like then.



Fig. 62 – Michelle Kuek Slide 10

This is another prep-room, called *of place and a paradox* which was about an art space in Pattani in Thailand. We were exploring art ecologies. Our intern Jaclyn Chong was given the opportunity to incorporate a series of works by NUS students who recently visited Pattani as part of their module. And for her to bring in their works into the existing prep-room space amidst all of the various artists' work. So, she functioned in the

role of a curator liaising with the students to transport and install their works, working with our collections team to determine the best method for installation, and negotiating and creating dialogues between the Pattani artists' practice and the students work. This video here are the students' works, which is what Jacqueline inserted into the prep-room. These are all the existing Pattani artists' works as well, which were installed a few months before the students' work came in.

The prep-room may be a site where audiences view the development of these projects. But for the student interns, I think the most important development happened within themselves. Their capabilities are tried and tested throughout the process. And most of the time, they find themselves more capable and resourceful than their own initial assessment. But this project goes beyond the prep-room. And yes, our prep-room has been adapted before by some of our education partners who wanted to incorporate prep-room's experimental and process driven nature.

And here are two examples that I have for you. A *Communications and New Media* module within NUS was organizing an exhibition at the ArtScience Museum. They adapted the prep-room to be used in the Student Lounge within the department to facilitate the planning for the exhibition. So beyond just curatorial project planning, what was interesting was that it became a form of inter-team communication between curatorial design and marketing, where they were able to keep abreast of each team's



development, throughout the 6 weeks that they were making this exhibition. Crucially it also helped the students experiment with all these methods of display, before bumping into ArtScience Museum. As you can see here it could be just as small as the corner within a room, or even a cupboard. It doesn't need to be a full-fledged gallery within a museum space.

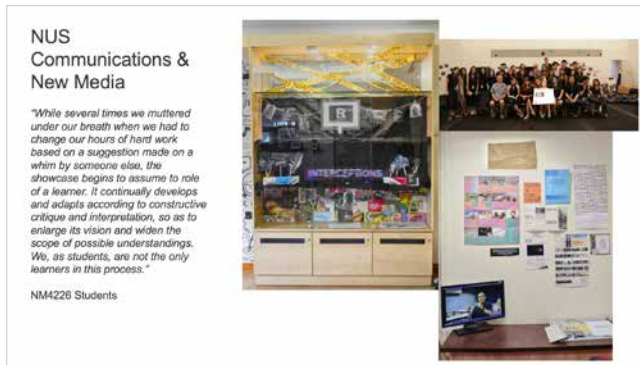


Fig. 63 – Michelle Kuek Slide 13

Another example is River Valley High School. We worked with their history department. And they were intrigued by the potential of the prep-room to prompt their students to think about artworks as historical sources, and to learn how to visually organise both artworks and textual sources together. They worked for about a few weeks on a woodblock print collection, and eventually developed a small exhibition to be held within their school's library. These were 15-year-old students.

I think that the potential of the prep-room, and how it may affect students, are many and we still have yet to completely tap it, despite doing this since 2011. One new potential that is emerging right now is that prep-rooms could be initiated by student interns right from the very beginning. And as we speak right now, we have two interns setting up a new project on the artist Jimmy Ong surveying his practice and his works. Thank you very much.

**MS. DEE CHIA**  
Head, Education  
and Programmes  
Singapore Art  
Museum (SAM)

*Due to contextual concerns, the transcript of this presentation will not be published.*



## DAY ONE: PANEL 3

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium



# CLOSING LECTURES

## MR. CAI YINZHOU

Director | Guide  
Citizen Adventures

## SAMANTHA LO (SKLO)

Artist

## DR JUNE YAP

Director, Curatorial, Programmes & Publications  
Singapore Art Museum (SAM)

*Due to contextual concerns, the transcript of this panel discussion will not be published.*



## DAY ONE: CLOSING LECTURES

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium

# CLOSING REMARKS



## DR JUNE YAP

Director, Curatorial,  
Programmes and Publications  
Singapore Art Museum (SAM)

I'm going to try and wrap up. I think today, you will all agree with me: we've had a very full and wonderful day. We've had speakers, whose backgrounds span a wide range: from museum educators, initiators and administrators, programmers and technologists. And this variety of speakers was really intentional. It was meant to enable ideas to be shared, new connections to be made. And we also felt that it was necessary to have such a widespread of speakers really to address a subject as big as this: of the future. What to expect? How to prepare for it. And I think our speakers have done very well, I think they have given more than we asked for even in asking all the important questions, and for very generously, and candidly sharing their very valuable experiences. I think I like very much to thank all our speakers for all the effort you put into your presentations. And here, I'm just going to try to sum up a little, to distill some of the presentations and messages as quickly as I can. I think some of the questions that were raised right from the start of the day, were very important. It set the stage for us, starting with the question from Kenneth on "What sorts of mindsets and behaviours do we need to meet the needs and opportunities of the future?" Another very important question asked by Vincent, "How do we learn? What is learning about? Challenging us with the with the proposition of education versus instruction. And then we also had the opportunity to hear a variety of approaches when it comes to museum learning and learning itself. That learning, on the one hand may not be just be a playground, but at the same time there are possibilities for things like embodied learning as was mentioned by both Eetuo and Luanne. I think other points that were very important that were raised today include Terry's point about critical thinking, that critical thinking is also a multi-stage process. It involves junctures for reflection, for return, for creating, and coming back again. When it comes to institutions, what was quite interesting, I felt was that learning itself is basically strategic for the institution necessary for an institution. I think this was pointed out by both Vincent, mentioning that tech is a strategic decision, and by Nina, who said that it was part of the mandate of the ArtScience Museum.

