Category 4 Resource Development

Project Translation

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Abstract

Project Translation is a project initially suggested by Dr Kelvin Tan in 2017 and we have progressed from simply helping Science Center Singapore (SCS) to translate and conduct their courses, to crafting our own proposal and executing it. Our aim is to help SCS to its fullest in its journey to make science accessible and engaging, while creating an environment where science befriends and transforms the minds of millions. In essence, we aim to help better facilitate communication between SCS and their visitors so that they can both benefit. Our final product includes the translated courses and our Summer Solstice booth which was created in conjunction with SCS's event during the June holidays.

1. Introduction

1.1 Rationale

The number of Chinese students or tour groups that visits SCS has increased considerably in the past few years. SCS indicated that there is an evident language barrier between the Chinese students and the trainers. This has caused miscommunications between the trainers and the students potentially causing accidents during lab experiments. According to studies online, language barriers not only generate negative emotional and cognitive responses, impacting-information gathering skills and help-seeking skills. Hence it is important to solve this problem as soon as possible, in order to allow students to be able to learn more effectively in lessons.

1.2 Objectives

We aim to help Science Center Singapore provide a more enriching and fulfilling learning experience for the public who are more comfortable with Chinese by translating and improving on their current products. At the same time, we proposed and introduced new creative ideas, tested them out, before conducting the event for the public.

1.3 Target Audience

Main Target Audience

- Science Centre Singapore

Secondary Target Audience

- Foreign Students from China
- General public of Chinese-speaking Singaporeans

1.4 Resources

Our resource package include the lesson package Science Center Singapore provided for us to translate and our self-created course on the Summer Solstice during the June holiday event.

What?/Why?

Summer Solstice

夏至

Who?

When?

Where?
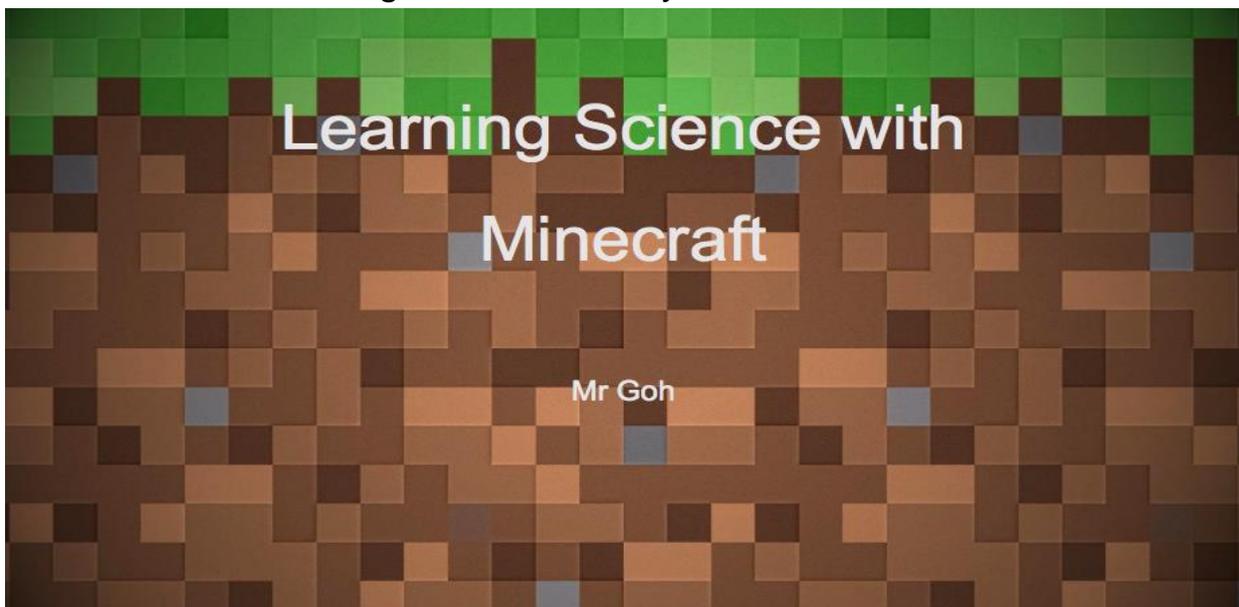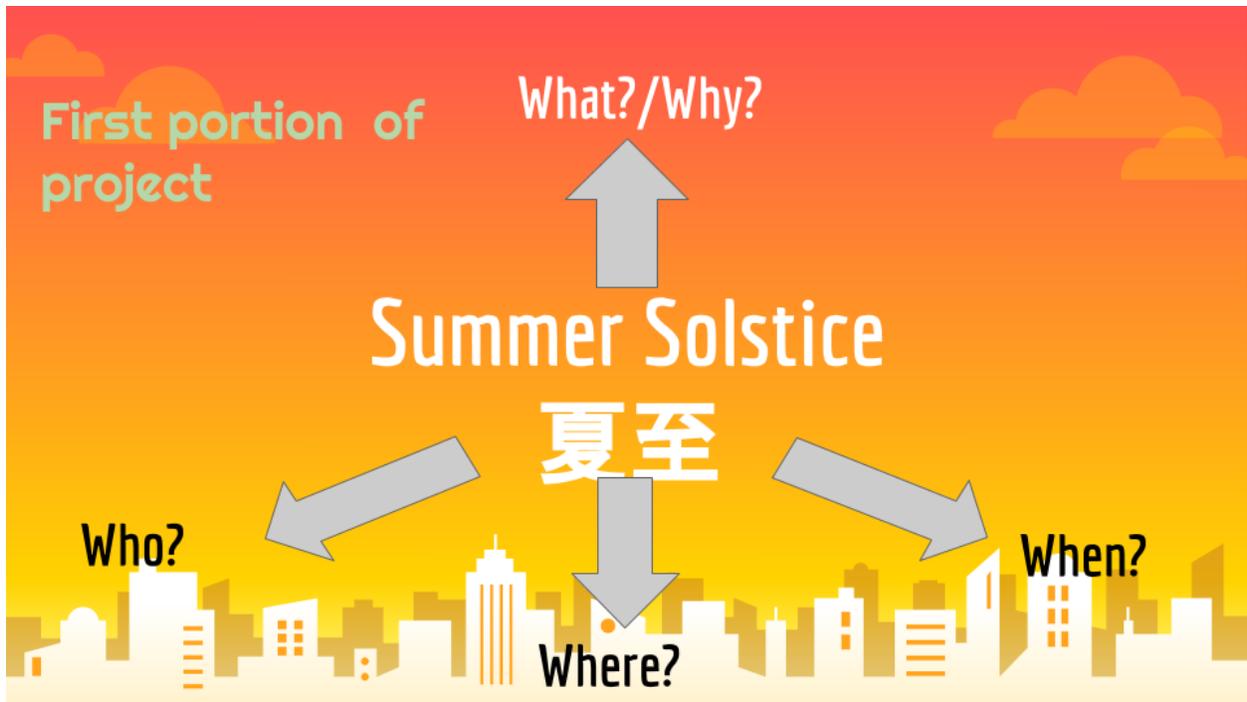
2. Review

