

# PROCAT

PROSPECTS COLLEGE OF  
ADVANCED TECHNOLOGY



## The role of the Digital Fellow



Commissioned and funded by

The  
Education  
& Training  
Foundation



This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 2.0 UK: England & Wales License](https://creativecommons.org/licenses/by-nc-sa/2.0/).



## 1: WHAT WE AIMED TO ACHIEVE

The current status of digitally-enhanced learning within the further education (FE) sector has been noted widely by Ofsted; by the government Further Education Learning Technologies Action Group (FELTAG) inquiry; by the McLoughlin report and by the 157 Group report, Further Education in 2020. The nub of their findings has been that, whilst the sector has invested heavily in computing and has taught its use at a relatively elementary level, digital technology has not been applied to changing the nature of learning or radically enhancing its accessibility.

We recognised some of these findings in our own practice and wanted to create a designated management role that would drive our ambition for PROCAT to be the sector leader in the use of digital learning technology within the vocational curriculum.

---

## 2: HARNESSING AN OPPORTUNITY FOR FUNDING

In 2014 we spotted an opportunity to take our vision forward and applied to the Education and Training Foundation's Research, Development and Innovation Fund for support to create the role of a Digital Fellow. Working in partnership with the Education and Training Foundation our initial ideas were enhanced to employ a Fellow who would develop and disseminate to the wider education and training sector:

- strategies to promote and implement effective digital learning with a focus on enriching and enlivening learning encouraging greater independence and developing research skills;
- approaches to developing the expertise of instructors in how to use and embed digital learning technologies in their practice;
- the use of advanced technical equipment and resources in specific curriculum areas to enhance work-based learning and assessment
- examples of processes that enable employers to have greater access to their apprentices so they can support them while on-the-job.



As an organisation we wanted the role of the Fellow to address two further areas:

1. The introduction of student-owned mobile technologies to enable much wider use of independent learning for students to acquire knowledge at their own pace.
2. The use of digital technology to enhance work-based learning, to include enabling employers to have real-time access to their apprentices' progress, so that on-the-job and off-the-job curricula can be better coordinated.

The aim was to share our learning as we evolved as an organisation through publications, resources, seminars and events.

Funding for the Fellow would run from April 2015 to March 2016, to support the initial start-up phase for the role, which PROCAT planned to continue for at least a further two years until 2018.

---

### 3: THE APPOINTMENT OF THE FELLOW

In March 2015 the Fellowship role was nationally advertised and in April 2015 Katharine Jewitt was appointed. Katherine was a leading expert in the design, implementation and maintenance of Digital Learning systems as well as being a very experienced further and higher education teaching practitioner. She has worked extensively for the Open University as well as having had senior roles in industry.

---

### 4: FOCUS OF THE WORK UNDERTAKEN

The strands of the work to be achieved are outlined in section 2 above. However, we recognised that the work of the Fellow needed to be aligned to our college wide priorities and captured in a transformational, well-researched digital learning strategy that we could share with others.



#### **Digital learning strategy**

This was the first piece of work that, in consultation with the senior leadership team, staff and students, the Fellow undertook.



The strategy, informed by UK and international research and practice, is underpinned by nine 'projects' or strands of activity each with their own purpose, rationale and deadlines. The projects are presented as business cases outlining key deliverables, outcomes, risks and estimated costs. They provide useful ideas for other organisations to take, use and modify as part of any digital learning strategy being developed.

The project titles and rationales are captured in the table below:

Project title	Rationale and purpose
1. Embedding effective use of Information Learning Technology (ILT)	Sharing of effective practice in the use of ILT within PROCAT and to the wider community. Delivering technology enhanced learning workshops to train staff in a variety of e-learning tools and learning design.
2. Implementing a Moodle Virtual Learning Environment and Bring Your Own Device (BYOD)	To implement FELTAG recommendations and enable the management and delivery of online learning.
3. Mastering Microsoft Office by flipping the learning	Build the capacity and capability of staff and students to use Microsoft Office and develop key skills for the workplace.
4. Launching Digital Learning Scholarships for Digital Ambassadors	Build the capacity and capability of staff and students in the use of digital skills.
5. Digitalising student enrolment	To make student enrolment effective and efficient. Present PROCAT in a digital age. Eliminate time to print and scan 10,000 pages.
6. Developing employer engagement and work-based learning	Embracing creativity to drive innovative learning experiences that will ensure the college is world class in technology-enhanced learning for employers.
7. Creating an online booking store on the campus website for course and facility bookings	Increase revenue and improve branding to employers and other external stakeholders.
8. Developing a dedicated Fellowship website	To share progress of all digital learning projects taking place.
9. Developing a Digital Literacy Framework	To support technical skills, critical thinking and social engagement.