And then we had a great panel also, which I think really put emphasis on the point that learning should be people-centred. And here, we had Jervais talking about connecting technology to the real, we had Abilash talking about: it's not just

## DAY ONE: CLOSING REMARKS



the tech, but the conversation, Suenne reminding us that innovation starts with people, not technologies. Ai Wee, telling us that learning is learning about the art and artists, Shufang, reminding us with the very intriguing question of what is it that children want to know about art, not just what we think they want to know. And then Saravanan talking about a holistic approach, and what I made note of was *Captions by Kids*, which I thought was a fantastic initiative; Michelle also then brought us back to the importance of what students what the audience and students want to learn, and that the development, the most important development is development that comes from within the students. And then Dee kind of rounded off this whole train of thought, with museum education, not just being about learning, but about potentially empowering. And I think that's also where we ended up with our two closing lectures, which I thought really drove that point home. But also, I think, a couple of things that the closing lectures raised, which I thought was very important. Although Samantha and Yinzhou are not from the museum education field, I think, in a way, what they were sharing has very important lessons for us. Firstly, from Samantha Lo, she talked about accessibility. But her accessibility is a different kind of accessibility, an accessibility that capitalises on humour, something that museums sometimes don't really think about—we are very serious places where you learn in a very serious sort of way—also, how to find the ideas that can go viral, that get spread and distributed? I mean, isn't that what we, as Museum administrators, educators, are looking for? In a way, maybe Sam Lo has the answers. And then for Yinzhou, where learning is a process that comes from within, that comes from self-organising. The reason why he started the tours was because he was curious himself, and that's the learning journey. But in the process of organising perhaps one's own learning journey, that one finds that there is this like-minded community out there, there are



## DAY ONE: CLOSING REMARKS



like-minded audiences, people who want to share that journey with you. And with that, I kind of want to round off this sort of summary of today, coming back to a very precious panel with the kids and youth. One thing that I noted from that particular discussion was the importance of social cache. I can't remember the name of the kid who said it but what they are looking for in a museum is the things that they can put into their social media. I think what that tells us is that, you know, when we talk about museum learning, we're often

thinking about, you know, audiences, visitors, new attendees, participants, how do we increase, you know, the number of people who come in and compete, worksheets, complete activities, attend our talks. But really what people are looking for is not just their own personal relationship with the technology. We are thinking about, should we use AR or VR? How does the individual who walks through the museum doors, utilise these technologies? But the thing is, what people are interested in is not that relationship, of the technology to the individual. We're interested in the relationship between individuals. This is about us communicating with each other. The technology is just that means. And so, with that, thank you, everyone, all the speakers, for their very wonderful presentations. Hang on I also have a slightly longer thank you list actually.

I'd like to thank all the speakers for the day, for taking the time, for taking the effort that has allowed us to have such interesting presentations and discussions, for touching on very meaningful and important issues and concerns. But I also want to extend our deepest gratitude for those without whom all of this would not be possible.

Firstly, to National Arts Council, especially Mr. Lin Kwan Tai, and Ms Sharon Chen, for journeying with SAM team, for the symposium to happen.

Thanks also goes to the Singapore Botanic Gardens' programmes, festivals and event management team led by Leong Cheng Yee for their venue support and many hours over-time to help us make this event happen. We will also like to thank Ngee Ann Polytechnic, who is our programme partner and for their provision of youth volunteers to assist us with the running of the programme.

All these people have been very crucial to the success of today's symposium. And finally, also to thank all of you, our friends, colleagues and participants of the symposium, your support today on this very long but very enriching day means a lot to us. Thank you very much.

## DAY ONE: CLOSING REMARKS



## WORKSHOP I:

# DAKOTA ADVENTURES

Facilitated by:  
**MR. CAI YINZHOU**  
Director | Guide  
Citizen Adventures

On 25 July 2014, HDB announced that Dakota Crescent would be slated for redevelopment. By December 2016, residents have moved out of this place they used to call 'home'. Consisting of a majority ageing population, some struggle with small things like taking the lift, remembering their way home, making friends with new neighbours. Others struggle with bigger things like keeping their house clean, getting regular meals and staying healthy. The relocation of an entire estate calls into question Singaporean's idea of home. What are the impacts of demolishing a site relatable to the population? Do people make the place, or does the place make the people? With these questions, we hope to open the discussion about how we care for different populations, activation of the community, and what a ground up response can look like.

