



College Innovation

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Recommendations

The Committee is invited to:

- Note the work that has been developed to utilise the College Innovation Fund;
- Consider the three stands of activity strategically and offer comment on them
- Make any other observations or comments as appropriate.

Financial implications

- At this time there are no new financial implications for the SFC to consider. The Council has distributed the £500K College Innovation Funding (to support College IV activity, the FUTUREquipped project and the CIAF) which was provided by the Government to support this work. New funding for this agenda is still to be confirmed going forward.

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Background

2. The SFC's strategic plan and the Innovation Scotland Forum's Action plan both recognise the important role that colleges in Scotland play in delivering the Government's economic vision. The SFC strategy states:

"We will have a stronger, more productive and resilient economy with economic growth supported by innovation from our colleges and universities."

and

"Improvements in our culture, health, well-being and public services will be supported by a two way flow of new ideas and innovation between colleges, universities and public services."

3. The Scottish Government provided £500,000 to the SFC for College Innovation Fund (CIF) for AY2017-18, delivered through the additional Government grant-in-aid to SFC for knowledge exchange activities (the former "SEEKIT" budget). The College Innovation Fund has been used to establish and explore activity in the college sector, to an extent in partnership with national infrastructure currently funded from HE budgets. Funding for specific activities was approved by the SFC Strategic Funding Group (SFG) in March 2018.
4. The SFC worked with the former RKEC College Innovation Working Group (CIWG) and latterly with the Colleges Scotland CIWG (the successor to the RKEC CIWG) to bring forward three strands of activity that are outlined below.

Update on College Innovation Fund Activities

FUTUREquipped: Colleges and Innovation Centre Pilot Project

5. This funding has been used to support a collaborative, cross sectoral, Innovation Centre (IC) / College pilot project that involves Construction Scotland Innovation Centre (CSIC), Digital Health Institute (DHI), Innovation Centre for Sensor and

Imaging Systems (CENSIS) and the Data Lab (CSIC and DHI are the primary IC leads working on the proposals development but opportunities to link in with other ICs are being explored as part of the proposals development).

6. The proposal was developed via a sub group of the RKEC College Innovation Working Group (CIWG), along with additional representatives from the Sector who bring particular expertise. The proposal is about how the ICs and colleges can work collaboratively to demonstrate a new approach to skills training for the needs of tomorrow's industry – led by industry itself. This substantial project will give a visible example of the potential for staff in colleges to play an active role in larger scale business transformations necessary for our economy.
7. In January all colleges in Scotland were invited to apply to participate in the FUTUREquipped project. The college applications were evaluated by a panel with representatives from the Scottish Funding Council, CSIC, DHI, Energy Skills Partnership (ESP) and the College Development Network (CDN) The selection criteria included: relevance of current course programmes; current expertise and capability of college and lecturing staff in key areas; business relationships and collaboration experience; track record in innovation; and proposed approach to creating legacy impact and long-term sustainability.
8. An application process was undertaken to identify the college partners with industrial links who are best placed to support this work and 13 colleges were identified to participate:
 - Forth Valley College
 - West Lothian College
 - New College Lanarkshire
 - Ayrshire College
 - West Highland College UHI
 - Inverness College UHI
 - North Highland College UHI
 - City of Glasgow College
 - Fife College
 - West College Scotland
 - Borders College
 - Edinburgh College
 - Dundee and Angus College
9. The selected colleges are active project partners and are involved in the co-design of the learning programme. This will ensure that areas of expertise within colleges can be exploited for broader benefit within the programme. The developmental work between partners to deliver this project has begun, with the group meeting to plan the projects work over the coming months. There has

been good representation for the partners at these meetings.

