

# Interactive Future of Museum

## Encouraging Youth Group to Engage with Museum

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**Abstract**—With digital technology rapidly spreads out in recent years, there is a graduate trend that people are losing interest in engaging with cultural facility such as visiting museums especially youth group. This paper starts from describing this social phenomenon and discusses the reasons lead this trend. By analyzing the research data, future museums combined with interactive technologies can be a viable solution to encourage more youth people back to museums.

**Keywords**—youth; future museum; attendance; interactive design

### I. INTRODUCTION

With technology development in recent years, the public pay more attention to high-tech and spend their time on electronic products. The trend that people lose interest in cultural activities has emerged in many countries, such as visiting museums. Plenty of researches show the declining tendency in attending museum, especially in the young age group. According to the NEA's Research Report — "How a Nation Engages with Art" (2013), museum attendance has decreased by all age group under 65. There is a considerable drop from individuals aged 18-24. In 2012, only 18.4% of youth attended a museum in the 12 months before being surveyed, down 4.5% from 2008. This drop is even sharper when comparing with the data in 2002. Unlike children are taking by parents or school, most of youth aged from 15 to 24 make the decision by themselves for visiting museum or not. This data reflects the issue that youth is losing their interest in visiting museum. More importantly, this situation does not just occur in individual countries and regions. It is a global issue and Australia shows the same seriousness.

The ABS 2005-06 Survey of Attendance at Selected Cultural Venues and Events (2007) shows 395,400 people aged 15-17 years visited museums in the past 12 months from 2005 to 2006, which contribute 48.3% of its population. It also shows 644,000 people aged 18-24 years visited museums in the past 12 months, which contribute 33.3% of its population. However, this number decreased dramatically when it comes to the period from 2009 to 2010. The 2009-10 ABS Publication Attendance at Selected Cultural Venues and Events (2011) shows the number of museum visitors aged 15-17 down to 339,900, which contribute only 39.3% to its population (down 9%). The data also show the number

of museum visitors aged 18-24 down to 631,700, which contribute 29.1% to its population (down 4.2%).

From data sources above, it is clear that museum attendance by young people is much less than before. This is a genuine and urgent issue because of youth might beyond the reach of benefits from museums in terms of education significance and self-development.

### II. REASONS WHY YOUTH DO NOT WANT TO VISIT

This research focuses more on youth self-development than designing an attractive museum. As a result, reasons present here are found from young people themselves. Lecture series video from John Falk and Lynn Dierking (2013) indicates that each and every visitor attendant museum in order to fulfill his or her own personal identity-related needs. Youths are lack of interests to visit museums because they are unable to fulfill their personal identity-related needs. According to Lynda Kelly and Allison Bartlett (2009), the head of the Australian Museum web team, youth feel museums are irrelevant to them. Several reasons are mentioned. Firstly, youth treat museums as 'retrospective' contrast with their preference of knowing more about 'now' and 'the future'. Secondly, they see museums as boring and not enjoyable venues with didactic, unapproachable and protective exhibitions. Thirdly, Past experience of museum memories, such as enforced visits by schools, boring workshops, prevents them from pursuing their own interests. Fourthly, youth feels lack of engagement in museum programs. Interactive installations are unattractive as usually aimed at children rather than youth. Last but not least, youth is interested in issues that explore personal identity which is neglected by museums.

### III. YOUTH MUSEUM ATTENDANCE DECLINE IS A REAL ISSUE

—Young people respond to appropriate structure, positive relationships, and a sense of accomplishment — and in return, they provide talent, creativity, and community connections that enrich libraries and museums."

— Anne-Imelda Radice (2008)

Anne-Imelda Radice (2008), a director of the Institute of Museum and Library Services, defined the relationship between youth and museum in such a way. Museums and

libraries are essential partners in ensuring youth developing skills and receiving the social, intellectual, and emotional supports they need to thrive. Definite advantages make museums essential to positive youth development have three aspects: study performance, learning motivation and enjoyment, informal but lifelong skills. The problem is: because youth lost their interests in visiting museum, they might be unable to gain these benefits and skills.