The tour consists of a walk in the estate of Dakota Crescent, following the story of relocation to Cassia Crescent with a stop at Old Airport Hawker Centre in between. In addition, participants will get to understand the efforts of ground up initiatives as well as visit the neighbourhood where residents have relocated to.

## DAY 2: WORKSHOPS

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium



## WORKSHOP II:

# TOUR OF FUTURE WORLD EXHIBITION, CREATIVE AQUARIUM + PLAY WITH CODING WORKSHOP SNIPPERS

Facilitated by:

**ARTSCIENCE MUSEUM**

## **FUTURE WORLD EXHIBITION**

Immerse yourself in a futuristic world of high-tech interactive digital artworks in *Future World: Where Art Meets Science*. Created in collaboration with teamLab, a globally renowned interdisciplinary arts collective, the exhibition showcases an intersection between art, science, magic and metaphor through a collection of cutting-edge digital installations. Conceived as a dynamic, flexible, media-driven show, the exhibition will continue to refresh over time as the fields of art and science evolve. Visitors can build their own digital universe, learn and play together using a combination of physical and digital technology.

## **DAY 2: WORKSHOPS**

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium



## **CREATIVE AQUARIUM WORKSHOP**

Participants will discover the diversity of life and what makes a healthy ecosystem by putting together their own environments and creating their own digital sea creatures.



## **PLAY WITH CODING WORKSHOP**

Explore the basics of coding using a unique programme only available at ArtScience Museum! Discover coding which are used in our daily lives and witness how coding can be fun with engaging activities.

### **DAY 2: WORKSHOPS**





### WORKSHOP III:

# DESIGNING LEARNING EXPERIENCE USING MUSEUM SPACE

Facilitated by:  
**INDIAN HERITAGE CENTRE**

The workshop will start with the *Little India Heritage Trail*, where participants will learn more about IHC's heritage hunt, and visit nearby cultural landmarks that provide the opportunity for authentic learning and appreciation of our heritage. It will be followed by an interactive and dramatized tour of Indian Heritage Centre's (IHC) permanent galleries, where participants will get to discover the stories of Singapore's Indian community.

## DAY 2: WORKSHOPS

DEAR FUTURE: Museum Learning in the Digital Age | Singapore Art Museum Education Symposium

# SPEAKERS



**MR. KENNETH KWOK**  
Assistant Chief Executive,  
National Arts Council, Singapore

## OPENING REMARKS

Kenneth is Assistant Chief Executive, Planning and Development, at the National Arts Council, overseeing the council's strategic planning, international relations, research, capability development and arts education policies and programmes. He was formerly a classroom teacher, vice principal and Assistant Director, Curriculum Policy with the Ministry of Education, receiving the national Outstanding Youth in Education award for young teachers in 2002, and the Prize for Leadership Learning in 2010. Kenneth holds an Ed.M. in Arts in Education, and has served as an adjunct lecturer in Educational Drama with the National Institute of Education.

---



**MR. VINCENT POUSSOU**  
Director of Audiences and Digital Grand Palais Council, Singapore

## KEYNOTE SPEAKER

As Head of Audiences and Communication, Vincent Poussou participated from 1992 to 2004 in the creation of Parc de la Villette, new urban cultural Park in Paris. In 2005, he was appointed Head of education and audiences of the Pompidou Center tasked with increasing the diversity of visitors. In 2012 he created the new department of audiences and digital at the Réunion des musées nationaux-Grand palais.

He has worked in particular on the conception of educational workshops and gardens in la Villette; extending the Centre Pompidou audiences to young visitors specifically teenagers; on the development of the Mobile Pompidou project ; and on innovative mediation and digital exhibitions projects at the Grand palais. His focus is a global approach to combine education, marketing and programing in the digital era in, in order to extend and diversify the audiences of museums and hybrid cultural institutions.

---



**MR. LIM EE TUO**  
Director, Admin-Operations St. James' Church Kindergarten

## PANEL 1: UNDERSTANDING THE 22ND-CENTURY AUDIENCE

Ee Tuo is the Director for Operations at St. James' Church Kindergartens and the Little Seed Preschools. He has played various roles in the early childhood sectors for the past decade. As a deputy director in the Early Childhood Development Agency, he started the Start Small Dream Big President's Challenge Project to encourage children to give back to the community. He is also a strong advocate for innovation especially in the use of technology in the classroom. He doodles—both during his free time and work hours. He likes to tell the story behind his Chinese name which connects him to the past and to the future at the same time..

## SPEAKERS

# SPEAKERS



**MS. LUANNE POH**  
Director  
The Artground –  
A Curious Place  
to Be

## **PANEL 1: UNDERSTANDING THE 22ND-CENTURY AUDIENCE**

Luanne has been involved with playmaking and producing works for young people since 1999. She is interested in creating platforms that designs thoughtful experiences for young audiences through the arts and is currently spearheading The Artground—A curious place to be, a dedicated arts centre for children in Singapore, developed in collaboration with the National Arts Council (Singapore). Inspired by the poem, *100 Languages of Children* by Loris Malaguzzi, The Artground with its indoor and outdoor play spaces hopes to encourage curiosity, in adults and children, through play.



