

# Chapter 13

## TPD as Online Collaborative Learning for Innovation in Teaching

**Diana Laurillard**  
*Institute of Education, UK*

**Elizabeth Masterman**  
*University of Oxford, UK*

### ABSTRACT

*This chapter focuses on supporting university teachers in the UK in the more innovative use of digital technologies. Although the use of these technologies is now widespread and increasing, it is not always optimised for effective learning. It is important that teachers' use of technology should be directed towards innovation and improvement in teaching and learning, and should not merely replicate their current practice in a digital medium. The authors therefore make the case for an online collaborative environment to scaffold teachers' engagement with technology-enhanced learning. The chapter outlines the findings of our recent research into a blended approach to TPD, and use these to identify the requirements for an online collaborative environment: tools for learning design, guidance, and access to relevant resources to support teachers in their discovery of new forms of technology-enhanced teaching and learning. Such an environment, they argue, would provide a framework for a "community of innovation" in which teachers participate both as learners and researchers.*

### INTRODUCTION

The social and political context within which most higher education (HE) systems operate is making increasing demands on improvements in both the quality and the scale of teaching and learning. The Lisbon strategy on lifelong learning, agreed in 2000, aimed to make the EU the world's most competitive

and dynamic knowledge-based economy by 2010, and called on member states

*...to create the necessary conditions to enable universities to improve their performance, to modernise themselves and to become more competitive – in short, to become leaders in their own renaissance and to play their part in the creation of the knowledge-based society envisaged under the Lisbon strategy. (CEC, 2006)*

DOI: 10.4018/978-1-60566-780-5.ch013

The current thinking at national level in the EU is exemplified in a recent education strategy document from the UK (DfES, 2005, p. 94). This set an agenda for further and higher education that includes the provision of high quality university courses with excellent teaching; access to university for those with the potential to benefit; and greater, and more flexible, opportunities to study. The emphasis on both higher quality and broader reach is thus a direct response to the Lisbon strategy. One major source of these increased requirements is the incursion of digital technologies into every aspect of employment, which means that the education system must both adapt in response to the changing technology environment and equip its graduates to do likewise.

However, these ambitious aims for the education system are not matched by commensurate increases in funding. Furthermore, at the post-compulsory level (i.e. education beyond the age of 16) the burden of cost is increasingly being transferred to the students. Schemes under which graduates contribute retrospectively to the cost of their learning have been implemented or are under consideration in many EU countries. However, the widening participation agenda, which aims to open up HE to those in lower socio-economic groups, calls the affordability of these ambitions into question unless universities can also find ways of improving the productivity of learning and teaching. If we are to improve both quality and reach, as governments demand, improving productivity will be essential.

Technology-enhanced learning (TEL) is one possible option for remedying this state of affairs. Digital technologies can be harnessed to serve every aspect of teaching and learning because they now provide the electronic equivalent of every educational technology invented so far. Paper, books, libraries, chalkboards, notebooks, pens, broadcasting: all are mirrored in different kinds of digital technologies, often bearing the same names, such as *e-book*, *digital library*, *interactive whiteboard*, *notebook*, *light-pen*, *podcasting*, *webcasting*.

Because of this capacity to support diverse kinds of teaching-learning interactions, TEL has the potential to help in meeting the demands of governments. It can improve both quality (e.g. by adapting to individual learners' needs) and reach (e.g. by offering greater flexibility in the mode and location of learning), and because it can also support economies of scale, could improve productivity as well, making expansion affordable without commensurate increases in funding.

Although the potential of TEL is very exciting, however, it is challenging to realize. It presupposes radical innovation, both in the way learners are supported and in teachers' approaches to pedagogy. Responsibility for such innovation is therefore a key issue, and one that cannot be entrusted solely to the educational publishers and software houses that control the market in online educational resources. It is our contention that the academic community itself must take responsibility for re-thinking the nature of teaching and learning in the light of the new opportunities afforded by digital technologies. However, if academics are to be innovative in teaching and learning, they will need considerable support. In this chapter we introduce the idea of an online "community of innovation," in which the individual professional teacher can embrace the role of innovator through participating in a supportive online environment as learner and researcher alongside their peers.

## **THE FEASIBILITY OF TEACHER-LED INNOVATION**

In this section we review the situation that currently pertains vis-à-vis support for university teachers in the UK as they engage with TEL. We identify the emergent practices on which our vision of teacher-led innovation through a professional support network is founded.

The majority of educational institutions are adapting to the pressure for more students by injecting high levels of investment into ICT

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/tpd-online-collaborative-learning-innovation/36943](http://www.igi-global.com/chapter/tpd-online-collaborative-learning-innovation/36943)

## Related Content

---

### Challenges for the Teacher's Role in Promoting Productive Knowledge Construction in Computer-Supported Collaborative Learning Contexts

Maarit Arvaja, Raija Hämäläinen and Helena Rasku-Puttonen (2010). *Online Learning Communities and Teacher Professional Development: Methods for Improved Education Delivery* (pp. 263-280).

[www.irma-international.org/chapter/challenges-teacher-role-promoting-productive/36945](http://www.irma-international.org/chapter/challenges-teacher-role-promoting-productive/36945)

### Cloud Computing for Teaching Practice: A New Design?

Robab Saadatdoost, Alex Tze Hiang Sim, Hosein Jafarkarimi, Jee Mei Hee and Leila Saadatdoost (2014). *International Journal of Web-Based Learning and Teaching Technologies* (pp. 50-68).

[www.irma-international.org/article/cloud-computing-for-teaching-practice/120735](http://www.irma-international.org/article/cloud-computing-for-teaching-practice/120735)

### Design, Modeling, and Implementation of the COPROLINE (Collaborative Project Online) System

Fauzi El Moudden and Mohamed Khaldi (2020). *Personalization and Collaboration in Adaptive E-Learning* (pp. 259-283).

[www.irma-international.org/chapter/design-modeling-and-implementation-of-the-coproline-collaborative-project-online-system/245226](http://www.irma-international.org/chapter/design-modeling-and-implementation-of-the-coproline-collaborative-project-online-system/245226)

### Facilitating E-Learning with Social Software: Attitudes and Usage from the Student's Point of View

Reinhard Bernsteiner, Herwig Ostermann and Roland Staudinger (2008). *International Journal of Web-Based Learning and Teaching Technologies* (pp. 16-33).

[www.irma-international.org/article/facilitating-learning-social-software/3010](http://www.irma-international.org/article/facilitating-learning-social-software/3010)

### A New Churn Prediction Model Based on Deep Insight Features Transformation for Convolution Neural Network Architecture and Stacknet

Jalal Rabbah, Mohammed Ridouani and Larbi Hassouni (2022). *International Journal of Web-Based Learning and Teaching Technologies* (pp. 1-18).

[www.irma-international.org/article/a-new-churn-prediction-model-based-on-deep-insight-features-transformation-for-convolution-neural-network-architecture-and-stacknet/300342](http://www.irma-international.org/article/a-new-churn-prediction-model-based-on-deep-insight-features-transformation-for-convolution-neural-network-architecture-and-stacknet/300342)