

## Case Study: An SCQF Learning Journey WEA Scotland Pilots its Credit Rated Science Course



### **“An Introduction to Science in Everyday Life” – SCQF Level 4 with 3 SCQF Credit Points**

#### **The Awarding Body**

The Workers' Educational Association (WEA) was founded in 1903 and is the leading voluntary sector adult education organisation in Scotland. We are a charity dedicated to bringing high-quality, professional education into the heart of communities.

We were assessed 'Excellent' in our last inspection in Scotland from Her Majesty's Inspectorate of Education (HMIE) and 'Good' by Ofsted in 2017. Learners do not need any previous knowledge or qualifications to join most of our courses, only a willingness to share their curiosity, ideas and experience.

We have a special mission to raise aspirations and develop educational opportunities for the most disadvantaged. This includes providing adult literacy, numeracy, ICT, STEM and ESOL skills for employment; courses to improve health and wellbeing; creative programmes to broaden horizons and community engagement activities that encourage active citizenship.

## **The Credit Rating Body**

Glasgow Clyde College is a highly respected further education college created following the mergers of Anniesland College, Cardonald College and Langside College in August 2013.

The college is an SCQF Partnership Credit Rating Body authorised to provide third party credit rating for organisations who wish to have their learning programmes placed on the SCQF.

The WEA course, “An Introduction to Science in Everyday Life”, supports Glasgow Clyde College’s STEM Manifesto to ensure that STEM is given prominence and status in the college and the community it serves and to build increased STEM capability in Scotland.

## **Our ESOL Partner**

Our learners came through a partnership with The Ogilvie Centre at St Aloysius Church in Glasgow who run an ESOL programme using skilled volunteers for over 60 refugees and asylum seekers. The number of students and volunteers enables the centre to divide groups by level from ESOL Literacies to SCQF Level 5. The Ogilvie Centre also provided the venue for the pilot programme.

## **Background to “An Introduction to Science in Everyday Life”**

In 2018 the WEA Scotland, with funding from Glasgow Clyde Education Foundation, developed and published a teaching resource to use with learners, “Science for a Successful Scotland”. This is available as a hard copy resource and a free online e-learning resource hosted by Glasgow Clyde College through [www.mycl Clyde.ac.uk](http://www.mycl Clyde.ac.uk).

The aim was to promote STEM in Scotland through the introduction of science topics in an interesting, inspiring and engaging way in community settings, colleges and schools.

We also wanted to raise awareness of Scotland’s ‘growth sectors’ as identified by the Scottish Government’s Economic Strategy and show that there are a variety of pathways into STEM related careers.

We designed the resource for use with learners who are likely to face barriers to learning or want to return to learning. It was also developed with Family Learning in mind to help parents help their children with their own learning in sciences and increasing science capital.

The resource is very flexible and can be used in an informal way by tutors using a social practice approach. However, there is also the option to run a credit rated course based on Science for a Successful Scotland.

## **Accreditation**

The WEA Scotland created a unit specification for a 30-hour course, “An Introduction to Science in Everyday Life”, which is designed to provide accreditation for learners who are learning about the basics of science using all or part of the Science for a Successful Scotland learning resource. Learning outcomes cover the identification of uses of science in everyday life, research of a topical science issue and carrying out a science experiment.

It is designed to increase learners' knowledge around science subjects and science-related careers. It aims to increase learners' confidence talking about science subjects and career opportunities, so could be of benefit to returning adult learners and to parents or carers who want to support their children's learning or career choices. It could also motivate learners to move on to further learning (for example in colleges) as a result of developing interest in one or more of the sciences they explore during the unit.

Glasgow Clyde College allocated a credit rating of SCQF Level 4 with 3 SCQF credit points to the Unit: "An Introduction to Science in Everyday Life" in 2018.

### **Benefits for the Learners**

The rationale for choosing to run the pilot course with community based, adult refugee and asylum seeker ESOL learners was based on the knowledge that within this demographic there are often learners with some knowledge of science and/or who are extrinsically motivated by the "reward" of a recognised qualification. This group also face multiple barriers to improving their lives through further study or satisfying work and need something challenging or interesting to do while they are waiting for changes to their status or a place on a college ESOL course. They are also a strong fit for the learner criteria for Numeracy/STEM within the WEA's Glasgow Integrated Grant Fund that made it possible for this course to run.