**MS. LORRAINE TAN**  
Senior Manager,  
Learning &  
Development  
School of  
Humanities  
& Social Sciences  
Ngee Ann  
Polytechnic

## **PANEL 1: UNDERSTANDING THE 22ND-CENTURY AUDIENCE**

Lorraine is the Senior Manager for Learning & Development, and Lecturer with the School of Humanities & Social Sciences, at Ngee Ann Polytechnic. As an author and illustrator for children's books, Lorraine enjoys the creative process which she uses in the modules she teaches, including arts management and design. Her book *Karung Guni Boy* has been brought to life at the National Gallery Singapore's Children's Biennale 2019.

In 2017, she garnered the inaugural School Heritage Champion Award (conferred by the National Heritage Board) for the polytechnic in her collaborative projects with the Malay Heritage Centre. She also received the Platinum Academic Award (Development) in 2016 for her role in integrating the second-year curriculum for the Arts Business Management Diploma into the annual Verve Arts Festival



**MR. TERRY DEEN**  
Head, Learning  
Queensland Art  
Gallery, Gallery  
of Modern Art  
(QAGOMA)

## **PANEL 1: UNDERSTANDING THE 22ND-CENTURY AUDIENCE**

Terry Deen is the Head of Learning at the Queensland Art Gallery | Gallery of Modern Art. QAGOMA Learning launched in October 2015, with a view towards opening a Learning Centre based at the Queensland Art Gallery. Terry's work in arts learning is informed by ten years' experience as a secondary art and design teacher. He is engaged in Queensland's design education community as the 2014 Queensland-Smithsonian Cooper Hewitt Design Education Fellow.

Terry's current role involves engagement across a broad array of communities, disciplines and practices including digital learning, arts learning, cultural learning, regional arts, accessibility and arts advocacy.

## SPEAKERS

# SPEAKERS



**MR.  
CLIFFORD CHUA**  
Academy Principal  
Singapore Teachers'  
Academy for the  
aRts (STAR)  
Ministry of Education

## **IN RESPONSE: A CONVERSATION WITH OUR FUTURE MODERATOR:**

Mr. Clifford Chua is the current Academy Principal of the Singapore Teachers' Academy for the aRts (STAR). Prior to this posting, he headed Palm View Primary School as its pioneer Principal after serving a stint of 6 years as Principal of Kuo Chuan Presbyterian Primary School. A recipient of the Colombo Plan Scholarship, Clifford graduated with a Fine Arts Degree with honours in Printmaking and Art History from the University of Canterbury, Christchurch, New Zealand and was posted to Victoria School to helm the Art Elective Programme. He spent 6 years in the school and later pursued his master degree in Curriculum and Teacher Education at Stanford University. After graduation, he spent about 5 years as Curriculum Planning officer in the Curriculum Planning and Development Division, MOE and was part of the team of educators who helped raise the profile of Arts Education in our schools. He served as Vice Principal at Radin Mas Primary School for about a year before his posting to Kuo Chuan Presbyterian. Clifford was awarded the Public Administration Medal (Bronze) in 2011 for his service to education.

## **SPEAKERS:**

### **MR. MUHD MAIMUEL HAZIQRI BIN ASRI**

Student (20 years old) | Ngee Ann Polytechnic

### **MR. ANG CHER JIE, JEFFERY**

Student (14 years old) | Xinmin Secondary School

### **MISS QUEK JIA XUAN RAPHAELLE**

Student (15 years old) | Ngee Ann Secondary School

### **MR. KIERAN LEE JIA WEN**

Student (10 years old) | Damai Primary School

### **MISS TOH KAI RONG**

Student (11 years old) | Mayflower Primary School

## **SPEAKERS**

# SPEAKERS



**MS. CAROL LOI**  
Founder  
Village Consultancy

## **PANEL 2: TO TECH OR NOT TO TECH?** **MODERATOR:**

Carol Loi is a digital literacy educator, parent coach and a member of the John Maxwell Team providing leadership and communications training. She is also a Fellow of the Centre for Media Literacy. She has served in the public service for over twenty years, including the Ministry of Education and the Info-communications Media Development Authority. She runs a consultancy and training company, working closely with partners such as Singapore Kindness Movement, Google, Facebook and DQ Institute to nurture digital citizenship in Singapore. She has a Master in Business Administration, specialising in technology and human capital management. She and her husband have two teenagers who enjoy art.



**MR. VINCENT POUSSOU**  
Director of  
Audiences and  
Digital  
Grand Palais

## **PANEL 2: TO TECH OR NOT TO TECH?**

As Head of Audiences and Communication, Vincent Poussou participated from 1992 to 2004 in the creation of Parc de la Villette, new urban cultural Park in Paris. In 2005, he was appointed Head of education and audiences of the Pompidou Center tasked with increasing the diversity of visitors. In 2012 he created the new department of audiences and digital at the Réunion des musées nationaux-Grand palais.