10. The SFC provided a letter of offer to Edinburgh Napier University (ENU), as the Host institution for CSIC who will manage the financial elements for the project partners. ENU has accepted the offer of funding and project activities have commenced.
11. £307,605 has been allocated from the CIF to the FUTUREquipped project.
12. Further information on the project can be found at Annex 1: FUTUREquipped, Interim Project Report July 2018

Innovation Vouchers, working with Businesses and Colleges

13. Proposals are developing from the work Interface has undertaken with colleges to date and we have received applications from individual colleges for the SFC to consider for funding. We will continue to review the current Innovation Voucher (IV) scheme to ensure appropriate 'fit' for the college sector, resulting in a higher uptake of this support. College specific flexibilities have been considered internally by the SFC to be built into the voucher scheme, on a pilot basis, going forward. SFC will continue to work with Interface as the first cohort of funded College IVs are completed to consider the uptake and opportunities for further development of the IV scheme for colleges.
14. It is possible that the SFC could flex the current IV requirements for the colleges, on a temporary/pilot, basis to establish if this results in a higher level of uptake of IVs in the college sector - leading to better engagement between colleges and the SME base. This will be undertaken on the basis of feedback from the sector so we can tackle specific issues that may be raised or indeed look at piloting specific focus areas
15. For example, there is a real opportunity to develop a pilot around supporting innovative practices in businesses, which would support innovative skills, and would complement the current standard voucher which supports business-led innovation leading to a product/ process/service.
16. Making this a "Pilot" will give the SFC and partners the maximum flexibility to develop the scheme experimentally and openly, learning from the experiences of partners and assessing the IVs objectively so as to identify the areas of strength that we may wish to focus on in the future.
17. £92k was allocated from the CIF for College IVs.
18. Further information on the College IV activity can be found at Annex 2: College Innovation Voucher Activity Update.

19. Some feedback on the use of the scheme by colleges has been received to date, comments include:
- Some businesses that the colleges may want to work with have already worked with a university and are therefore ineligible to work on another IV with a college, we have been asked to look at whether this can be changed.
 - The current value of IVs is not covering the complete costs for colleges to develop the applications and deliver the programme of work. The CIAF provided some resources and capacity to address this issue. However, it will not be enough to sustain ongoing activity without a significant uplift in funding for colleges. Another option would be to look at the current value of an IV and see if increasing funding would help resolve this shortfall.
 - The potential to use student placement IVs by colleges to support their own activities, or the embedding of those developed by a university partner should be considered. This would require careful development between partners, especially if the activity developed from a university to a college. This must not be used for standard employability placement purposes.

College Innovation Accelerator Fund (CIAF)

20. The College Innovation Working Group (CIWG) identified the capacity challenge to the college sector's ability to engage more extensively with businesses, including through the College Innovation Voucher scheme. The challenge is primarily the colleges' limited capacity to deploy funding and staff resources towards business development activities.
21. In establishing a College Innovation Accelerator Fund (CIAF), we would like to support colleges to free up capacity in the college to explore new business relationships and innovation voucher (IV) opportunities, without compromising funds needed for core activities.
22. This funding is part of a wider context of support for colleges and sits alongside the Flexible Workforce Development Fund (FWDF), and the newly available opportunities for colleges to apply for Innovation Vouchers. We hope that the CIAF will provide a means by which colleges can work more extensively with SMEs, which is a group that is not eligible to access the FWDF.
23. We offered every college in Scotland £4K, and all have accepted it. The funding will be paid in academic year 2017-18.
24. This funding was offered in accordance with SFC's Financial Memorandum, and the following specific conditions:

- Funding must be used for staff time to undertake preparatory work to develop Innovation Voucher proposals and undertake a deeper engagement with the business sector, to explore level of interest and demand for collaboration.
 - Colleges should include a statement in their OA confirming that this work has been conducted in line with the college's EHRIA commitments
 - SFC expects that colleges which are part of multi-college region should receive an equal share of the funding, eg £12,000 to be allocated to Glasgow with each college receiving £4,000
 - Colleges must report on the activity, and what their plans are for further engagement with business after the end of the funding period
25. We are funding the CIAF to support the achievement of its key outcomes, which in turn supports the delivery of our Strategic Outcome on Outcome 3: Greater innovation in the economy (national strategy and practice, strategic investment, enterprise and creativity, international)
26. In establishing a pilot College Innovation Accelerator Fund (CIAF) we supported colleges to free up capacity to explore new business relationships and innovation voucher opportunities, without compromising funds needed for core activities.
27. £100K has been allocated from the CIF for the CIAF activity.
28. An end of award report, which includes a final financial statement, should be submitted by 30 September 2018 to SFC. The report should detail the effectiveness of the investment in achieving its outcomes and the impact it has created. The outcomes of the investment should also be reported through the college's Outcome Agreement and discussed with their OAM to inform future development.