The resources by the Science Center are in English and the teachers are also not very comfortable using the Chinese language.

Hence communication between Chinese-speaking groups (there are frequent visitors and tours from China) is severely hindered and they are unable to learn and enjoy the programmes to the optimum.

3. Methodology

Before we start the process of translation, we have to first understand the different stakeholders involved and how to cater to both the instructor and the students' needs. Bearing this in mind, we strived to achieve a balance between the usage of Chinese and English in our translated product. The instructor, who is much more comfortable speaking English, must still be

able to understand and convey the information on the slides, while the Chinese Speaking visitors can also understand whatever is going on during the lesson. Therefore, we translated crucial terms and specific instructions into Chinese and also included the original English terms.

3.1 Needs Analysis

We conducted a needs analysis in order to ascertain the value of our project. We approached the team from Science Centre Staff responsible for the marketing, preparation and carrying out of the courses to see how we could work with them to help improve on their current resources. First, an interview was conducted with Mr Jason from the Marketing Development regarding the customer base. Indeed, he confirmed that SCS have been seeing many more tourists from the China market. From this, we were able to confirm that our project was indeed relevant and useful. Next, we conducted an interview with Ms Ong, an SCS staff who had experience conducting classes for these China tourists, and confirmed that indeed students were unable to understand the lesson content nor the instructions given due to the language barrier. Hence, our project was deemed as feasible and able to solve problems faced currently by the SCS in trying to cope with the expanding China Market.

3.2 Development of resources

Translation work was done since the start of the year, we translated the slides "Learning Science with Minecraft" provided by SCS, into a version that contained both Chinese and English, so the teacher can explain the slides and so the foreign students can read off the slides if they do not understand the teacher.

