



## *JISC RSC Scotland South & West Case Study @ Coatbridge College*

### **A new PDA in Resilience Management Designed for Senior Practitioners throughout Scotland**

The PDA Resilience Management at SQA level 9 is a brand new qualification that is unique in the UK as the only 'resilience management' course and is delivered fully online exclusively by Coatbridge College as it's first online course.

#### **Summary**

Coatbridge College is situated in North Lanarkshire and provides a comprehensive curriculum portfolio for the local geographical area and beyond. As part of its strategic planning, it continually invests in new technology to provide the best service for its current students and as a means to broaden its customer base. To this end, Coatbridge has invested in developing a niche market course, to reach students in wider national and international communities.

This case study highlights the 'mission critical' role that online Learning Technology and Business Systems have played in the development and delivery of an e-learning course. The new level 9 Professional Development Award in Resilience Management encompasses teaching, learning and research techniques and is delivered off-campus via Blackboard to students throughout Scotland. The students are currently working in a wide variety of industries and agencies, including Police Force, Fire and Rescue, Local Authorities, NHS and the Private and Voluntary sectors.

The PDA award is unique to the United Kingdom as the only qualification dedicated to 'resilience' management and its creation is a direct response to the growing importance attached by the government to resilience management. This is reflected in the learning programme which is based on the philosophy of Integrated Emergency Management. Current demands require organisations to adopt a professional managerial approach to resilience management, that builds understanding of its principles, its legislative framework and the skills, expertise, knowledge and techniques that will sustain organisations in an emergency situation. Consequently, the PDA in Resilience Management is a stand-alone specialist award aimed at senior practitioners.

It consists of 13 SQA units that equate to 104 SCQF Credit Points. There are 88 mandatory credits required. The remaining 16 credits are achieved by following one of two 'learning and development' routes that are selected by the candidate. The course is delivered fully online via College VLE (Blackboard) to off-campus students. The first programme delivery started in April 2010 and there is now a second cohort running.

Acting as a change agent, a Programme Director was employed by the College to lead on this initiative and co-ordinate activities between the many areas of the college involved in this course. These included the Business Management Section, Media Support Team, Student Services, Core Skills Team, and the Quality Department. This has been used to create an innovative online learning model which is used to transform the systems and delivery for future on-line learning.

Implementation of the PDA Resilience Management, as outlined in this case study, has also provided a robust test for the capacity and capability of the College's online learning and teaching platform; Blackboard. The time and resources dedicated to the PDA resilience has increased motivation levels relating to e-learning across the college and provided invaluable experience for the teams involved in the design and implementation of this flagship course.

### **The Challenges**

The PDA Resilience Management is the first fully online course delivered by Coatbridge College. All materials for this course were developed in-house and although some units had already been developed for classroom delivery, the materials had to be significantly redesigned to accommodate online delivery and the e-pedagogical requirements.

Traditionally, education and training in this area is provided via workshops, seminars, observations and exercises, either in 'table-top or live play'. The challenge was to recreate a complex pedagogy online which would ensure all learning styles were catered for. Though this form of online delivery was previously untested by the 'resilience community', the Scottish Government wished to provide equal access to all potential candidates irrespective of their geographic location in the country - hence the drive to create an online course supported by an online Professional Learning Community (PLC).

The need to build on existing high standards of learning and teaching was an early design requirement as those undertaking the award were either already in senior posts with responsibility for resilience management, or would be in a position where they expect to take up such posts in the imminent future. Most were already in employment with one of the Category 1 responders as defined by the Civil Contingencies Act 2004.

A major test arose from designing, writing and maximising use of the online learning technologies for a brand new course that was being rolled out to students in real-time, i.e. course materials being developed, tested and placed on the virtual classroom platform only a few weeks in advance of their delivery to students. The diversity within the digital literacy of the group posed the challenge of ensuring that the group was ready for the online mode of delivery.

To deal with this the College implemented its planned on-line support structure that enabled students to promptly contact course tutors and college support staff to speedily address any issues and also provide some online training. Often these issues arose from their use of VLE within the workplace due to security measures that were in place.

## The Activities

In order to simplify and standardise the process of managing documents, the course structure was designed into clear categories for the key elements which enabled students to both navigate and interact to maximum advantage within the VLE. The categories included:

- Homepage.
- Information: Course guide, Syllabus , Student Support Services.
- Induction: Introductions.
- Course units: the list of course units.
- Collaborations (generic): Group work (WIKIs), generic discussion forum, group Blog.
- Surveys.
- Journals.
- E-books.
- Course and Unit glossaries.
- Other course tools.
- Open source tools (i.e. OpenOffice.org and JISC Access Apps).

