Doctoral School's Researcher-Led Initiative Fund Project 'Teaching problem solving and analytical thinking through coding and programming'

Organised by

May – October 2020

## Introduction

The aim of this project was to help teachers in developing analytical and problem solving skills among children between 8 and 11 years old. It was supposed to be composed of 10 to 12 weekly run sessions. Pupils taking part in the project would solve various games and tasks practicing their skills. The games were planned to involve group and individual work of the students.

## Summary

Pandemic introduced in April 2020 has changed the plan that involved face to face sessions. The project has naturally transferred into the Internet. It was planned to communicate daily with the students online – using zoom or google classroom – giving out various 5-10 min long individual activities that pupils would do every day. Due to slow process of obtaining the ethics review, the project could not run before the summer holidays. Also, Ethics Committee has made it clear it was impossible to run the project online as university students could not run the sessions with school pupils without being monitored by a qualified teacher. This pre-requisite set by the committee was impossible to be obtained via online sessions. Hence, the project had to return to its original idea to organise face to face sessions. It was decided to run the project after summer holidays as initially planned in schools over September and October. Unfortunately, the schools did not opened to external visitors in the beginning of the school term. Even parents did not have access to school due to the spread of the pandemic. The project then was again moved to digital media. As the teachers were in schools with their pupils, it was impossible to organise online education to run this project. However, the aim of this project was always to help the teachers who had even more difficult job to teach their students during this difficult time. Hence, it was decided to combine the activities planned for the students and spread it across all local primary schools. The teachers were given prepared material with lots of activities to choose from during their class.

## Outcome

The project has undergone a lot of changes since it was granted in May 2020. As an outcome, two series of activities were produced: one for the years 2-3 and one for the years 4-5. It was circulated by the end of September to ten local primary schools. The teachers were very happy to receive the pack, keen to use the games prepared and promised to circulate it further.

Throughout all the discussions with the local schools all teachers and the headmasters were very keen and interested in taking part in this project. Everyone was asking to wait through this difficult

time of pandemic uncertainty and come back as soon as it is over. The project received lots of positive encouragement and it is hoped it will be able to organise the original plan and run face to face sessions when the pandemic is over.

## Finance

The RLI Funding panel have agreed to award £760 for the project: 'Teaching problem solving and analytical thinking through coding and programming'.

Throughout the project £725.21 was used and claimed from TA009-99. It was spent for games and teaching materials from Fun Learning store in Brighton.

Hence, the remaining £34.79 can revert back to the Researcher Development Programme, to allow reinvestment in future public engagement activities.