Direction of Further Development

29. Utilising the CIF funding, three distinct stands of activity have been piloted. Namely strategic project activity (FUTUREquipped), Innovation Vouchers for use by colleges and capacity building in the sector (CIAF). These were all developed to respond to specific issues raised in the developmental work undertaken by the CIWG.
30. We have the opportunity to help present information to the Government that could inform future spending reviews and funding settlements. Given the timeframes some of the considerations on the future direction of college innovation activities has to be done in advance of the conclusion of the pilot activities to ensure information can be provided to the Government timeously.
31. Establishing what aspects of the CIF pilot activity are considered most valuable

by RKEC and therefore should be further developed would be useful to the executive in taking forward future activities. Any guidance that RKEC could provide at this time would be appreciated.

Risk assessment

32. This paper and its recommendations, are considered a low to medium risk. The SFC strategic plan highlights the role of colleges in the innovation landscape and our colleges have a key role to play in stimulating innovation through their close links to business and industry, particularly small and medium sized enterprises (SMEs), which predominate in the economy in Scotland. Not to continue to develop the college innovation agenda would create a risk to the effective delivery of the SFC's strategic plan going forward.
33. The College Innovation Funding has split between the three stands of activity developed. All colleges in Scotland have received funding through the CIAF; all colleges are able to access the IV scheme, if they wish to, and the FUTUREquipped project included all colleges who applied to be involved. We have achieved a good spread of the funding provided throughout the college sector.
34. This will continue to be monitored and any risks identified will be brought to the attention of the senior executive, Committee or Council as is appropriate.

Equality and diversity assessment

35. At this time no issues concerning equality and diversity have been identified as part of this strategic developmental work. The working group's discussions, dialogue with the sector and other stakeholders has not raised any equality and diversity concerns at this time. However, this will continue to be monitored and considered when this is operationalised and individual colleges and stakeholders would be asked to ensure that their activities are conducted in an appropriate and equitable fashion and that they have any appropriate policy framework in place to support equitable opportunities for all.
36. In establishing a pilot College Innovation Accelerator Fund (CIAF) we supported colleges to free up capacity to explore new business relationships and innovation voucher opportunities. We asked for there to be an explicit statement in that this work has been conducted in line with the college's EHRIA commitments and our expectations to comply with all legislative requirements. This will inform further development of this work.
37. In commissioning the FUTUREquipped project an EHRIA was undertaken by the project team which was reviewed, and approved, by the SFC.

Financial implications

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Recommendations

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- To make any other observations or comments as appropriate.

Publication

40. This paper will be published on the Council website.

Further information

41. Contact: Andrew Youngson, Senior Policy Officer, tel: 0131 313 6519, email: ayoungson@sfc.ac.uk.

Annex 1: FUTUREquipped, Interim Project Report July 2018

Contents:

1. Workstream Progress (recent activity, progress and next steps)
 - a. WS1
 - b. WS2
 - c. WS3
2. Challenges and remedial actions
3. Project Learning and Knowledge Acquisition

1.1 Workstream 1 progress:

Participation from colleges has been extremely positive, with all 27 participants being confirmed by their employing college. Each subject area is well represented with a total of 12 built environment, 8 Health and Care, and 7 ICT lecturers anticipated. The current gender split is equally representative with the group comprising 43% female and 57% male participants.

Following much iteration the dates and locations for activity have been agreed as follows:

Day 1 - Introduction to the FUTUREquipped programme

Venue - Construction Scotland Innovation Centre, Hamilton

Date - Tuesday 21st August, 2018

Day 2 - The Future of Construction and SMART housing

Venue - Construction Scotland Innovation Centre, Hamilton

Date - Wednesday 22nd August, 2018

Day 3 - The Future of (Digital) Health

Venue - Strathclyde University, Glasgow

Date - Tuesday 4th September, 2018

Day 4 - Innovation and Curriculum Development

Venue - Carnegie Conference Centre, Dunfermline

Date - Wednesday 12th September, 2018

Day 5 - WS 1 close and presentation of outputs

Venue - Surgeons Hall Edinburgh (tbc)

Date - Tuesday 25th September, 2018

Current priorities are:

1. Continued development and iteration of the 5 day programme, preparatory activities and reading list, and a series of legacy/co-design projects that will arch over the duration of the programme - the development of content and learning materials for workstream 2 will form the basis for the legacy projects and options/requirements are currently being explored for this.
2. Confirming availability and contributions from the project's advisory pool and business partners; contributing Innovation Centres (x 4); and facilitators.
 - a. All Innovation centres have provided considerable support to the project thus far, with both the data lab and censis adding input in the form of presentations, access to technology/kit and feeding back on the draft itinerary.
 - b. Re. facilitation - the project team have been exploring a range of options in recent weeks and have now identified [Doug Morwood of Whole Earth Futures](#) as a suitable replacement for Bernadette Maguire as our facilitator over the 5 programmed dats.
 - c. Additional curriculum design support provision has been agreed with [Douglas Morrison](#) (representing City of Glasgow College and the Scottish Institute of Knowledge Exchange). Douglas will support the planning and development of the curriculum design piece, providing his sector level knowledge and background in innovation to support participants in the development of new learning content and curriculum - to be delivered as part of the workstrea, 2 activity.

1.2 Workstream 2 progress:

Throughout the planning of WS1, consideration of the linkages to WS2 have been factored in to discussions and methodology. Some learning has taken place around the potential challenges to colleges in adopting new curriculum (see section 3 below) and mitigating actions are current being explored.

One such action is the scope to have newly created content SCQF levelled, this to catalys adoption amongst the college sector and increase the capability of lecturer colleagues to develop new levelled content on an ongoing basis. This will allow for a more agile and responsive curriculum that can be more easily integrated alongside existing programmes of study e.g. SQA awards. Initial meetings with SCQF have been positive and the FEq team have reached out to colleges in the sector who are approved to provide 3rd party levelling services.

1.3 Workstream 3 progress:

A number of potential WS3 opportunities have now been identified via the FEq business partner pool. The projects will require collaboration from across all 3 of the project's subject disciplines.

1. **Norscot** (construction supply chain) have expressed interest in a piece of action research that explores mechanisms to increase the energy efficiency of homes through the use of SMART technologies (see appendix 1 for the project summary).
2. **Link Housing** have expressed interest in an action research project aimed at comparing the cost benefit analysis' of retrofitting existing accommodation versus design stage implementation of SMART technology in a social housing context (see appendix 2 for project summary).

There is uncertainty amongst the project team as to whether or not all college partners possess the capability and experience required to conduct an effective action research project. To overcome this (potential) barrier, the team is currently exploring options for the provision of mentoring, project coordination and support for colleges to undertake such projects, potentially with the support of a 3rd (university, IC, consultant or other) partner.

This approach is being explored on the basis that colleagues within the FE sector should be empowered to gain the necessary experience to engage in action research projects - which, over the long term, could support the sector's capability in respect of industry knowledge acquisition; improving linkages between curriculum and industry; and increasing potential for commercial activity.

Current priorities for the project team:

1. Review of responses to call for proposals.
 - a. A call has been communicated out to the 13 colleges participating in the FUTUREquipped, with a deadline for responses of 31st July.
2. Short listing of returns in collaboration with business partners and advisory pool members.
3. Aim for project kick off late August/Early September.

2. Challenges and remedial actions:

2.1 WS1 logistics

There has been a need for significant iteration in relation to logistics for the WS1 programme. An initial plan to spend 2-days in the Highlands proved too complex, with budgetary constraints (accommodation during August - peak season), participant's out of work commitments, access to business partner sites and the lecturer's summer-break some of the key challenges encountered.

Following numerous discussions, the decision was taken to base the majority of WS1 activity around the central belt (Hamilton, Glasgow, Dunfermline, Edinburgh), with this being considered the most equitable approach, minimising disruption to participants. For those travelling from the UHI campus' in the far North, additional accommodation will be provided to mitigate any scope for them to be disadvantaged by the decision.

For future instances of this or similar activity, it would be advisable to develop a clearer picture of the windows of opportunity that exist across the academic calendar for lecturer release and availability.

2.2 Business Partner Engagement

Business partner engagement continues to be a challenge for the project manager, in terms of the speed of comms, responses and activity from business partners. The rate of response has impacted on initial deadlines for the dissemination of WS3 opportunities to colleges. Compounding this issue is the timing for dissemination of opportunities, in that the summer break is fast approaching and the window of opportunity to have curriculum staff input into mini-competition returns is closing.

A number of other potential WS3 projects have been discussed over the past 8 weeks. Unfortunately, the speed of response and subsequent impacts on timescale has led the project team to the decision to focus on the 2 best developed projects as at the beginning of July. The project team will reflect on and catalog learning from this series of events in due course. For now, the focus is very much on operationalising the 2 projects identified above.

3. Project Learning and Knowledge Acquisition:

3.1 The role of qualification stakeholders

Through discussions around the workstream 2 (curriculum development) piece, the influenceability of underlying qualifications (governed by awarding bodies such as SQA, Edexcel, City and Guilds) has been highlighted as a barrier to developing and implementing new and innovative curriculum.

Challenges discussed include the development cycles for qualifications which can extend across a number of years; an 18-36 month lead time for the addition of new units/topics into pre-existing frameworks e.g. National and Higher National qualifications; and additional layers of complexity in respect of vocational/work based qualifications - due to additional governance from sector skills councils. In respect of the project's ambition to positively influence curriculum and have legacy impact, these factors present a considerable barrier.

For the purposes of the FEq project, a short term and small scale workaround could be to scope out potential for FEq created content to undergo SCQF levelling. The anecdotal feedback from within the sector has been that SCQF levelled content may achieve higher levels of adoption, due to the legitimacy and audience targeting that an SCQF level would provide. Exploration of this option is considered within the scope of the current pilot and initial comms have been sent to SCQF to request further information on the practicalities and processes involved.

Longer term, strategic engagement with the various stakeholders at the awarding body level is required with a view to collaboratively exploring mechanisms through which to increase the responsiveness of underpinning qualifications relative to employer and industry need. This is however considered to be outwith the immediate scope of the FEq pilot.

End

Lewis Gale, Project Manager, July 2018

Annex 2: College Innovation Voucher Activity Update

Key summary

As of the 2nd of August 2018

- We have received enthusiastic interest from colleges with respect to Innovation Vouchers; 7 Colleges have submitted applications and many more have been in touch with queries regarding potential submissions.
 - The information sessions on Innovation Vouchers conducted at 6 Colleges (a mixture of in person and via skype by me and one of my Business Engagement colleagues). From those sessions we received applications (Pre-Submission Forms/Innovation Voucher Forms) from 4/6 of those colleges.
 - The Final Report from the first approved College Innovation Voucher conducted in this Academic Year is expected in Mid-August.
-
- **Number of colleges who have applied for IVs (successful or not and do not need to identify specific colleges)**

We have received applications from 7 different Colleges in the last few months.

- **Number of applications received from colleges total to date**
 - We have received:
 - 9 Pre-Submission Application Forms
 - 1 Follow on Voucher Application Form
 - 8 Standard Innovation Voucher Applications
- **Success rate of applications (% of applications that have been supported vs % that have had to be rejected)**
 - Success Rates:
 - Pre-Submissions 4 approval rate to date (45%) – however 2 of the others are outstanding with no decision to date as require further information
 - Follow on Vouchers – 100% decline
 - Standard Innovation Vouchers – 5 approved – (62.5% success) – however 1 was withdrawn (by the College/Company) and 2 were rejected (25% rejection rate)
- **Current expenditure of the College Innovation Voucher pot**
 - To date monies awarded for the five standard IVs has been **£24,986**

- **The reasons for rejection (to identify any trends or issues that might be reviewed)**

Reasons for rejection/withdrawal:

- Innovation Voucher - Withdrawal due to conflict of interest – applicant also worked at the same College
- Pre-Submissions – 2 Withdrawals due to fact that Companies had already received Innovation Vouchers with a University. One rejection due to Company Status on Companies House (voluntary arrangement)
- Innovation Voucher x 2 – SFC Rejections - due to fact Panel believed they lacked innovation and did not result in tangible innovative product
- Follow on Voucher – Rejection as Company in the interval from Innovation Voucher to Follow on Voucher the business has expanded to more than 250 staff and can no longer be classified as an SME