Museum can enhance young students' study performance. First of all, museum is a terrific learning venue with public trust. It is equally a quality learning environment accommodate the strengths and needs of learners. The basic function of museums is to collect objects, data and exhibitions which are accessible for audiences to research and be inspired (Interview with Grace, 2015). It provides a wealth of valuable resources to enhance learning and provide active opportunities for exploration, skill-building, and enrichment (Anne, 2008). Plenty of evidence present that museums are a partner of the essence of schools and colleges to enhance science literacy (Cynthia 2009, Branch & Meikle 2012, Linda & Herbert 1994). According to Linda & Herbert (1994), museums provide opportunities for students to be actively involved participants in learning process as they are able to manipulate real objects. It can enhance conceptual learning in the classroom and well understanding of complex scientific concepts. The interview with Warren D. Allmon, Judy Diamond, and Martin Weiss, who are museum professionals with extensive expertise in informal science education, point out that the great contribution are made by natural history museums and science centers in improving the effectiveness of science evolution education. Diamond states that museums have specimens that show evidence for evolutionary changes which provide teachers and students with opportunities for learning through direct experience with evidence. Allmon thinks comparing with the textbook, touch-ability and practical experience is more helpful to improve science literacy. Weiss has the analogous common that museums have authority on science and many specialists who can guide students. These educators are specially trained to introduce science through the use of the fossil evidence in their collections (Branch & Meikle 2012). Beside these experts' opinion, there is a case study report presents evidence that designed learning environments, especially museums, are places have a powerful impact on young students' development of interest in science and positive science-related attitudes and identities (Cynthia, 2009). In 1997, Saint Louis Science Center (SLAC) started a project called the Youth Exploring Science (YES). This program is designed to help youth developing confidence in science, technologies and so on. It also shows evidence that youth can largely benefit from engaging with science, especially in terms of study performance. In the test group, 96.875% youth graduate from high school and 93.75% youth start their universities or colleges in 2009 (Cynthia, 2009).

Why youth need to learn by visiting museums, not just stay in school and study hard? In addition to consider performance, museums also make a significant contribute to learning motivation and enjoyment. Hein (1998) emphasizes that learning in museums is now considered to be an active

participation of the visitor with the environment. Museums shift the focus from the written word to specialize objects representing culture, science and nature, which motivates learners engaged with the environment through interactions. Moreover, John Falk and Lynn Dierking (1998) described that the learning that happens in museums as "free-choice" learning characterized by user-directed choice. In this case, learning and leisure is becoming a one-in-the-same experience in museums. Australian researcher Jan Packer summarizes that the engagement of museum audiences in learning is "learning for fun". Audiences actively search for experience and benefit from the process of learning itself, rather than for the achievement of any outcomes (Packer, 2006).

Furthermore, museums participation has powerful impacts on enhancing young people's informal but lifelong skills. Skills such as problem solving, independent thinking, critical thinking as well as collaboration and communication with others are important for youth. However, they claim there is not sufficient opportunity in high school or college to develop these skills. A report on Gallup poll shows that young adults recognize skills such as problem solving, critical thinking and communication are inseparably linked with future work success and job satisfaction. The majority of respondents (59%) reflected that they developed most of the skills used in their current job outside of school (Jenna & Preety, 2013). Similar claim from university education experts is that students are lacking of either independent thinking or critical thinking. According to Spedding (2011), who is the managing director of Oxbridge Applications, students are trained to repeat facts just like automatons without capacity of setting their own ideas. Because of this, to get a better quality of graduate, Oxbridge University has had to change applications process. After interviewed academics from 250 universities, A study by Oxford University's educational studies department and the Universities and Colleges Admissions Service identifies that students, even with top grades at leading institutions, are likely to "lack independent thought" nowadays (David, 2006).

