CYBER SECURITY TECHNOLOGIST, HMRC

The organisation

In 2015 HMRC was given responsibility for the Cybersecurity Apprenticeship Programme (Level 4) funded by the National Cyber Security Programme (NCSP). It is cross-government with 25 apprentices placed across ten departments, including the Cabinet Office, Home Office and NHS Digital. In the future, the apprenticeship team will extend its reach further across government and develop other standards.

The approach

The Cyber Security Technologist apprenticeship is a recently developed standard (June 2016), which means the team has the dual challenge of implementing a new scheme into the Civil Service in parallel to a completely new and untested standard.

Ensuring quality is vital, and the programme team took the opportunity to work with the learning provider (identified through a Civil Service Learning [CSL] Provider consortia) to create a package that delivered for business needs and met the standard. The quality of instructors was critical in such a dynamic and fast-moving area, it was essential they were up to date with the latest developments in cybersecurity.

This programme has led the way in innovative recruitment of more diverse apprentices capable of demonstrating the aptitude, ability and behaviours which best fit the requirements. Applicants do not need STEM qualifications and recruitment is strengths-based - delivering a consistently fair and inclusive recruitment experience, with less emphasis on experience and more on potential with no discrimination across gender, ethnicity, or social background.

Adverts are placed through multiple channels, including social media, to appeal to a broader spectrum of people. Applicants complete an online assessment, followed by a strengths-based telephone interview. The final stage is participation at an assessment centre, where a group exercise, presentations and a further strengths-based interview take place. Candidates who have taken part feel the process is a positive experience, and it has led to an increase in the number of women gaining a place, and resulted in a high-calibre cohort who were the right fit for an apprenticeship in cybersecurity.

For many of the apprentices this was their first experience of work, so the structure of the apprenticeship was designed to allow them time to settle into a work environment before starting their courses. After every module they have the opportunity to apply their learning in the workplace, to reinforce what they have learnt.

Ongoing support is provided informally through peer support by an apprentice from an earlier cohort; and formally from their line manager and mentor.

The challenges

Initially it was a challenge to sell a programme internally that didn't currently exist, as there was no evidence of success. To overcome this, the benefits of the scheme were highlighted while emphasising the support that was on offer from the programme team, CSL, the learning provider and apprentice tutors and mentors.

Additional challenges occurred due to the nature of the profession and the civil service requirements for security clearances, which all apprentices must go through. This led to delays. The nature of the job, and its security element, also means that the apprentice has to be there for some time before they start to develop the knowledge and skills to be able to be involved in cybersecurity work. This poses a risk that apprentices could get frustrated at the beginning and may drop out. Peer support helped alleviate this, as apprentices can hear from others who have successfully passed through that stage.

The benefits

For both the Civil Service and the cross-Government Security Profession, succession planning is fundamental: to bring new people in, to hear new ideas and benefit from different ways of thinking. The apprenticeship offers the opportunity to facilitate this, whilst at the same time providing the apprentice with real work experience, and allowing them to develop within the culture and organisational values of the civil service.

The programme also helps to create a more 'modern civil service', which has facilitated a long-term change in the diversity of the workforce. Most departments offer the apprentice a permanent contract, which helps them to embed into the team and fully focus on the apprenticeship; rather than feel they're in a transient position and need to start to look for a job.

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