**Sandra Kelly**

Title of project: Egypt

Reflection on Personal Learning

The programme Scratch which aims to develop computer programming skills, is a worthwhile avenue for any teacher or school to explore as a means of developing students’ ability within ICT. Having studied and created various projects within Scratch for the past number of months, it is fair to say that I have a good understanding of the programme along with the advantages and disadvantages that accompany it.

Through effective planning and preparation, Scratch can take students on a virtual tour of engaging and creative learning. A tour where they can visit historical or geological sites, study the world around us as it is today or in the past, explore the wonders of numeracy or the creativity that can be found within literacy. The list as to what can be achieved with Scratch is endless but creativity is an ingredient that must accompany it. Many of the projects that have been previously produced by individuals using Scratch are entertainment based rather than educational. It was therefore necessary to think about how the scripts and controls that are available to use could be adapted to achieve the intended purpose: cross-curricular learning. For example when asking questions, one must enter the many possible answers that a student might give in order for the project to continue. This was important as not all students will answer a question in the same way. Another example is if one wants a character to appear in a certain place, the X and Y coordinates must be used and adapted to achieve this. For reasons like these and others, I have come to believe that the programming side of Scratch would only be suitable to a class of upper key stage two students. It was intended that my project on Egypt would be sample as to what could be created by a Year Five or Six student with the intention of a younger student being capable of using it as revision or an introduction to Ancient Egypt and without the difficulty of creating it.

In terms of suggesting improvements for students who chose the Creativity, Cross-curricular ICT and Computer Science specialism next year I would advise providing an opportunity for students to watch all of the projects created during this academic year. In doing so, students will quickly learn how to do things like; propose a question, how to have a character move onscreen or perfect their timings without having to learn it all by a process of trial and error. I would also encourage students to write down any new discoveries that they make and share them with the group at the end of class. As there are many controls within Scratch, to make the best use of these a reference book or help from a peer would be of great benefit.

I would also advise that planning your project in advance is important but it is also important to plan within the restrictions of Scratch. For example, timings are a difficult aspect to perfect and it is useful to have a strategy to help you with this. For my project, it was impossible to judge how long students would take to answer a question, so to cater for this I arranged my project so that a new stage or character would not appear until a particular answer was typed in. This solved the timing issue for me and also made my project more interactive for the user.

For next year’s students it might also be of benefit for them to have the opportunity to visit the nearby a school who are also working on developing the project or even Skype the school in Prague. This would give all students the chance to see Scratch working within a classroom environment as during our own placements this was not possible for all trainee teachers to observe or even participate.

*Impact of Research*

Having specialised in working with Scratch, I firmly believe that it is an excellent stepping stone for students who are entering a world where technology has no limitations and the market for IT specialists is at large.

Unfortunately during my placements I did not have the opportunity to teach Scratch to my students as the teacher had other plans in my first placement and in my current placement there is very little emphasis on ICT throughout the school. Students do not have the luxury of an ICT suite to work in which made it very difficult to arrange meetings with older students during break times. I did however speak to the ICT coordinator about Scratch and we shared our opinions and views on the topic. It was unanimously agreed that Scratch could be very valuable to schools if it is effectively planned and prepared.

There have been many situations in the past where I have searched YouTube looking for a video to assist in explaining a particular concept to students. However now with this software I have become more resourceful and can create my own animated clips to accompany my lessons where needs be. With Scratch it could be possible to go a step further and ask more advanced students to create a clip that explains a process as a means of alternative pupil assessment.

If I have the opportunity to teach Scratch in September, I would like to get the project running slowly at first by ensuring students are not overloaded with information. As I will be teaching in key stage one, I will propose the idea of a lunch time or after school club where I can introduce the programme to older students first to assess how they interact with it. Operations like choosing a character, editing it and positioning it onscreen are areas I would have students explore first before creating any movements. Students brainstorming their ideas and recording what they want to achieve would be of great importance as this is what helped me throughout the creation of my project.

There are ample opportunities for students to expand on their subject knowledge in taking part in such a project and in doing so they will also be knowingly or unknowing creating a cross-curricular resource that may be used forever more.

Throughout my time in primary schools I have rarely seen students using programmes other than Microsoft Word, PowerPoint, Paint or online educational games. Scratch provides opportunities for students to use numerical, thinking and creative skills. It encourages them to be patient, to think about how decisions now will affect later actions and the importance of planning. I feel the advantages of this programme are endless and Scratch can, as the current curriculum advises, prepare pupils to participate in a rapidly changing world.