

## Project Summary

|                         |   |
|-------------------------|---|
| <b>Name of Project:</b> | e-School learning environment development   phase 1 |
|-------------------------|---|

|                      |               |
|----------------------|---------------|
| <b>Project Lead:</b> | Peter Diamond |
|----------------------|---------------|

|                    |      |
|--------------------|------|
| <b>Ext. Number</b> | 2415 |
|--------------------|------|

### Brief Project Description (including Project Timescales):

This project focuses on the development and piloting of an e-school. An e-school virtual learning environment adds value to existing educational establishments, opens up curriculum and teaching opportunities, and is a means through which attainment and achievement can be enhanced.

The project will deliver:

- An e-school system
- Courses developed for an e-school environment
- Pilot of e-school course delivery to pupils
- A pilot review and plan for a wider phase 2 implementation

The timescale for this project is 36 months. The project will start once the project manager is recruited and in post. This is estimated to be January / February 2018.

### Service Area and Function:

|          |                                      |
|----------|--------------------------------------|
| Service  | Education, Leisure and Housing (ELH) |
| Function | Lifelong Learning and Inclusion      |

### Innovation Fund Category (tick as appropriate):

|                    |   |
|--------------------|---|
| Spend to Save      |   |
| Preventative       |   |
| System Development | ✓ |

### Funding Request:

|          |
|----------|
| £271,800 |
|----------|

### Estimated Net Revenue Savings to be realised (see notes):

|  |                |
|--|----------------|
| Increase to annual revenue costs – (see note 12)     | £ -            |
| Increase to annual income generation – (see note 13) | £ -            |
| Reduced annual revenue costs – (see note 14)         | £54,400        |
| <b>Net annual revenue savings</b>                    | <b>£54,400</b> |

### Payback Period:

|         |
|---------|
| 5 Years |
|---------|

# Project Details

## 1. Introduction and background (why is the project necessary):

The world wide web has transformed many aspects of society since its inception in 1989. For education, it has opened up a diverse range of opportunities for learners and educators. Through this medium opportunities are emerging for learners, of all ages, in communities, institutions and homes.

Harnessing e-learning, alongside existing teaching and learning practice, undoubtedly has massive potential for all education systems, but particularly those in remote and sparsely populated island communities.

The very definition of what a school is can be questioned. This project focuses on the concept of an e-school. An e-school and virtual learning environment adds value to existing educational establishments, opens up curriculum and teaching opportunities, and is a means through which attainment and achievement can be enhanced.

Orkney is not breaking new ground in developing an e-school environment. This removes much of the project risk as there is a tried and tested example of its delivery within a similar environment in the Western Isles.

Comhairle nan Eilean Siar has delivered e-Sgoil, which is its e-school and virtual learning environment. Initially this was used for the delivery of Gaelic however it is now delivering a broad spectrum of educational opportunities to remote schools and has had a positive impact on education in the Western Isles.

### **Orkney e-School | a range of potential benefits**

This project is necessary for a diverse range of reasons. The delivery of curriculum through e-school will bring financial savings. At the same time significant broader and more varied learning opportunities can be afforded to students.

This benefits both teachers and young people and helps to sustain our remote communities. We can better utilise our teachers and facilities. A composite class environment can be used when delivering e-school content to pupils.

There is little doubt that e-school has the potential to be the conduit for a number of activities in the field of education and beyond. The principle of linking learners and educators, regardless of location, is fundamental to the project.

e-school is aimed at expanding opportunities in core curriculum planning and delivery in Orkney schools with priorities for senior phase and therefore supporting the Orkney offer.

## 2. Project Objectives (what is the purpose and desired outcome):

- To achieve baseline savings of at least £54,400 per year through
  - a reduction in transport costs of teaching staff to the isles
  - better utilisation of teaching resources achieved through the reduction in lost productive teaching time
- To develop and implement an e-school system
  - this is the actual technical method by which e-school curriculum content is delivered and accessed

- To restructure timetables to create teacher availability
  - this allows teachers to be involved in the development and delivery of e-school curriculum content and broaden opportunity for students across all secondary schools thus supporting the principles of the Orkney offer
- To develop e-school curriculum content
  - creation and testing of content which can be delivered through the e-school system
  - this will involve developing existing content for e-school delivery
- To deliver e-school content to pupils at Orkney's junior high schools and senior secondary schools
- To plan phase 2 of the project
  - phase 2 to be self-funded by ELH.

### 3. Scope (what are the parameters/boundaries of the project):

- e-School system development
  - the developed system should work for delivery of content to other schools initially
  - delivery of content to a home environment is the secondary priority
- e-School curriculum content development
  - content delivery should focus on the senior phase curriculum.
  - priority areas are STEM (science, technology, engineering and maths) and language courses
- e-School curriculum delivery
  - delivery should be focused on Orkney's 3 junior high schools and 2 senior secondary schools
  - to include those not able to attend for reasons of ill health or social exclusion

### 4. Method of approach (how are you going to complete the work):

A two phase approach is planned for the development and implementation of e-school.  
Phase 1

- Funding planned from the innovation fund
- Development of the system required to deliver e-school learning
- Restructuring of timetables
- Development of content to be delivered through e-school
- Pilot delivery of e-school courses
- System and pilot review and production of lessons report
- Project plan for phase 2

Phase 2

- Self-funded by ELH
- Scaling up of e-school course delivery within Orkney
- Look at paid for provision of e-school courses out-with Orkney

A product focused PRINCE2 approach will be taken for the project. Agile techniques maybe used where appropriate.

The following method of approach will be taken upon project approval:

- Project manager recruitment
- Project initiation
  - overall project planning to take place at an appropriate level of detail
- Stage 1 | e-school specific courses agreement
  - assess and agree initial e-school courses for development

- Stage 2 | timetabling and e-school system development
  - timetabling exercise to provide teacher availability
    - required as part of teacher buy-in
    - completed for stage one agreed course
  - allocation of technician resource
  - develop and test e-school system
  - produce e-school system documentation and training materials
- Stage 3 | e-school course development
  - allocation of teacher resource
  - develop e-school courses
  - produce e-school course creation guidance and training materials
- Stage 4 | e-school course delivery
  - e-school courses delivered to pupils
- Stage 5 | e-school review
  - review of e-school system and courses delivered to pupils
  - production of review and lessons report
- Stage 6 | phase 2 project planning
  - produce phase 2 project plan
- Stage 7 | phase 1 close out
  - phase 1 close out and production of close out report

#### 5. Key Outputs (what are you going to deliver):

The key outputs from this project are:

- A system that provides a sustainable e-school learning environment
- e-School curriculum content developed for STEM and language subjects
- Training material and documentation on the use of the e-school system and the development of suitable course content
- A restructured and synchronised timetable
- Teacher capacity for curriculum content development
- e-School course pilot delivered to pupils
- e-School system and pilot review and lessons report
- A project plan for phase 2
- Before and after process maps and costings

#### 6. Key Milestones (what are the key events and when do they occur):

The key milestones are the completion of each stage as follows. An appropriate project schedule will be created as part of project initiation. All dates are therefore only indicative at this point.

| Key milestone / stage                           | Estimated timescale |
|---|---------------------|
| • Project manager recruitment                   | Q4 2017 – Q1 2018   |
| • Project initiation                            | Q1 2018             |
| • Stage 1   e-school specific courses agreement | Q1 - Q2 2018        |
| • Stage 2   timetabling and e-school system dev | Q3 - Q4 2018        |
| • Stage 3   e-school course development         | Q1 - Q2 2019        |
| • Stage 4   e-school course delivery            | Q3 2019 – Q2 2020   |
| • Stage 5   e-school review                     | Q3 - Q4 2020        |
| • Stage 6   phase 2 project planning            | Q3 - Q4 2020        |
| • Stage 7   phase 1 close out                   | Q4 2020             |

## 7. Key Interdependencies (what links are need to allow progress – see notes):

- CR07 Orkney Learning Landscape review
- National review of school governance
- IT (limited)

## 8. Major Project Assumptions (describe assumptions you are making):

- That the SWAN (schools network infrastructure) will have sufficient bandwidth to support e-school delivery
- That SMT will support the delivery of this project.

## 9. Staffing required for the Project (including Headcount and FTE – see notes):

### 1.0 FTE Project Manager (36 months) total

- To be recruited to upon approval of the project
- Post required for the duration of the project
- Desirable experience: working in an educational environment
  - GTCS registration not essential

### 1.0 FTE Technician (24 months) total

- Recruitment exercise required
- A total of 1.0 FTE for 24 months will be required
- The breakdown in terms of numbers / timing will be confirmed during the projects

### 1.0 FTE Teacher (12 months) total

- Recruitment exercise required
- A total of 1.0 FTE for 12 months will be required
- The breakdown in terms of numbers / timing will be confirmed during the projects
- This is the maximum anticipated requirement and may not be fully utilised

### Project management support

- Provided by the Change Team Senior Project Officer

The project manager will be required for the duration of the project. During the early stages of the project the allocation of the technician and teacher requirement (in terms of numbers and timing) will be assessed.

Input will be required from education service staff and service users. Time will be required by these same groups for training and during pilot implementation / go live.

Any ongoing administration and support of the system will be provided by education through existing resources. Any additional requirements will be addressed through the self-funded phase 2.

## 10. Project Management (how do you intend to manage and monitor the project – see notes):

A product focused PRINCE2 project management approach will be taken. Agile project management techniques may be used where appropriate.

