

## Fact Sheet

23 May 2017

### PILOTING THE USE OF VIRTUAL REALITY IN SOCIAL STUDIES EDUCATION IN SINGAPORE SCHOOLS

#### Background

1. This pilot project on the 'Use of Virtual Reality (VR) in Social Studies Education' is in line with initiatives to step up Singapore's push towards becoming a digitally-ready society. Digital readiness includes giving students access to technology and developing their confidence to use it, enhancing the way they live, play and learn. Virtual Reality lends itself well in providing an immersive experience to enhance students' learning.

#### Objective

2. The objective of the pilot project is to trial the feasibility of using VR technology as a tool in the teaching and learning of Social Studies in Singapore schools. Through the VR experiences, students are able to participate in multiple virtual learning experiences of different locations around Singapore.
3. An IMDA Grant was awarded in December 2016 to Beach House Pictures Pte Ltd to create an innovative VR solution that allows:
  - Students in a classroom setting – through the use of VR technology – to go through the same experience as they would on-site.
  - Teachers to guide students through the VR experience and use supplementary instructional photographs, videos or information in addition to the immersive environment to reinforce key learning points.

## Piloting VR with Schools

4. In March 2017, five primary schools piloted the use of VR during their Social Studies lessons:
  - i. Beacon Primary School
  - ii. CHIJ – Our Lady of Good Counsel
  - iii. Fuhua Primary School
  - iv. Montfort Junior School
  - v. West Spring Primary School
5. Prior to the VR experience, close to 25 teachers went through a training workshop to conduct the VR lessons. During each one-hour lesson, students got to experience 4-5 VR experiences, lasting no more than 5 minutes each. Students also completed related activities in between the VR experiences to reinforce their learning on the topic. In total, about 400 students took part in the pilot project.

## Key Features

6. Beach House Pictures collaborated with IMDA and MOE on this pilot project, where MOE provided inputs on the design of the Primary Social Studies VR lesson packages to ensure that it was aligned to the curriculum and the learning outcomes of the Social Studies primary school syllabus.
7. For example, the following topics were selected for the pilot:
  - a. Remembering the Early Settlers taught in the P4 Social Studies syllabus
    - The content covered in the VR experience is based on the contributions of the early settlers and how their contributions are reflected through the design and architecture of buildings we see in Singapore today.
    - Students were able to ‘explore’ landmarks such as the Central Sikh Temple, Chinese Garden, and Geylang Serai Market.

b. Agriculture in Singapore taught in the P6 Social Studies syllabus

- The content covered in the VR experience explains how Singapore farmers continue with their agricultural activities despite a high urban population and limited land. Some of these farms are not easily accessible by students.
- Students were able to ‘explore’ the farmers’ use of high-tech machines and creative cultivation methods in places such as an offshore fish farm, an organic vegetable farm, an egg farm and a dairy farm.

### **Application Development**

8. Beach House partnered Hiverlab, a VR tech company, to leverage on Hiverlab’s proprietary platform to create a VR application customised for a classroom setting. This application enables students to experience the same VR content simultaneously.
9. A dashboard was developed to allow teachers to:
  - Control (play, pause and stop) and guide students through the VR experience;
  - Know what their students are looking at through indicators on the teacher’s screen, and allow them to point out certain interesting spots in the video; and
  - Bring out supplemental instructional photographs, videos or information augmented on top of the immersive environment, to emphasize key learning points.

### **Potential Benefits of VR**

- VR is an immersive medium that simulates the experience of being in a location, thus captivating students’ attention.
- With VR, students are able to visit and explore learning sites within a short space of time without needing to leave the classroom. Some of these sites may not normally be easily accessible to students due to their remote locations or due to students’ health and safety reasons.

- Teachers are able to use the customised VR classroom application as a teaching tool to direct and optimise students' learning.

---

**About Infocomm Media Development Authority (IMDA)**

*The Infocomm Media Development Authority (IMDA) will develop a vibrant, world-class infocomm media sector that drives the economy, connects people, bonds communities and powers Singapore's Smart Nation vision. IMDA does this by developing talent, strengthening business capabilities, and enhancing Singapore's ICT and media infrastructure. IMDA also regulates the telecommunications and media sectors to safeguard consumer interests while fostering a pro-business environment. IMDA also enhances Singapore's data protection regime through the Personal Data Protection Commission. For more news and information, visit [www.imda.gov.sg](http://www.imda.gov.sg) or follow IMDA on Facebook [IMDAsg](#) and Twitter [@IMDAsg](#).*

---

**For media clarifications, please contact:**

Christopher KOH (Mr)  
Senior Manager, IMDA  
DID: (65) 6211 1709  
Email: [christopher\\_koh@imda.gov.sg](mailto:christopher_koh@imda.gov.sg)