He has worked in particular on the conception of educational workshops and gardens in la Villette; extending the Centre Pompidou audiences to young visitors specifically teenagers; on the development of the Mobile Pompidou project ; and on innovative mediation and digital exhibitions projects at the Grand palais. His focus is a global approach to combine education, marketing and programing in the digital era in, in order to extend and diversify the audiences of museums and hybrid cultural institutions.



**MS. NINA ERNST**  
Associate Director,  
Programmes  
ArtScience Museum

## **PANEL 2: TO TECH OR NOT TO TECH?**

Nina Ernst is the Associate Director, Programmes for ArtScience Museum at Marina Bay Sands. Her work at the museum spans public engagement through tours, talks and workshops, performances, films and events, as well as schools programmes, interactive displays and outreach. Since joining ArtScience Museum, her focus has been on growing the attendance and deepening the engagement for public programmes and schools.

## **SPEAKERS**

# SPEAKERS



**MR. OLIVIER BOS**  
Chief Inspiration  
Officer  
MeshMinds

## **PANEL 2: TO TECH OR NOT TO TECH?**

Raised in Amsterdam, based in Singapore.

Olivier Bos spearheads the brainstorming processes behind creative ideation and business strategy in MeshMinds. Olivier frequently squeezes his creative brain juice in realising visionary concepts into reality—physically and/or virtually.

Olivier's personal interests revolve around exploring the meaningful intersections between technology and art. His vast knowledge of tech trends is thus usefully aligned with his passion in utilising technology for good causes around the world. Often, Olivier can be seen focusing on projects revolving around Human-Centered Design or assisting in the conduct of immersive technology workshops.

Olivier also is a firm believer in creating meaningful social relationships with people around him. He helps to foster an uplifting environment and ensures dynamic relationships are established between artists and partners. He strongly believes in nurturing genuine, lasting relationships between different partners, in order to assist in delivering impactful live projects and programmes.



**MR. JERVAIS CHOO**  
Deputy Director,  
Organisational Design  
and Innovation  
National Museum  
of Singapore

## **PANEL 2: TO TECH OR NOT TO TECH?**

Jervais Choo is the Programme Director for the *DigiMuse* project which aims to advance digital innovation within the culture sector. He currently leads the public sector transformation efforts for the National Heritage Board and has a keen interest in bringing together new methods of bridging experience and understanding through contextual layering and digital interventions.



**MR. ABHILASH MURTHY**  
Founder,  
Bus Uncle Company

## **PANEL 2: TO TECH OR NOT TO TECH?**

Abhilash is an entrepreneur with a background in design-focused software engineering. He created the *Bus Uncle* chatbot as a hobby project, which has grown to become Singapore's most popular chatbot. His company is now helping enterprises and organisations build their own engaging chatbots and pioneering conversational advertising in Singapore through their current chatbots.

## **SPEAKERS**

# SPEAKERS



**MS. SUENNE  
MEGAN TAN**  
Director, Audience  
Development &  
Engagement  
National Gallery  
Singapore (NGS)

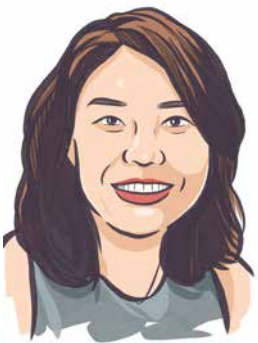
## **PANEL 2: TO TECH OR NOT TO TECH?**

Suenne Tan is Director of Audience Development and Engagement at National Gallery Singapore where she works across the Gallery to ensure that the Gallery's programming is relevant, accessible, and meaningful to different audiences, supporting the Gallery's vision of fostering and inspiring a thoughtful, creative and inclusive society.

Suenne leads a cross-disciplinary team and collaborates with artists to develop new exhibition-making formats, that enhances the connection to art for different audiences, based on her belief in the power of art to open minds to embrace new possibilities.

Suenne conceptualised and launched the Gallery's Keppel Centre for Art Education (KCAE), which provides a creative environment for children and families to access art throughout the year. KCAE received the 2018 Children in Museums Award in recognition of it being an excellent example of a dynamic 21st century education centre within an art gallery.

Suenne is interested in understanding different ways people experience and engage with art within a museum context. One of her key areas of interest, is to explore how museums can leverage on innovative and integrated use of technologies to create new forms of art engagement that are meaningful and relevant to different audiences.



**MS. SEOW AI WEE**  
Deputy Director, Art  
Singapore Teachers'  
Academy for the aRts  
(STAR)  
Ministry of Education

## **PANEL 3: ALTERNATIVE LEARNING SPACES**

Ms. Seow Ai Wee is the Deputy Director, Art, at the Singapore Teachers' Academy for the aRts (STAR), Ministry of Education. She leads with her team of Master Teachers and Academy Officers to design and implement varied professional learning experiences that would nurture professional identities of art teachers and transform art learning in schools and museums.