A group of learners from the Ogilvie Centre attended an information session on the proposed pilot, the Science for a Successful Scotland resource and the accreditation/qualification. As a result, 12 learners, two women and 10 men, chose to enrol on the 30-hour pilot course. There was a wide range of English levels within the group. The students all had a minimum of secondary education level and some knowledge of science ranging from basic level to university level. One student had a Biology degree from Eritrea and could not access her final transcripts, another was an Anaesthetist from Yemen. The group recognised that they still needed to improve their English but the majority were keen to study subjects other than English, preferably Science and Maths related subjects at a higher level.

Ten students completed the course and attendance was good, averaging 8 per class. Given the profile of the group, absences were to be expected due to the need to attend a variety of appointments. It also took place during Ramadan which was observed by 8 out of 10 students.

The course consists of 5 units linked to key industry sectors in Scotland:

- Energy
- Tourism and Environmental Science
- Life Sciences
- Science and the Creative Industries
- Science of Food and Drink

Each unit contains learning content about the science topic incorporating physics, chemistry, biology, geology, meteorology, climatology and oceanography with maths embedded throughout. There are a variety of activities, experiments, local investigations and assessments. The course also helps to develop scientific skills, such as inquiry, investigation, analytical thinking and scientific literacy.

In addition, the learners are using core skills: Communication, Numeracy, ICT, Problem Solving and Working with others at SCQF Level 4.

This is an important step towards further non-ESOL study and an impressive addition to their CV when applying for work or study.

Seven gained SCQF Level 4 with 3 SCQF credit points and three gained a certificate of participation, which was a great achievement.

The pilot showed that the course could be run for ESOL learners but it became clear that more time would be needed to allow tutors to focus on writing and explaining scientific theories.

All of the students are in college studying ESOL, many with the hope of moving into transition courses in the caring professions or science based courses.

### **The WEA Educational Impact Awards 2019 - National Outstanding Student Group**

This inspirational group of ten refugees and asylum seekers, having fled Eritrea, Sudan, Yemen and Iraq, and all at different stages of the resettlement process, were awarded National Outstanding Student Group because they demonstrated to ESOL students across the country that there are different pathways open to them when they progress to an Intermediate level of English.



This group of role models were part of a 60 strong community of refugees and asylum seekers who attend The Ogilvie Centre every Monday to Friday morning to learn English, socialise and get support.

The individual learners chose to do this course for a variety of reasons. All were interested in maths and science but to varying degrees. It was the challenge and the opportunity to try something different and make progress that appealed to others.

The participants were diverse in terms of ability, age range and gender. It was great that two of the most motivated and successful learners were young Eritrean women and they offered an excellent example to the other women in the wider ESOL group.

One of the learners, who had quite a low level of English, was an anaesthetist by profession in Yemen and attended the course to help transfer his scientific vocabulary into English. He became a role model for the group because he was older and experienced and could help translate more difficult concepts into Arabic. He also gave feedback that it helped him to assist his children, in English, with their science homework. He continues to study English and has been accepted as a Volunteer for St John Ambulance as a CPR Champion. He is working with NARIC to get his medical qualifications from Yemen recognised and contribute further to Scottish Society.

The learners worked well as a team and helped and encouraged each other to keep going despite the numerous obstacles that stood in their way.

#### **What next for “An Introduction to Science in Everyday Life” SCQF Level 4?**

The pilot programme has been externally monitored by Glasgow Clyde College and all recommendations have been agreed and will be included in any further courses run by the WEA Scotland. However, in the immediate future, given the existing STEM resources and reach of Glasgow Clyde College, it has been agreed that the College will run, assess and verify future “An Introduction to Science in Everyday Life” units at SCQF Level 4 with 3 SCQF credit points and the WEA Scotland, as the awarding body, will provide certification.