While students claim they want these skills but they cannot gain from school and educational experts state students lack of these skills, museums can enhance these informal but lifelong skills. Firstly, Susan H. & Susan R. (2012) state that people are determined by experience, which means learning potential is linked to the stimuli we receive. Youth is better developed with stimulating, multi-sensory and positive feeling. Museum approach can provide them through with informal but lifelong learning. Museum attendance has a great influence on the youth, help them to extend their appreciation and make fresh interpretations. Secondly, according to Daniel, Jay & Brian (2013), museums have an effect on the capacity of students to engage in critical thinking. A School Visit Program is held in Crystal Bridges Museum of American Art that involves 3,811 students. These students who were engaged in museums demonstrated significantly stronger critical thinking skills and these effects were even larger for students from more disadvantaged backgrounds. Thirdly, Tamara Lemerise (1999) professor mentions that two projects:

Young Curators' project and Role for Adolescents in Major Exhibitions project which are offered by museum benefit the most from adolescent clientele. By interacting young people with the activities of the museum, young people get involved in concrete tasks and they learned to assume positions of responsibility.

#### IV. BEING PURPOSEFUL AND PLANNED FOR MUSEUM INTERACTION PROJECT

"So long as a dedication to public service is its driving force, a museum can be a good one in an almost infinite number of ways ...In everything museums do, they must remember the cornerstone on which the whole enterprise rests: to make a positive difference in the quality of people's lives."

— Stephen E. Weil (2002)

In light of recent declines in museums attendance by youth, museums and society have already noticed this issue and do some changes to compensate for the visits decline. For example, it is available to take their lessons to the classroom and use their collections as a teaching tool through traveling programs, video conferencing or computer-based lessons (Tamar, 2010). Sarah (2015) also states that something needs to change if museums desire to transition from being an institution of object orientation to consumer orientation. Younger people learn and interact with the world differently. They are not willing to be preached by a museum curator. What youth thought is to participate, to feel the museum and objectives are not configured for them, but connected and engaged with them. Consequently, museums need to think outside of standard practices to find new methods to attract young audiences.

For the same goal, future museums' projects have important implications for efforts to stimulate young people's interests and lead them to museums. After deeply researching our end user which is youth, we believe that high technology interaction is the most suitable way to fulfill their needs and stimulating young people's interests in museum. For example, schools, interactive technologies and museums can work together to support youth's study performance, learning motivation and enjoyment, informal but lifelong skills. Grace, who is the professor of UNSW and the expert in museum, also indicates that high technology interaction could be a great way to attract young audiences to museums as youth show heavily interesting on digital things and high-tech products. It also can enhance understanding not only for what collections in museums but also for what is the process or story behind these collections (interview with Grace, 2015).

There are plenty of successful examples and existing researches show high technology interactions have the positive impact on enhancing the visitors' experience (Jocelyn, 2010, Koula & Canan, 2012, Lynda, 2011). Mobile learning application is a possible solution. Museums have already explored mobile applications as a tool to attract young group (Vavoula, Sharples and et al, 2009). Evidence demonstrates that mobile tools make promotion for inquiry activities in the museum, such as active exploration,

information search and so on (Hsi, 2002). Moreover, such tools have been applied for enhancing art museum visitors' experience by offering additional information about artworks as well as allowing visitors to share their impressions and reflections outside of museums (Tallon & Walker, 2008; Vavoula et al, 2009). Therefore, future museum projects should consider applying high technology into our museum interactive project, but not restricted to mobile applications.

#### V. CONCLUSION

This paper provides the description of losing youth visitors in traditional museum. Currently, interactive devices acquire more interaction especially in youth group. Therefore, future museum projects should consider applying high technology into our museum interactive project, but not restricted to mobile applications.

Future works will extend our research field to discuss more interactive solutions and analyze their working principles to design interactive museum.

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