

FitQuest: A mobile phone exergame project

Dear Parent or Guardian

Your child's class is taking part in a physical activity research study in which they will use an exercise game on a mobile phone during PE classes for five weeks. Here is some information about the study. Please complete the consent form overleaf and return it to the class teacher.

What is the project about?

It's really important for children to be physically active. Being active can benefit children's physical health and mental wellbeing. However, it can be hard to persuade some children to exercise. We are researching the potential of mobile phone exercise games to increase children's physical activity. Our pilot research so far suggests that games like this motivate children to spend time exercising. To follow up on these results, we are running a randomized controlled trial in schools to see whether playing an exercise game called FitQuest regularly for five weeks can increase children's physical activity and improve their attitudes to exercise. Your child's school has agreed to join the study, and your child's school has been randomly allocated to use FitQuest.

What's the game like?

During his PhD research at Heriot-Watt University, Andrew Macvean created a mobile phone based exercise game which aims to encourage children and teenagers to exercise in a fun way. It is a location based game, which means that the players exercise outside in a playground. Andrew worked closely with pupils and teachers to design the game, and tried it successfully in two Edinburgh schools.

The game is themed generally around 'farm yards' (see screenshots below). The children are asked to run (in the real world) to chase a chicken or escape the wolf. The phone uses the player's GPS location to update the position of the character on the screen and the wolf on screen will chase the player.



What will it involve?

The children will use FitQuest as part of their normal PE lessons for a five week period. They will also have the option to play the game during lunchtime and break if they wish. In the week before they begin playing the game and after the five week period, they will be asked to wear an accelerometer during school hours to record the number of steps they take, and the number of minutes they spend in moderate to vigorous activity. The accelerometers are small gadgets worn round the waist on a Velcro strap on top of clothing. Pupils will also complete one questionnaire about their attitudes to physical activity. If you would like to see the questionnaire your child will complete, please email Judy.Robertson@hw.ac.uk. FitQuest records information about which games each child plays, how many points they score, how long they spend playing each game, and how fast they run during each game. Your child may also be interviewed about their opinions about the game during the project. All of the data which we store will be anonymous, and will be kept securely on computers at Heriot-Watt Computer Science department. All phones and accelerometers will be provided by the university. The study will begin on 10th February 2014 and run until 3rd April 2014.

What will my child get out of it?

Our previous findings show that children greatly enjoy playing the game, and that it gives them moderate to vigorous exercise while they play it. On top of this the game has been designed to be appealing to those children who do not normally enjoy exercise. For this reason, less fit children might see particular benefit from taking part. As well as health benefits, we hope that the game is fun and the experience of working with university staff and students on a real research project is of additional benefit to the school and children.

Thank you for taking the time to read this. If you would like further information, please feel free to contact me. We hope that your child enjoys taking part! (Note, if you do not want your child to take part, the teacher will give them another kind of PE activity instead). Please complete the form below and return to the class teacher.

Best regards

Dr Judy Robertson Senior Lecturer **Computer Science Heriot Watt University EH 14 4AS** 0131 451 8223 Judy.Robertson@hw.ac.uk

Please circle the sentence you agree with:

I agree for my child to take part in the FitQuest project and for his or her data to be included in the research results

I agree for my child to take part in the FitQuest game but do not consent for his or her data to be included in the research results.

I do not agree for my child to take part in the FitQuest project.
Child's name:
Child's class:
Signature:
Date: