Chapter 9
Thinking Things Through
Collaborative Online Professional Development

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ABSTRACT

One of the most powerful ways of changing our thinking about how we teach and learn is to experience for ourselves the power of collaborative project-based experiential learning. Few teachers have had the opportunity to learn in this way, and this creates barriers for those who want to change their pedagogy. The Oracle Education Foundation's Project Learning Institute provides teachers with the experience of collaborative project-based learning, using ThinkQuest® to create their own curriculum project. By collaborating with their peers, tutors and mentors, teachers are able to model the projects, environment and experiences they want for their classes through a blended learning experience. This chapter describes the model of continuing professional development and its impact on schools, pedagogies and professional philosophies.

INTRODUCTION: IS TODAY'S EDUCATION FIT FOR PURPOSE?

For more than ten years groups of concerned stakeholders have focused on the apparent mis-match between the learning that school systems promote, and the needs of a changing world and its societies (Cuthell, 1998; Dockstader, 1999; Edens, 2000; Cuthell, 2003). Whilst much of the concern has been functionalist and a reaction against globalization, other voices have identified a disjunction between the world of schools, and that of the young people in them.

"Preparing today's youth to succeed in the digital economy requires a new kind of teaching and learning. Skills such as global literacy, computer literacy, problem solving, critical thinking, creativity, and innovation have become critical in today's increasingly interconnected workforce and society – and technology is the catalyst for bringing these changes into the classroom." http://www.eschoolnews.com/resources/creating-the-21st-century-classroom/

The utilitarian functionalist perspective has been matched by a concern that there is an increasing disjunction between the educational offerings presented to students and their real needs, interests and concerns (Preston, 2004; Trilling, 2005). The agenda that sees the embedding of creativity, critical thinking, problem-solving, working with others and other key skills in ICT-rich learning environments often seems to conflict with official prescriptions to specify, increase and test subject content in a desire to raise standards.

BACKGROUND

The MirandaNet Fellowship has worked with teachers since 1995 in a bid to effect curriculum change through professional development models based on practice-based (action) research, supported through an online community of practice (Cuthell, 2005; 2006; Cuthell & Preston, 2005; Preston, 2004; Preston et al, 2000). The MirandaNet Fellowship, founded in 1992, is an e-community of practice for international ICT policy makers, teachers, teacher educators, researchers and commercial developers who are passionate about digital technology in teaching and learning and about using technologies to promote cultural understanding and democratic participation. Currently there are over 850 members in 43 countries worldwide. The website, online forums, seminars, workshops and projects run by members are funded by international partner companies and government agencies. (http://www.mirandanet.ac.uk)

An early MirandaNet project (1999 – 2002) was with the Oracle Education Foundation, an independent, charitable, organization funded by Oracle Corporation©, which has provided ThinkQuest©, (previously known as Think.com) a free collaborative online tool for schools to use, for almost ten years. This provides a secure and protected environment for projects that can cover single classrooms, whole schools – or international collaboration. Recent work has promoted teacher and curriculum development through the integration of Project Learning, embedded ICT and the use of ThinkQuest as an online learning platform. ThinkQuest is an online community that facilitates project learning and the use of technology to help students develop vital skills for life and work in the 21st century. This initiative has been run through the Project Learning Institute©, which uses blended learning (online personal learning, mentoring and teamwork; face-to-face workshops) to promote pedagogical change and student-centred learning.

ThinkQuest is a protected, teacher-mediated environment that allows members to collaborate on learning projects within their own class – or with other schools globally, create web pages with text, pictures, multimedia components, and downloadable files, interact in online message boards, brainstorms, and debates, send messages within the protected community, participate in the ThinkQuest competition, an international project learning competition and browse an extensive library of educational resources created by students for students. This collaborative learning environment can be accessed from school and from home.

It has already been mentioned that what are termed 21st Century Skills are often presented from a utilitarian functionalist perspective. It is very easy for schools and teachers to assume that all that is necessary is for these to be taught and practiced. However, creative thinking, innovation, and the confident use of new technology, together with critical thinking, need to be practiced and deployed by learners as part of their work process. By collaborating on learning projects within an online environment, students are provided with constant opportunities to develop and hone each of these important skills.

Critical thinking develops the ability of learners to use multiple perspectives to analyse an issue or problem, create an intervention plan, and evaluate the results of the intervention. This is also combined with creativity, in demonstrating

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