Ai Wee began her teaching career as an art teacher at Outram Secondary School. While pursuing her master's degree at Teachers College, Columbia University, in New York City, she joined the Museum of Modern Art, first as a Teaching Resident and then as a Museum Educator. She went on to work for the next six years at the Whitney Museum of American Art as the Coordinator of School and Teacher Programs. Prior to STAR, Ai Wee was an Assistant Professor of Arts Education at Tamagawa University, Tokyo, where she taught undergraduate courses on developmental theories, learning approaches and curriculum design.

Ai Wee is currently a doctoral candidate with the Art and Art Education Department at Teachers College. Her research focus is on ecology of long-term museum-school partnerships.

## **SPEAKERS**

# SPEAKERS



**MS.  
YE SHUFANG**  
Deputy Director,  
Education  
National Gallery  
Singapore

## **PANEL 3: ALTERNATIVE LEARNING SPACES**

Ye Shufang serves as Deputy Director of Education at National Gallery Singapore. She leads the direction and development of learning resources and programmes for families, students and teachers. She also heads the Gallery's Keppel Centre for Art Education, a dedicated learning facility that provides creative spaces and activities for children to discover art through imaginative play.

Shufang's experience in education spans over 20 years. She served as Programme Leader for Undergraduate and Postgraduate Programmes at the Faculty of Fine Arts, LASALLE College of the Arts (2002 to 2007). Shufang developed and implemented the visual art practice, research and assessment framework for both programmes. She has supervised over 8 cohorts of Undergraduate students and Postgraduate candidates in their practice and research in visual arts.

In 2007, Shufang joined School of the Arts (SOTA), the first pre-tertiary art school for students ages 13 to 18 years old. As the Head of Visual Arts Faculty, Shufang led the research, development and implementation of a 6-year curriculum for Studio Practice and Theory and History of Art for the International Baccalaureate Diploma. Shufang also developed an assessment framework for different art disciplines, providing training for her faculty in assessments and moderation.

Over the past decade, Ye has served on several curriculum planning, review and advisory committees with a number of art education institutions. She currently serves on the Annual Grant and Scholarship Applications and Assessments Panel with National Arts Council and on the Curriculum Development Advisory Committee with Nanyang Academy of Fine Arts.



**MR.  
SARAVANAN S/O  
SADANANDOM**  
General Manager  
Indian Heritage  
Centre

## **PANEL 3: ALTERNATIVE LEARNING SPACES**

Saravanan S/O Sadanandom is the General Manager of Indian Heritage Centre, who is currently on secondment from the Ministry of Education. In his role, he has participated in the Little India Engagement Sessions organised by Singapore Tourism Board, organises educational programmes for schools, and is involved in various projects with stakeholders that focus on the development of IHC and Little India as a hub for the community.

## **SPEAKERS**



# SPEAKERS



**MS. MICHELLE KUEK**  
Manager, Outreach  
NUS Museum

## **PANEL 3: ALTERNATIVE LEARNING SPACES**

Michelle KUEK is the Manager of Outreach at the National University of Singapore (NUS) Museum and NUS Baba House where she leads the team in the areas of programmes, education and student development. Her focus is on the integration of the museum's collections and exhibitions into academic curriculums across the university, working closely with university management, academics and students. She also manages the NUS Museum Internship Programme, an established museum mentorship programme for undergraduates, and coordinated the 2012 and 2014 editions of *Curating Lab*, a national curatorial development programme for young curators.



**MS. DEE CHIA**  
Head, Education  
and Programmes  
Singapore Art  
Museum (SAM)

## **PANEL 3: ALTERNATIVE LEARNING SPACES**

Dee is known to most students who visit SAM Exhibitions as “Teacher Dee” or the ‘cher’ from SAM. Dee began teaching in 1997 and has worked with students and schools of varied profiles and age groups, ranging from 5 – 18 year old, and from the gifted to those identified with special educational needs. She has served in various positions and areas, including heading the Humanities, Visual and Performing Arts as well as Student Development Departments in various schools and Senior Specialist for Art at the Ministry of Education where she helped develop the Student Learning Space (SLS), a nation-wide learning portal which provides learning resources for all students in Singapore.

In her current role as Head, Education and Programmes at SAM, Dee oversees and implements Education and Public Programme initiatives at the museum, such as the Contemporary Art and Mental Health Programme, Project Happiness @ SAM, the Think! Contemporary and Think! Contemporary Preschool Exhibitions which showcase Preschool and Primary School students' artworks in response to SAM's contemporary art exhibitions. She also champions initiatives which make SAM more accessible, such as the SAM Touch Collection and Kopi Teh and Contemporary Art for seniors.

## **SPEAKERS**

# SPEAKERS



**MS.  
SAMANTHA LO  
(SKLO)**  
Artist

## CLOSING LECTURES

Sam Lo (aka SKLO) is a self-taught Singapore-based visual artist whose work revolves around social commentaries fueled by daily observations of her surroundings and research into the sociopolitical climate.

Her intrigue with the concept of culture and the bold execution in some of her earliest forays into street art dubbed her the “Sticker Lady”, a nickname lovingly given by the city in reference to the saga that was birthed from her work in the streets.

Since then, the artist’s work—whether installations, large scale murals or digital designs—has been centred on understanding the world around us and how our actions are interdependent on each other.

Sam is creative director at Culturement and an associate of YALLA.



**MR.  
CAI YINZHOU**  
Director | Guide  
Citizen Adventures

## CLOSING LECTURES

Since the days of his youth—many of which were spent exploring the streets of Geylang—Cai Yinzhou has had an impulse for discovering hidden stories.

To this young, compassionate tour guide, old buildings are filled with lessons from the past, and neighbourhoods are classrooms where personal narratives entwine with the arc of history.

Yinzhou's many social initiatives include Geylang Adventures and Dakota Adventures which aim to unpack social issues through sight-seeing, and Backalleybarbers, a project offering free haircuts to migrant labourers. For his efforts in aiding Singapore’s disadvantaged, the young advocate of social change was conferred the Singapore Youth Award in 2017. During the 2018 National Day Parade, the founding story of #backalleybarbers was also featured during the parade show segment.

Yinzhou will share his experiences in using tours to access and unpack to understand multifaceted perspectives of the sidelined communities and setting up spontaneous social initiatives hoping to inspire and advocate the belief of loving thy neighbour.

## SPEAKERS

# SPEAKERS



## **DR. JUNE YAP**

Director, Curatorial,  
Programmes  
& Publications  
Singapore Art  
Museum (SAM)

## **CLOSING REMARKS**

Dr June Yap is Director of Curatorial, Programmes and Publications at the Singapore Art Museum, where she oversees content creation and museum programming.

Her prior roles include Guggenheim UBS MAP Curator (South and Southeast Asia), Deputy Director and Curator at the Institute of Contemporary Arts Singapore, and curator at the Singapore Art Museum.

Amongst exhibitions she has curated are *No Country: Contemporary Art for South and Southeast Asia* as part of the Guggenheim UBS MAP Global Art Initiative, *The Cloud of Unknowing* at the 54th Venice Biennale with artist Ho Tzu Nyen, *The Future of Exhibition: It Feels Like I've Been Here Before* at the Institute of Contemporary Arts (Singapore), *Paradise is Elsewhere* at Institut für Auslandsbeziehungen (Germany), media art exhibitions *Interrupt* and *Twilight Tomorrow* at the Singapore Art Museum. She is the author of *Retrospective: A Historiographical Aesthetic in Contemporary Singapore and Malaysia* (2016).

# WORKSHOP FACILITATORS

## **WORKSHOP I: DAKOTA ADVENTURES [TOUR]**

### **FACILITATOR**

#### **MR. CAI YINZHOU**

Director and Guide

Citizen Adventures

Biography under *About the Speakers*  
on page 103.

#### **MS. WENG WANYING**

Operations Executive and Guide

Citizen Adventures

A Singapore Tourism Board Certified Tour Guide, WanYing graduated from the Singapore Management University and is the operations executive at Citizen Adventures.

## **WORKSHOP II: TOUR OF FUTURE WORLD EXHIBITION, CREATIVE AQUARIUM + PLAY WITH CODING WORKSHOP SNIPPETS**

### **FACILITATORS**

#### **MS. EMMA LEE LAY JIA**

#### **MR. MD SALIHUDDIN**

#### **MS. GINA SOH**

#### **MS. DINA ABDUL RAZAK**

Education Team | ArtScience Museum

The Education team at ArtScience Museum is dedicated to delivering high quality open-ended programmes such as workshops and tours for participants aged 3 and up. Drawing on the diverse range of complementary skills within the team, the bespoke programmes are designed to holistically engage audiences.

# WORKSHOP FACILITATORS

## WORKSHOP III: LEARNING EXPERIENCE USING MUSEUM SPACE

### FACILITATORS

#### MR. SARAVANAN S/O SADANANDOM

General Manager  
Indian Heritage Centre  
Biography under *About the Speakers*  
on page 101.

#### RAZMIAH BANU YACOB

Assistant Manager (Outreach & Education)  
Indian Heritage Centre  
Razimah is the Outreach and Education manager for Indian Heritage Centre, where she makes heritage more accessible for schools and the grassroots. With two years' experience in communications, she also lead the marcomms of the museum in both traditional and digital platforms.

#### RANI KANNA

Director  
AKT Creations  
Rani Kanna is a Masters degree holder in applied linguistics pursuing her PhD in child psychology. Rani firmly believes Education is not the filling of a pail, but the lighting of a fire. She has undergone special training for teaching arts to preschoolers. Accordingly, she has directed a number of plays, including musicals, specifically for small children. Rani has mastered the art of professional storytelling and has organised a number of literary events. She has been awarded the voice-over talent for Disney cartoons in Tamil. A research paper in language acquisition is next on her plate as she simultaneously juggles with her passion for education the children.