To support accessibility for navigation, a 3-click-rule to find the document was applied. Similarly, every unit within the course is delivered on a weekly basis. The project team agreed to use a standard language to avoid confusion and jargons for students. This is also reflected into the course handbook and course guide, both of which are located on Blackboard. During induction students are informed about the importance of using approved file formats such as Microsoft Office 2003. This ensures that no students are excluded from accessing materials or sharing learning opportunities due to incompatible systems.

All information was released in sequence and at set times as per the course structure and guidelines. This process ensured that all students had equal access to the same information and documentation. Each unit has a specific folder with general interest items. This folder contained files, both audio and visual, web links and journals and professional blogs. The Media Support team also delivered Library induction, Blackboard induction and all the associated activities and requirements including netiquette, online policies and procedural guidelines.

Each week's learning materials also contained a "Comments on Activities" section. These materials give a framework of good practice that should assist students to develop their model answers and also serve as a supplementary study note to reinforce "lessons-learned" themes.

In addition, the project team developed a Service Level Agreement for the following core standards:

1. There would be an induction process (two days at the beginning of each course) to adequately prepare students in the use of e-learning tools and technologies, information literacy and digital literacy.
2. There would be an advanced preparation day (one day at the beginning of each new unit) to prime students on the format of the next unit and to update them on use of any new online tools or College procedures that were being introduced to enhance their learning.

3. All learning activities materials and resources would be made available online, both as interactive and PDF versions to support the flexibility often required by online students.
4. The online learning and teaching materials would be designed, created and placed on the VLE platform in 'real-time' for weekly delivery over the 2 year duration of the course.
5. Maximum use should be made of multi-media materials and digital technologies such as web 2.0 tools, activities and software applications like 'Course genie' and 'Articulate' to keep learners engaged and provide an enhanced learning experience.
6. There would be ongoing 24/7 access and support for students via their laptop/desktop of all required learning, teaching, research materials and resources to meet their needs.
7. Use would be made of email, Wimba pronto, mobile phones, telephone conferences, dedicated discussion group threads and help areas on Blackboard to ensure sufficient tutor, administration and technical support for learners.
8. An online 'Professional Learning Community' would be created as part of a collaborative learning environment. This would entail a student centered approach and pedagogy that encourages learners to take responsibility for creating more active learning opportunities.
9. An e-learning pedagogic "Online Discussion Based template", derived from the Institute of Education, University of London, would be used for the integration of online learning technologies into the course delivery. This would incorporate several approaches which would embed all core teaching and learning activities to meet the needs of the 30 students in two different cohorts.
10. At the end of each unit, students, tutors and college support staff would take part in a structured debrief and feedback session as part of TULIP – The User Led Improvement Programme.

### **The Outcomes**

Through the VLE's system reports, monitoring of online forums and the TULIP sessions, there was clear evidence that students benefited greatly from 24/7 access into all course activities and resources. Given the nature of their professional lives, this has been particularly innovative for our student group who are able to access announcements, 'what's new' tools and study notes through smart phones as well as laptop and desktop computers.

By means of reflective journals, students were able to review their progress in collaboration with their course tutors, enabling personal feedback and constructive comments to be exchanged. In addition students were encouraged to submit their research findings in relation to the unit requirements and sector developments.

All the online discussions and forums were monitored by the online tutor and Media Support team. Nearing completion of each unit, all materials are systematically collated and evaluated for recurring themes and trends. This data was used to inform the design and delivery of future units and course developments. The Media support team also collated all requests through VLE support email in relation to this course.







During the course, all students successfully demonstrated their digital literacy and information literacy skills for academic purposes.

Learner feedback also centred on the amount of Video and audio files that were included in each week's learning materials. Students suggested having a maximum of 5 videos/audio materials as because of their demanding professional workload.

As the students work through online learning materials, they found the use of some symbols very useful and suggested that the use of symbols was increased to simplify instruction and make them more visual. A system was developed that directed them to related activities which can be seen in Figure 1 below. These helped them learn in a number of ways by:

- Directing them to additional sources of material that may help to reinforce their understanding.
- Giving guidance on how the ideas might be used by them to make proposals to enhance and develop resilience.
- Encouraging them to think about, share and reflect upon how the ideas apply to their own experience.

**Figure 1: Table of symbols used to direct students.**

	Activity	Indicates that you should undertake an Activity.
	Individual Activity	You should undertake this alone as the activity seeks to explore your thoughts, reflections, experiences and practice.
	Group activity	Requires some interaction to share your thoughts, knowledge and experience with members of your learning group.
	Reflective Journal	Reminds you to take time at the end of each week to reflect on your studies and activities over the previous week and to write up your reflective journal.
	Web – based research	Directs you to relevant web-based learning tools or additional reading/research.
	Tutor Marked Assignment – formative assessment	This symbol means that a tutor marked assignment (TMA) is to follow. These will be found towards the end of each study section. The aim of the TMA is to cover and/or incorporate the main topics of the section and prepare you for unit (summative) outcome assessment.

