Digitally Ready for the Future
Application for small project funding

- Funding for small projects is available to staff and students under the following themes:
  Work placements; Employability; Enhancing T & L through the use of technology;
  Digital skills and literacies; Staff/student partnerships
- All successful applicants will be expected to
  - actively disseminate project outputs (e.g. by contributing to relevant T & L events and
    submissions to the Digitally Ready and/or Enhancing Teaching and Learning blogs)
  - participate in a celebration event in the Spring Term involving all successful applicants
  - complete a short project report and case study proforma by 31 May 2012
- Project funds will be available until 30 April and all project work should be completed by then.
- An electronic copy of the completed application form must be submitted to **Nadja Guggi**
  (**n.guggi@reading.ac.uk**) by **Monday 3 December 2012.**

Applicant details

Name Dr Kate Allen ☒ Member of staff ☐ Student
Department ART
Email k.allen@reading.ac.uk
Telephone 07808 159006

Project team (Please give details of any other team members)

Name Dr Nic Hollinworth **Post Doctoral Researcher AHRC Project *Interactive sensory object for and by people with learning disabilities.*** ☒ Member of staff ☐ Student
Department SYSTEMS ENGINEERING
Email n.d.hollinworth@reading.ac.uk
Telephone

Project theme/s (Please tick all that apply)
☐ Work placements
☐ Employability
☐ Enhancing T & L through the use
  of technology
☑ Digital skills and literacies

☐ Staff/student partnerships

Project Title

Sensors, Circuits and Sculpture

Project Summary

Describe the proposed project (up to 500 words). Your summary should demonstrate how your project relates to the use of digital technologies and/or the development of digital literacies of staff and/or students, and should include the following:

- *Background*
- *Aims and objectives*
- *Scope*
- *Outcomes and deliverables*
- *Sustainability*
- *Project schedule*

Interactive and digital sculpture

Background

Interactive sensory objects made by and for people with learning disabilities is a three year AHRC funded research project which explores the potential of newly developed easy-to-use electronics in making the experience of members of the user-group more vital and meaningful when accessing heritage sites. The project consists of a series of workshops that are fundamentally experimental and exploratory in character. We would like to share some of our research with students from the art dept giving them a series of practical hands-on workshops as an introduction to interactive and digitally-enhanced sculpture/installation.

Aim

The aim is to introduce art students to the potential of using interactive technologies in sculpture and installation, and to enhance artworks and installations with the potential to make them responsive to people or the environment.

Objectives

To hold introductory workshops in the art dept for students led by Nic Hollinworth, which are experimental and exploratory in character. Students will design and develop multisensory interactive objects using sensors and rapid prototyping electronic Arduino boards to activate a particular webpage, video, sound, smell or movement, that act as triggers to information, thus augmenting reality for the user.

Scope

Through a series of hands-on workshops led by Nic Hollinworth working with the art dept, we will introduce students to simple electronics using 'squishy circuits' to activate

light, sounds or movement.

We will encourage the students to experiment with various interactive materials such as conductive fabrics and threads, embedded circuits and shape memory wire which can be made to change shape by applying a current (possibly controlled using Arduino or similar).

We will explore different ways of obtaining input from the environment and introduce students to a variety of basic sensors, which respond with some form of movement, light or sound.

Outcomes and Deliverables
A Project Blog will document workshops and student work. We will hold an exhibition of interactive objects and or environments created by the students in the last week of March 2013.

Sustainability
Students having completed the project will be invited to attend workshops and seminars connected to the AHRC project Interactive Sensory Objects as the project is based in MERL from April. They will also be able to volunteer to assist during workshops with the co-researcher, people with learning disability group in Reading.

Project schedule
Art students will be given the option to sign up for the 12 available workshop places.
Introductory practical Workshops 2-5 from Feb 6th.
Follow up group tutorial to discuss work for exhibition in last week of term.
Group tutorial of work and opening of exhibition.