#### KALAH RAJESH KANNAN

Special Needs Educator  
AKT Creations  
Our resident special needs educator Kalah is a well-beloved emcee and popular actor. Dedicated to the field for 28 years, Kalah believes every child born on earth has the rights to Education the fun way! After completing her National Institute of Education Diploma in Teaching, she followed her heart and switched over to special care needs. She is a professional storyteller, and a performing artiste on stage and television. Kalah has been involved with the National Heritage Board in creating the International Award-winning Singapore Little Treasures program for preschool teachers. One of the feathers in her cap is the Musical for Special Kids which received a standing ovation.

## WORKSHOP FACILITATORS

# ABOUT THE ORGANISERS



The Singapore Art Museum opened its doors in 1996 as the first fully dedicated visual arts museum in Singapore. Since then, we have built one of the world's most important collections of contemporary art by artists from Singapore, Southeast Asia and Asia. We are committed to creating meaningful encounters with art for all our visitors, through our exhibitions, research, publications, public and educational outreach.

In 2019, our two museum sites—the former St. Joseph's Institution on Bras Basah Road and Catholic High School on Queen Street, closed for a building redevelopment. With the aim to create an architectural landmark for contemporary art in Singapore, this major undertaking includes the preservation of the buildings' heritage architecture, thoughtfully blending the old and the new. When SAM re-opens, visitors can look forward to an iconic museum space where the public can experience and engage with art.

During this period, we will continue to hold exhibitions and events at partner venues and spaces like the Regional Libraries of Tampines, Woodlands and Jurong, as well as Singapore Botanic Gardens.

The redevelopment is supported by the Ministry of Culture, Community and Youth (MCCY), and Tote Board.

Follow us for the latest information about our building works and museum programming. [www.singaporeartmuseum.sg](http://www.singaporeartmuseum.sg)

# ACKNOWLEDGEMENTS

## SUPPORTED BY:



## NATIONAL ARTS COUNCIL

The National Arts Council champions the arts in Singapore. By nurturing creative excellence and supporting broad audience engagement, our diverse and distinctive arts inspire our people, connect communities and profile Singapore internationally. We preserve our rich, cultural traditions as we cultivate accomplished artists and vibrant companies for the future. Our support for the arts is comprehensive—from grants and partnerships to industry facilitation and arts housing. The Council welcomes greater private and corporate giving to and through the arts so that together we can make the arts an integral part of everyone's lives.

## VENUE PARTNER:



## SINGAPORE BOTANIC GARDENS

Established in 1859 at its present location, the Singapore Botanic Gardens played an important historical role in the introduction and promotion of many plants of economic value to South East Asia, including the Para rubber tree. Over the years, the Gardens has continued to introduce and rejuvenate its horticultural attractions, each designed to enchant and delight while continuing its mission of connecting plants and people. Today, the 63.7-hectare Gardens is a key civic and community regional recreational park, an important national tourist destination as well as a leading tropical and horticultural institution, playing host to over 3 million visitors annually.

The Singapore Botanic Gardens showcases the best and most spectacular of tropical flora set in stunning verdant landscape. Its extensive collection of more than 10,000 types of plants includes the region's most significant living collection of documented palms, orchids, cycads and gingers. The Gardens is also an important centre for tropical botanical and horticultural research, education and conservation.

In 2008, the Gardens joined the ranks of renowned international attractions when it was awarded the Michelin three-star rating. In the same year, this lush tropical sanctuary in the heart of the city's busiest shopping belt was selected by Time Magazine as Asia's Best Urban Jungle. In 2015, the Singapore Botanic Gardens was inscribed as a UNESCO World Heritage Site.

The Singapore Botanic Gardens is managed by National Parks Board.

## PROGRAMME PARTNER:



## NGEE ANN POLYTECHNIC

Ngee Ann Polytechnic started in 1963 and is today one of Singapore's leading institutions of higher learning with 15,000 enrolled students in over 40 disciplines. It seeks to develop students with a passion for learning, values for life, and competencies to thrive in a global workplace. <http://www.np.edu.sg>

## SYMPOSIUM PROJECT TEAM:

### SAM EDUCATION AND PROGRAMMES:

Dee Chia, Head  
Wang Tingting, Senior Manager  
Gabrielle Lee, Assistant Manager  
Chua Qing Hui, Assistant Manager

### PUBLICATION

**TRANSCRIPTION:** Jacky Wong  
**EDITING:** Dee Chia, Head, Education and Programmes / Wang Tingting, Senior Manager, Education and Programmes  
**DESIGN:** Stephanie Wong, Senior Graphic Designer  
**PHOTOGRAPHY:** Airtitude, Event Organiser, Alvin Ho  
**VISUAL SCRIBER:** Idea Ink

### © 2019 Singapore Art Museum

All rights reserved. Apart from any fair dealing for the purposes of private study, research, criticism or review, no part of this publication may be reproduced by any process without the written consent from the Publisher.

### IMAGES

SAM is grateful for the image and copyright assistance provided by numerous individuals and institutions.

*Transcripts and presentations reproduced with the permission of speakers.*