As the first fully online course delivered by Coatbridge College, the PDA in Resilience Management has set new standards for performance that have enabled the Media Support team to now create an online course rubric, Figure 2, for all elements of online delivery involved as part of other courses within the college.

**Figure 2: The current use of the rubric for PDA in Resilience Management.**

<b>Course Component</b>	<b>Evidence</b>	<b>VLE Tools</b>
Course Content	Course materials (both in pdf and interactive versions) Video and audio materials General interest section in the units Online course handbook Reading Presentations List of websites and other online resources Syllabus	Online weekly lesson plans Glossary URLs (external links) Mashup (video and audio files) Roster (Class list in details) Contact (lecturer information) Course calendar Online Survey
Learning Activities (both individual and group)	Ice breaking activities Task discussions Share of experiences Tasks outputs	Generic group discussion board Group Blog
Communications	Feedback/tutors from tutors and assessors	Announcements Group emails Wimba Pronto (online chat with Audio and Video)
Web 2.0 tools (i.e. Blogs, WIKIs, journals etc.)	Journal WIKIs Discussion board	Graded discussion board, Graded WIKIs Graded Journal
Online Assessment & feedback	Submissions of draft/final assignments Online tests (formative self assessment tests) Feedback from tutors for each submissions	Safe Assign Online tests Grade Centre for feedback
Course Administrations	Reminder of tasks, deadlines and assignments Contact information of tutors, students and support services	Announcements Calendar Publishing online information within the units Online student policies and procedures within VLE

Course Component	Evidence	VLE Tools
Course Evaluations (incl. student induction and surveys)	Student induction feedback Student satisfaction survey Monitoring group discussions	Online surveys Discussion board
Quality check & monitoring	Quality department's regular monitoring scheme for each unit	Online access into the courses
Accessibility (i.e. disability requirements)	Student registration forms Online student emails and feedback form	Online Accessibility portal
Additional Support Needs (i.e. digital literacy)	Online Library portal E-books for the courses E-safety 2010 portal (by JISC) Eskills for eLearning 2010 (By JISC) VLE Exemplary course design portal College's VLE Showcase portal College Blackboard Training (on demand) Staff ICT/ILT training portal	Online Library portal E-books for the courses E-safety 2010 portal (by JISC) Eskills for eLearning 2010 (By JISC) VLE Exemplary course design portal College's VLE Showcase portal College Blackboard Training (on demand) Staff ICT/ILT training portal
Copyrights/IPRs	Copyright of the materials/IPR are monitored regularly	Online search for all images and audio/video files within the course
IT support	Online help for the technical problems	Discussion board FAQs section Online "browser test" tool

## Lessons Learnt

1. Provide a longer period to consult on programme design - for Coatbridge College, the Scottish Government and the wider Scottish resilience community, this was completely new and uncharted territory which brought a unique opportunity for all the stakeholders to collaborate in the design and delivery of the course.
2. The College middle manager development increased particularly on the need to project manage efficiently and effectively plan and prioritise the design, creation and roll-out of learning materials for a fully online-based delivery, with very tight deadlines. Many areas of the college and many partners had input into the production of this course and it took time to perfect a system whereby this could be achieved in a cost effective timescale.
3. Confirmation of the worth of providing contingency planning in the event of problems with software, hardware, servers or other equipment that supports online delivery and post an additional version of those materials in pdf format.
4. Due to the nature of their organisations, some of the workplace computers used by students on the PDA Resilience Management were subject to increased security protection. Some organisations

routinely block access to any web-based applications (including College VLE). Consequently this restricted the opportunity for some students to study in their workplace.

5. When students access the College VLE, some students also use different operating systems (e.g. Windows, Apple, and Linux) and different versions of software applications (e.g. MS Office 2003, Office 2007). The variety of these formats resulted in several access problems, such as Word documents with different versions submitted through assignments. The college will now ensure that all students are aware of the operating systems and software required by to allow on-line delivery and can provide support to provide this.
6. The compatibility issues arising from the use of cross-browsers or the limited capabilities of different browsers (e.g. Microsoft, Mozilla Firefox, Google chrome). The media support team is now aware of cross browser issues and regularly monitor and make necessary adjustments.
7. The choice of the appropriate e-Pedagogy is crucial and the key point for success of delivering any online course.