



The Open  
University

# DIGITAL INNOVATION



# Introduction

## Digital Innovation

**The Open University is unique among UK universities in combining a mission to widen access to higher education with research excellence. We have over 1000 research academics working at the forefront of knowledge in the sciences, social sciences, arts and humanities.**

At The Open University, innovation has been at the heart of our learning and teaching for 50 years. We were the first university to make all its undergraduate course materials accessible by smartphone and tablet.

We have some of the world's leading experts in new and emerging technologies. And we have some of the world's leading experts in the theory and practice of learning. It's that combination that makes us special. We don't believe in innovation for innovation's sake. It must add value to the learning experience.

We systematically assess new technology as it emerges to see how we can make it work for learners. Everything we do is underpinned by rigorous evaluation and trials, so we only put into practice what works. Our record speaks for itself.

There has never been a more exciting time for learning technology and our digital innovations will lead the way.

# Anne Adams

## GETTING TO GRIPS WITH TRICKY TOPICS

### **We're combining technology and creativity to remove hidden barriers to learning.**

A common stumbling block to successful learning is the 'tricky topic'. This is a fundamental element of a subject that a significant number of learners typically struggle to understand.

This means they ultimately fail to master the subject, but the cause of their failure is often a mystery to teachers and trainers.

*We've found ways to identify and tackle tricky topics...* using digital technology and creative techniques, like videomaking and gaming.

*We're supporting teaching, professional development and organisational learning...* with free online resources and tailored support.

Our Tricky Topics Process is being incorporated into teacher training in several European countries as well as the UK.

*We're partnering the College of Policing...* and police forces across the UK, to support their training and organisational learning.

The work has led to the creation of new learning networks across all 43 UK police forces.

Our award-winning online simulation to train officers in the tricky topic of interviewing child witnesses featured on the BBC's *Crimewatch*.

*We're influencing higher education in Africa...* through our partnership with PASGR (Partnership for African Social Governance and Research). Tricky topics is now a core element of their pan-African professional development programme for university teachers.



Tricky topics is adaptable to any technology, its essence is the tools and processes that making learning truly transformative.



**Professor Anne Adams**  
Professor of Engaged Practice and Research, Professional Digital Learning

[www.open.edu/openlearn/education-development/learning/teaching-and-learning-tricky-topics/content-section-overview](http://www.open.edu/openlearn/education-development/learning/teaching-and-learning-tricky-topics/content-section-overview)



# Petr Knoth

## CUTTING THROUGH THE INFORMATION OVERLOAD

**Organisations in every country of the world use our CORE services to provide fast access to the most relevant data.**

A major issue for industry and universities is how to keep up with the huge volume of research data churned out.

*We've built the world's largest, most comprehensive aggregator...* of open access research papers. CORE was developed in our Knowledge Media Institute (KMi). We're world leaders in using Artificial Intelligence and data science for data processing and text-mining.

*CORE gives access to raw data from more than 188 million research papers...* but it's much more than a clever search engine. Its tools and services are specifically targeted to deliver the right information in a way that's manageable.

Over 16 million users have access to CORE (May 2020) and many companies and universities rely on CORE for:

- business intelligence
- research analytics
- compliance monitoring
- misinformation and plagiarism detection
- specialised searches for hard-to-access data.

*Our mission is to open access to knowledge...* so CORE will flag up and deliver any freely accessible alternatives to paywalled research papers.

CORE is a leader in the Jisc portfolio of open access services and the named supplier of open access compliance data to the Research Excellence Framework assessment.



*In CORE, we have created a unique open data service for today's world that empowers researchers and organizations to achieve more.*



**Dr Petr Knoth**  
Founder and Head of CORE, KMi



# Tim Coughlan

## BOOSTING WELLBEING AND STUDENT RETENTION

**We've developed a brand new approach to supporting students and their institutions through the highs and lows of the study journey.**

Our Journey is an engaging, online platform that encourages students to record, learn from and share their challenges and achievements.

*Our Journey captures rich information...* that isn't visible in student data or feedback surveys. It charts the student's entire study journey, showing the emotions it raises and the significant events that affect progress.

With sponsorship from the Higher Education Innovation Fund and Jisc, we developed Our Journey to benefit the whole UK higher and further education sector.

*Student motivation, mental health and emotional wellbeing are high priorities...* so we've designed Our Journey to facilitate supportive dialogue and mentoring, while respecting privacy.

We've built in tools to enable education providers to gather and analyse student feedback on a large scale, targeting specific areas they want to hear about.

*Our Journey's easy-to-use, game-style format...* is the product of extensive participatory research with students and staff. That research was founded on our unrivalled expertise in learning analytics and successful learning design.



We've developed Our Journey to give education providers a uniquely holistic insight into their students' experiences and generate valuable data to help support and nurture them.

**Dr Tim Coughlan**  
Lecturer, Institute of Educational  
Technology



<https://ourjourney.ac.uk/>



# Christothea Herodotou

## EMPOWERING RESEARCH FOR EVERYONE

**So, you thought doing scientific research was just for the experts? Not anymore.**

For 50 years, The Open University has brought learning within reach of everyone. Now, we're doing the same for research.

***Our unique citizen inquiry platform, nQuire, was created...*** in partnership with the BBC. It enables anyone to set up their own research investigation and get results of real scientific value.

We've built in tools that take care of key issues, such as ethics and data protection, and provide dynamic feedback on the investigation to keep users informed and engaged.

***nQuire has powered investigations...*** by major, national organisations. In 2019, we partnered with the British Trust of Ornithology to run Gardenwatch for the BBC's Springwatch series. It was the biggest citizen science survey ever conducted and more than 200,000 viewers took part.

We've hosted investigations by UK universities, including UCL, Exeter, Bristol, Wolverhampton, Manchester and Liverpool as well as The Young Foundation. Topics have ranged from climate change to COVID-19.

**nQuire was built...** in our Institute of Educational Technology (IET). This world-leading, research centre is at the heart of our reputation for innovation in teaching and learning.

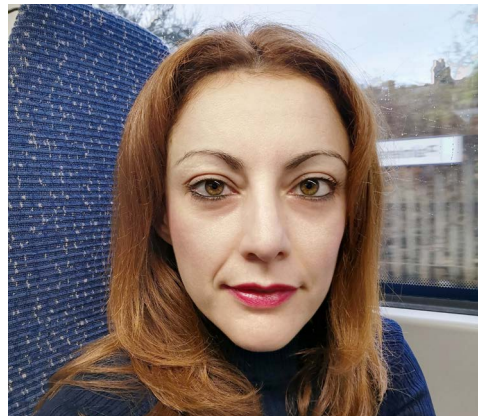


nQuire is much more than a standard citizen science website. We've given it the functionality to support small or large-scale investigations in any discipline and to make it engaging and educative as well as academically rigorous.

**Christothea Herodotou**  
Associate Professor, Innovating Pedagogy  
and Learning Analytics



[nquire.org.uk](https://nquire.org.uk)





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## **FIND OUT MORE**

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ask to be connected to the  
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