The Digital Fellow reported directly to the Principal who held fortnightly meetings to review progress against each of the nine project activities.

## 5: OUTPUTS AND IMPACT OF THE FELLOWSHIP ROLE

The digital strategy is aimed to be delivered in phases over 3 years. The lessons learned, methodologies, initiatives and techniques that have been developed so far have been shared in the PROCAT 'Transforming Vocational Education' toolkit.

The creation of a 'Fellow', a senior member of staff with the remit to lead the development of digital learning at PROCAT, has made it possible to:

- analyse and develop a coherent approach to implementing our digital vision, ensuring that it is aligned to our organisation's key strategic priorities;
- maintain our momentum and focus on digital learning, keeping it learner centred;
- embed digital activities in curriculum review and design processes;
- engage in research and the wider community to inform our thinking and next steps.

The impact of the Fellowship role, assisted by a strong commitment from the senior leadership team to resource and embed learning technologies across the college, has been captured in the table below.

Digital Technology Focus	Impact	Success Indicator
<b>The College has invested £1.6m in advanced engineering technology including robotics, computer-aided design and manufacturing (CAD/CAM), 3D Printers, 5 axis machining centres.</b>	Students and apprentices develop their skills and expertise on industry standard equipment. They develop advanced engineering skills in design, prototyping, automation, manufacture and systems testing.	Industry benefits from highly skilled engineers who already have the skills to use advanced engineering equipment and systems.  The investment in advanced engineering technology has enabled the college to introduce higher level programmes. Advanced and higher apprenticeship numbers have grown from 15% in 2010 to 88% of provision in 2016.



<p><b>The college has invested in an advanced aircraft maintenance simulator for its aeronautical programmes.</b></p>	<p>Students are able to undertake routine and non-routine repairs and maintenance of highly complex aircraft (Airbus A320) in a controlled and safe environment. This provides students with access to advanced skills away from the workplace.</p>	<p>Industry is benefiting from highly skilled technician apprentices in airframe maintenance and avionics.</p>
<p><b>The college has developed a range of digital learning technologies to enhance the professional practice of teachers and instructors.</b></p>	<p>Teaching staff now deploy a range of digital learning techniques to enhance and enrich learning. These include use of interactive white boards, flipped learning, and animation.</p>	<p>Students develop independent learning skills. Students have greater enjoyment of learning and are more engaged and more likely to succeed. Retention rates on long programmes have risen to 92%.</p>
<p><b>The college has invested in a software system to manage learning. The use of OneFile is designed to improve the awareness of learner progress and record achievement.</b></p>	<p>Instructors are able to track every student, monitor their progress, set targets and manage assignments.</p> <p>Students are able to digitally record the evidence of their learning, access learning materials, and submit work for marking.</p> <p>Employers are able to monitor the progress of their apprentices, understand what they are learning and comment on their work.</p>	<p>Learning records are electronically stored and the college has significantly reduced, and in some areas eliminated, paper-based records.</p> <p>Managers have access to instant reports on learner and cohort progress and can take action where progress is below expectation.</p> <p>Students and instructors can work on their learning at any time and any location.</p>



---

## 6: DIGITAL INVESTMENT

The investment that was made in year 1 of the project aimed to establish the digital infrastructure and capacity of the college. The capital cost of advanced engineering equipment was £1.4m and the cost of new and upgraded IT infrastructure was £200,000. The cost of the fellowship and of staff time associated with the project was in the region of £250,000. The total investment was made through a combination of capital grants, Education and Training Foundation fellowship grant and the college's own resources.

Year 2 and ongoing operating costs are estimated to be in the region of £200,000 per year excluding any further capital investment that may be required. This cost is mainly the employment of specialist staff to lead and champion digital learning.

---

## 7: NEXT STEPS

Funding by the Education and Training Foundation for the Digital Learning Fellowship has now come to an end. However, the process has allowed us to begin a journey that we will continue by appointing a Director for Teaching and Learning who will harness the next phase of our work, developing in particular the creation of professional standards for tutors and trainers that will define what we as an organisation expect in relation to the use of leaning technologies to enhance the quality of learning. The standards will be supported by a coordinated and comprehensive programme of professional development.

In addition we are also appointing a Head of Digital Learning who will continue to develop and deliver the college's Digital Learning Strategy and support the role out of the digital learning environment that has been designed this year.