

| Community Planning | Aberdeen

Progress Report	Project End Report: 3.3 Increase the number of people within Aberdeen City qualified with ICT and Digital skills at SCQF Levels 7 and above by 10% by 2023
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Governance Group	CPA Board – 29 February 2024

Purpose of the Report

This report presents the results of the LOIP Improvement Project Aim 3.3 which sought to increase the number of people within Aberdeen City qualified with ICT and Digital skills at SCQF Levels 7 and above by 10% by 2023

Summary of Key Information

1 BACKGROUND

- 1.1 The COVID pandemic highlighted the importance of IT services including:
 - Providing effective communication and engagement through websites which are easy to use
 - Online video meetings
 - Home working
- 1.2 Ensuring all young people have the digital skills that our future economy needs is considered to be crucial to economic competitiveness.
- 1.3 The SDS Digital Skills Assessment, undertaken in June 2021, stated:
 - Estimated that Scotland needs about 13,000 new people to work in tech every year
 - Tech roles are hugely varied with current demand in web development, software, cyber security and sales & marketing.
 - New roles continue to emerge areas of opportunity identified as data analytics, Artificial Intelligence & machine learning and internet of things, quantum computing
 - 74% of respondents forecast an increase in their employee numbers
- 1.4 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. Within Aberdeen 36% of businesses are categorised as

Professional, Scientific and Technical and 5% as Information and Communication. While the majority of these businesses are likely to incorporate some level of digital requirement employees across a range of sectors 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.

2 IMPROVEMENT PROJECT AIM

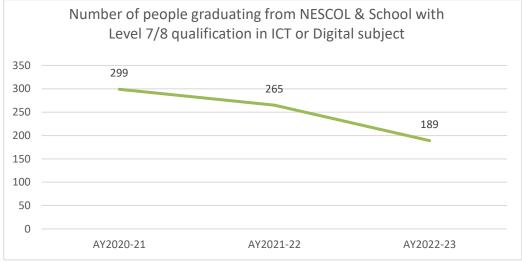
2.1 Against this background, in February 2020 the CPA Board approved the <u>project charter</u> for the initiation of an improvement project which aimed to Increase the number of people within Aberdeen City qualified with ICT and Digital skills at SCQF Levels 7 and above by 10% by 2023.

3 WHAT CHANGES DID WE MAKE?

- 3.1 The project team tested the following changes:
 - A. Working with partners (NESCol, RGU, UoA), the project developed professional learning for Computing Science teachers to enhance learning and teaching and also to develop subject expertise
 - B. Detailed mapping of progression in digital learning/teaching in early, primary and secondary level education was carried out to enhance and expand computing teaching in schools
 - C. Professional learning resources for Early to Second level created to strengthen interest in Computing Science
 - D. To support adult learners RGU introduced several new courses to build up skills in data science, artificial intelligence rand cyber security roles. At Undergraduate level this included a Graduate Apprenticeship in Data Science, while at postgraduate level a MSc Graduate Apprenticeship in Cyber Security was delivered. The Graduate Apprentice degrees allow a student to remain in employment while studying for their degree, a large part of the work is "work based learning" supporting the company and the student in new skills development.
 - E. RGU also introduced 3 "Upskilling" short courses in the areas of Data Science, Machine Learning and Al. These courses run for 10 weeks and are completely online.

4 HAVE OUR CHANGES RESULTED IN IMPROVEMENT?

4.1 The aim has not been achieved as shown in chart below. All university sectors say a drop in student enrolment over the course of the Covid Pandemic. However despite this RGU has seen a rise in application numbers to computing courses during this time. While completion numbers have fallen slightly given the movements in the sector this is seen as largely maintaining numbers over this time and as enrolments have started to increase post pandemic these number are expected to rise again.



- 4.2 As well as focusing on supporting increase the number of people completing level 7 and 8 courses, we have also focused on upskilling the full student population with the digital upskilling courses developed and offered to all RGU students. Since 2022/21 310 students overall have completed a digital upskilling course.
- 4.3 A digital event was held for 1000 teaching and support staff which included

workshops from RGU and representation from Aberdeen University. The event had computing science inputs for Early Stages and Upper Stages Primary staff focused on growing interest in the subject. Esports has now



been established at St Machar Academy and discussions are progressing to add Bucksburn Academy as a second Esports hub. Discussions continue with ABZ Works team to review the Computing Science offer. RGC Online will be an option for 24/25 supporting Higher Computing as an additional subject within ABZ Campus offer. Developing communications for parents/carers/young people to promote the opportunities in the sector and the range of pathways available will be progressed after Spring break, with inputs from a range of partners.

4.4 National and local extra-curricular with a Computing Science or Digital focus continue to be shared with schools and a survey of uptake and attitudes to Computing Science more widely is in draft to be shared early next month. A city-wide meeting of Computing Science staff is planned for February to identify opportunities for collaboration on resource development and the identification of training needs to allow staff to support a broader curriculum.

5 HOW WILL WE SUSTAIN THESE IMPROVEMENTS?

5.1 RGU will continue to run short courses and Graduate Apprentice course to support adult learning in the digital sector. The school has recently developed a new undergraduate course in Al and Data Science that will further skills in these areas in the region.

- 5.2 As above, a city-wide meeting of Computing Science staff is planned for February to identify opportunities for collaboration on resource development and the identification of training needs to allow staff to support a broader curriculum.
- 5.3 New aims are being taken forward by the Children's Services Board e.g. Increase by 20% the number of young people completing courses aligned to support the digital and tech sector by 2026 and also proposed under Aberdeen Prospers in terms of upskilling to further progress digital skills at all levels across Aberdeen.

6 HOW WILL WE MONITOR THESE IMPROVEMENTS?

- 6.1 Recruitment to and completion of courses with in the school are monitored annually by our internal processes. We have regular consultation with local industry to identify local workforce needs and requirements to ensure that all the degrees and short courses we offer continue to provide the skills needed in the city. The school undergoes a continual, iterative enhancement cycle to make changes to the courses we provide to ensure their currency and effectiveness in provided the skills required.
- 6.2 We will continue to report data through Aberdeen Prospers and the Children's Services Board.

7 OPPORTUNITIES FOR SCALE UP AND SPREAD

7.1 The learning from the project and the courses will considered as part of the new/current improvement aims as referenced above. Opportunities to further expand upskilling across all communities and to support people gain good quality employment opportunities as a result – this will be considered by all new Aberdeen Prospers improvement aims.

Recommendations for Action

It is recommended that the CPA Board:

i) Agree that testing is concluded and that whilst the aim has not been achieved, the changes have been embedded as business as usual and that opportunities for scale up and spread will be considered as part of the aim "Increase by 20% the number of young people completing courses aligned to support the digital and tech sector by 2026"

Opportunities and Risks

Insufficient engagement:

- encourage representatives from schools to join the project group.
- more interaction/involvement with colleges and universities.

Consultation

Aberdeen Prospers

Background Papers

The following papers were used in the preparation of this report.

<u>Project Charter Charter-3.3-Improving-Digital-Skills.pdf</u> (communityplanningaberdeen.org.uk)

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