Our second resource was our self-created course about the Summer Solstice during the June holiday event. We started the planning of this event back in April. After much brainstorming, we came up with a proposal with the guidance from the SCS staff. We then started the creation and design of the resources, namely the information booth and games booth. In addition, we translated part of the information on the information board into Chinese and rehearsed on how to explain the information in Chinese. Finally in June we created the props needed for our booth and set up the booths for the Summer Solstice event. We paid special attention of the informative part of the event, by explaining to visitors the information on the Summer Solstice and gave them a simple quiz before they are allowed to play the game. This ensures that they will learn something before they leave. Our game booth was modelled after the legend of Hou Yi, where visitors try to shoot down as many suns (red balls) as possible just as in the legends.

3.3 Pilot test

Pilot test of the Summer Solstice event was done with Science Center Singapore at the start of June. We were given feedback to edit the fonts of our information booth. We also should summarise the information into point form as our information had too much jargon and was too lengthy. In addition we were given a template by the staff for the background of our slides as they felt that it was too plain. Hence, we completed the editing and met up again a week before the event for the final evaluation and the props making for our various booths. The SCS was satisfied and we carried out the event and went to the SCS for five days consecutively, to explain the information for the information booth and to manage the game booth.

Pilot testing of the Minecraft Project was done with Science Centre Singapore in early August. We had to ensure the translation was on point, and gather feedback from the SCS staff. Other than that, we were told that there were some terms that were not accurate, and some of the sentence structure was problematic as they were like direct translations. We had to edit the sentence structure of some of the sentences in the minecraft slides such that they were accurately presented in Chinese.

4. Outcome and Discussion

We received generally positive feedbacks from the pilot testing, but there were a lot of things that had to be changed. We originally planned for three different booths, namely an informative booth, a game booth and a photo booth. In the end, we decided to do away with the photo booth due to lack of resources and manpower. Since, we were working on a tight budget, we decided to just focus on the two other booths and spend more time and effort on them.

For our information booth, the general feedback from SCS staff was that it was too wordy and lengthy, and thus hard to appeal to the public. In order to solve this problem, we improved on the appeal and readability of the information by first illustrating the facts presented in pictorial diagrams and figures as much as we could. Secondly, in order to make it easier to understand some of the more complicated facts, we got a globe so as to help the audience visualize the facts presented. Finally, we reviewed the resources and cut down on some less significant facts so that the resources are more easily understandable and absorbed.

For our games booth, there were not much changes done to the original concept of the games. During the week before the event we tried out different ways to make the bow and arrow required for the game, but in the end got some help from Science Centre and spent a portion of our budget on obtaining commercial bows and arrows. This was done so as to ensure

safety since the ones handling the equipment are mainly little children and there is a high risk involved. Besides, we also had to ensure that the equipment was able to last for the five days without succumbing to wear to tear. In terms of the organization of the games, we also decided to have a quiz before the games booth so as to ensure that the children will pay attention to the information booth and learn something rather than just coming to play so that the purpose of the event is not lost.

Overall, there was an overwhelming percentage of positive responses from the participants. They felt that the presenter (us) was friendly and informative, communicated science well. They also thought that they learnt something new, the interaction made them want to learn more about Science, and would recommend this to others.
There was also a positive response from SCS saying that they could tell that the children enjoyed it as seen from their willingness to queue for the booth, and that is the most important aspect. Ms Mok, one of the SCS stuff, also mentioned that our booth was well managed and we prevented the children from running around.

For the pilot testing of the Minecraft project we realise there were some problems with the way we translated the resources. We edited according and vetted it with our Mentor. Overall, they were rather satisfied with our form of presentation of the translation and they liked the way we place the Chinese translation beside the English words.

5. Conclusion
Project Translation had been a challenging project to undertake. We were working with Science Centre Singapore, a Scientific Institution, and thus had to ensure that our products were able to meet expectations. Translating their products posed several challenges due to the complicated scientific terms. However, through this experience, we were able to hone our translation skills and also developed a greater understanding of the science concepts. Creating the booth for the Summer Solstice event required creative thinking as we had to plan out suitable activities that

would engage the audience and educate them at the same time. Besides, we developed better communication skills through interacting with the customers and presenting our activities and products.

6. Acknowledgement

We would like to acknowledge and extend our deepest gratitude to the following individuals, without whose help the project would never be a success.

Ms Ong and Ms Mok, two SCS staff who helped us to coordinate between us and the SCS, while also giving us advices and help while we were working on our product,

the other SCS staff that helped us along our way by giving meaningful suggestions and comments during the pilot testing,

Dr Kelvin Tan who first introduced us to this project,

And Ms Fang Yu Ching, our mentor who guided and helped to vet our translation quality before we could present it to SCS.

7. References

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