- The projects board will be confirmed upon innovation fund application approval
- The project sponsor is Peter Diamond, Head of Lifelong Learning and Inclusion
- The project manager will be appointed upon approval of this application
- Monthly highlight reports will be produced by the project manager and approved by the project sponsor
- Any exception reports will be produced by the project manager and will be approved by the project sponsor

**11. Project Funding – One-off expenditure (detail what the funding components are – see notes):**

| <b>Post</b>                          | <b>Grade</b>                     | <b>Cost/FTE</b> | <b>FTE</b> | <b>Months</b> | <b>Cost</b>     |
|--------------------------------------|----------------------------------|-----------------|------------|---------------|-----------------|
| Project manager                      | G10 (TBC)                        | £47,900         | 1.0        | 36            | £143,700        |
| Technician                           | G6 (TBC)                         | £30,800         | 1.0        | 24            | £61,600         |
| Teacher support                      | TC6 (TBC)                        | £49,000         | 1.0        | 12            | £49,000         |
| Consultancy costs (time timetabling) |                                  |                 |            |               |                 |
|                                      | Consultant (10 @ £1,000 per day) |                 |            |               | £10,000         |
|                                      | Expenses assuming three trips    |                 |            |               | £2,500          |
| Equipment                            |                                  |                 |            |               | £5,000          |
| <b>Total</b>                         |                                  |                 |            |               | <b>£271,800</b> |

**12. Increase to annual revenue costs (detail any areas where costs will increase because of the project – see notes):**

- None

**13. Increase to annual revenue income generation (detail any additional income generated from the project, if applicable – see notes):**

- None

It should be noted that e-school could provide income to OIC in the future once the system has been fully developed. Space on courses run by OIC could be sold to other schools (within and out with Scotland). This is something that is already being delivered by Comhairle nan Eilean Siar through their e-Sgoil.

**14. Reduced annual revenue costs (the project should generate cost savings – provide details here – see notes):**

The introduction of e-school will bring significant savings. The exact makeup of these savings will become clear during the life of the project. Savings will be made in the following ways:

- Reduction in transport costs
- Better utilisation of teaching resource
  - To be achieved through the reduction in lost productive teaching time

A revenue saving of £54,400 per year is required to cover the cost of this innovation bid application over a 5 year period. This is believed to be a conservative level of reduction in annual revenue costs given the significant potential savings that are available in this area.

The savings achieved will be baseline adjustable and will be extracted as per the medium term resource strategy. The project will put forward original vs revised process costings detailing the nature of savings and the split by type / grade / function. The apportionment of these savings across individual budgets will be provided by ELH upon completion of the project.

**15. Stakeholder consultation (who are the key stakeholders and what consultation has been undertaken to date or needs to be undertaken in the future?)**

Stakeholder engagement and consultation is critical in the successful delivery of this project. This will form a proactive part of entire project lifecycle. Without buy in the delivery of e-school will not be achieved.

A full stakeholder analysis and engagement / consultation plan will be completed as part of project initiation. Key stakeholders will include:

- Teaching staff throughout ELH
- Service users (pupils and parents)

**16. What are the risks to the success of your initiative and how will you deal with them?**

Many potential risks for this project are minimised by OIC not being the first organisation to establish and develop the e-school concept.

**Change management**

The main risk to the success of the project is poor change management. The support of senior managers, teachers, pupils and parents is a prerequisite to drive and complete the development and implementation of the e-school. This risk will be mitigated through a focus on stakeholder engagement and communication.

**Required e-school project team skill set**

The project implementation is at risk if the project team does not have the required technical skill set. For this reason a project manager, teacher and technician will be recruited to form the core of the project team. Project management coaching / mentoring will be provided by the change team if required.

**End user training**

Getting the most from the system will require end user training for both teachers and learners. To mitigate any risk from “lack of skills” related failure, the provision of training (and associated materials) and documentation will be specific products that the project must deliver. This will cover both providing and accessing e-school classes and the creation of e-school content.

**17. What is your contingency plan if the expected savings and benefits are not realised?**

There is strong expectation that the delivery of phase 1 of e-school development will deliver the anticipated savings or more.

As previously outlined e-school has already been delivered in Comhairle nan Eilean Siar. While we need to develop and adapt e-school for Orkney the concept has already been successfully proven.

The savings target of £54,400 is therefore considered conservative but realistic. Phase 2 of the project will be self-funded by ELH. In the unlikely event that the savings are not achieved though phase 1 they will be delivered though phase 2.

**18. What will happen if your proposal is not accepted?**

If this innovation proposal is not accepted there will be significant delays in the delivery of this project which is a major component of the Learning Landscape review (CR07). There are not currently any dedicated resources available to drive this project forward.

An innovation fund project will allow the initial development work to be completed allowing ELH to self-fund phase 2 and widen out the scope of delivery. The likelihood of getting to the position of phase 2 is significantly reduced without approval of this proposal.

**Project Lead – Signature and date:**

**Executive Director – Signature and date:**

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**FINANCE USE ONLY**

Date Received:

Approved / Not Approved

Signature: