Charter 1.2 Increasing Digital Skills

Improvement Project Title: ICT and Digital SVQ Level 4 Qualifications
Executive Sponsor: Chair of Aberdeen Prospers
Project Lead: Allison Carrington Skills Planning Lead, SDS, Chair of Aberdeen Prospers allison.carrington@sds.co.uk
Aim statement (Increase the number of SVQ level 4 qualifications achieved in ICT and Digital by 10% by 2021 SVQ Level 4 is a vocational qualification so for the purposes of this Charter we will be aiming to: **Increase the number of people within Aberdeen City qualified with ICT and Digital skills at SCQF Levels 7 and 8 (Table 1) by 10% by 2024.** Table 1: Definitions of Levels of Study (available at: https://www2.gov.scot/Topics/Statistics/Browse/Lifelong-learning/StudyLevels)

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SCQF Levels	SQA National Units, Courses and Group Awards	HE Qualifications	Scottish Vocational Qualifications
12		Doctorate	
11		Masters	SVQ 5
10		Honours Degree	
9		Ordinary Degree	
8		HND / Diploma of HE	SVQ 4
7	Advanced Higher	HNC / Certificate of HE	MA (Level 6/7)
6	Higher	MA (Level6/7)	SVQ 3, MA (Level 6/7)
5	Intermediate 2		SVQ 2

The change in date is to reflect the academic year and timeframe to achieve the relevant training courses.

Link to Local Outcome Improvement Plan (LOIP):

The refreshed LOIP, published in 2019, identifies 15 stretch outcomes to break down the overall vision and ambitions to reduce poverty into manageable, thematic programmes of work. This Improvement Project sits under stretch outcome 1 within the Economy theme:

10% increase in employment across priority and volume / growth sectors by 2026: Developing the talent and future workforce necessary to support diversification of businesses and economy and it is recognised that digital skills are becoming ever more valuable in the workforce.

This is also linked to the following LOIP projects:

- Increase the number of people employed in growth sectors (digital/ creative; food and drink; life sciences; tourism; social care and health and construction) by 5% by 2021.
- Increase the number of Modern and Graduate Apprenticeships in priority and volume growth sectors by 5% by 2022.
- 80% of young people will successfully complete their Modern Apprenticeship programme by 2022.
- Increase the % of people in Aberdeen who feel comfortable using digital tools by 2021.
- 9090% of employers reporting that they have appropriately skilled people in their workforce by 2026.
- Increase the number of young people who leave school with a minimum of SVQ 3 in literacy and numeracy and 4 other qualifications to 98% 2021.

Why is this important?

The digital sector is growing and there is a need to fill approximately 13,000 jobs every year throughout Scotland. To balance this out there are approximately 4,000 students graduating in computer sciences each year, approximately 9,300 annual college enrolments in computing/ICT and 950 annual digital technology MA starts. However, not all of this supply enters the digital sector and, even in combination with the wider talent pipeline which includes transferable STEM graduates and career changers, the talent pipeline is not strong enough to support the sector (https://www.heraldscotland.com/business_hq/17214763.digital-chief-we-need-to-bridge-the-skills-gap/?fbclid=IwAR1yACCASpS7QPkMQqRkXNYTmXnJCYk_Uvc0YHGUAKJ_GJF7IJkkTi7BZxA).

Of the numbers above, approximately 86% of college graduates moved onto further study, 71% of university graduates moved into employment (although it is not clear whether this was in a digital / tech role) and 73% of MA students attained their MA. Of the graduates who moved in to tech roles 69% came from a computing science background with the remaining 31% transferring from other subject areas.

It is not only the digital sector which is demanding digital skills. Digital skills are becoming ever more prevalent in roles across a range of sectors and occupations. Employees are now frequently being asked to integrate digital skills into non-digital roles and the number of specifically 'digital' roles is rising with the impact of data use, cyber resilience etc.

Anecdotal evidence points to students (especially females) dropping digital subjects after second year in secondary school for a variety of reasons. We intend to use market research in two schools in Aberdeen City to get a clearer idea of why this is and to inform future change ideas.

Work is ongoing to establish details of student numbers in local schools and at FE/MA level. This will be included when available.

SVQ Level 4 is a vocational qualification so for the purposes of this Charter we will be aiming to increase the number of people within Aberdeen City qualified with ICT and

Digital skills at SCQF Levels 7 and 8 (Table 1). This will enable them to take advantage of digital opportunities as they arise and ensure a pipeline of talent to fill digital roles.

Measures:

As it is not possible to accurately determine the numbers of people attending university who are domiciled in Aberdeen City, other than for the purposes of study, the numbers of students signing up for or graduating in degrees in Computing or Digital subjects is not been used as a measure for success in this charter.

Outcome Measures:
- Number of students gaining a Higher or Advanced Higher in ICT or Digital subject in school
- Number of people graduating from College with SCQF Level 7/8 qualification in ICT or Digital subject
- Number of people attaining MA in Digital Technology

Process Measures:
- Number of students currently working towards Nat 4 / Nat 5 qualifications in ICT / digital subjects
- Number of students passing ICT / digital subjects at Nat 4/Nat 5 level
- Number of people signing up for SCQF Level 7/8 qualification in ICT or Digital subjects in College
- Number of people signing up for MA in Digital Technology

Balancing Measures
- Increase the number of students studying non-digital courses which require digital skills, but which are not

Gender distribution of above measures will be recorded

Change ideas
- Test, using market research, how students can be encouraged to take ICT/Digital subjects at NAT 5 and beyond (Cults and Northfield)
- Test how linking City school(s) into the SDS Cyber School Pilot to encourage industry into the classroom, to teach computing/ICT/Digital, increases engagement with ICT/digital subjects (Academic year 2020/21 after current pilot has been assessed).
- Test how linking City schools in with SDS Live Cyber Lessons increases engagement with ICT/digital subjects (February 2020)
- Test how linking every school in Aberdeen City with a Digital company through DYW increases engagement with ICT/digital subjects
- Test how attaining Digital Schools Status in Aberdeen City schools increases the number of students studying ICT at Nat 4 level
- Test how engagement with industry (eg. workshops with Google Digital Garage) encourages school pupils to have increased engagement with ICT / digital sectors.
- Test how developing specific marketing material increases uptake of Digital courses in schools and in College (NESCol working on a video as part of STEM Hub work).

Mature Audience
- Test how enhancing the understanding of FE courses available in the region can increase uptake.

Potential Barriers
- Work/measures will need to be aligned with academic terms
- Lack of buy-in from schools within the city
- Lack of buy-in from employers across the city
- Lack of engagement of mature audience

Project Team:
Allison Carrington, SDS / Interim Chair Aberdeen Prospers
Bob Farthing, Civic Forum
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Duncan Cockburn, NESCol
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Liz Rattray, University of Aberdeen

Outline Project Plan		
Project Stage	Actions	Timescale
Getting Started (Project Score 1-3)	-Project team established -Draft charter developed -Charter submitted to CPA Board	November 2019 December December 2019
Designing and Testing Changes (Project Score 4-7)	-Design changes for initial testing	January 2020
Implementing and sustaining changes that demonstrate improvement (Project Score 7-10)	-Agree change ideas tested which are proven to work that we will seek to embed permanently -Continue to gather data on no. of individuals signing up for and completing digital courses in College and University - Assess whether improvement levels are sustained	Dec 2021 onwards
Spreading Changes (Project Score 9-10)	-Assess opportunities for spreading change to other areas where applicable	Jan 2023