Developmental self-audit:
a tool for assessing e-capability in colleges

QIA in partnership with ALT with the support of CEL, LSC, JISC, LSN and Becta.

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1. Overview

The Scottish Funding Council has invested over £50m in the development of information and communications technology (ICT) infrastructure since 1999. Colleges have also made large investments in IT from their main recurrent grant. As a result, Scotland's colleges have a generally well-developed IT infrastructure which is capable in principle of supporting significant use of ICT for teaching, learning and assessment.

2. The organisations

A steering group has recently been set up to promote e-activity. Membership includes college principals, the Funding Council, the Scottish Qualifications Authority, Her Majesty's Inspectorate of Education, the Joint Information Systems Committee, the Scottish Further Education Unit, and the Colleges' Open Learning Exchange Group.

Sero Consulting Ltd developed a developmental self-audit (DSA) tool contextualised to address the national setting of Scotland's colleges and 40 out of 43 of Scotland's colleges participated in the study. A light touch self-assessment method was utilised that colleges found straightforward and an acceptable workload to apply and from which they gained significant benefits. Each college completed an engineered Excel workbook for data capture, generating a single page management overview of e-capability in the college which could inform decision making at a senior level. The outputs from the survey were collated into an anonymous comparative report.

3. The detail

3.1 Approach

The study identified elements which need to be in place for a college to achieve embedding, provide information on the extent to which Scotland's colleges are currently able to embed e-learning in mainstream practice, and identify challenges and bottlenecks which may impede the full implementation of this process. The study included consideration of technical issues, pedagogic issues, staff development, capability and training needs, financial issues (costs of implementing online assessment, benefits in terms of efficiency gains and/or quality improvement), management and organisational issues for colleges, quality assurance (e.g. incorporating ICT services within college self-evaluation processes; identifying appropriate measures of effectiveness for e-activity), strategic leadership issues at sector, college and department level, and learner and employer readiness to engage in e-learning and e-assessment.

The end result of the questionnaire process is an output grid. The college input is recorded in an Excel workbook by responding to the practice statements about each process/dimension and recording distance travelled in the cells. The evaluation is automated, generating the output grid from the workbook. T*he DSA Output Grid* gives a management level view of the e-maturity in the college. An example output grid is illustrated below:

DSA

Learning	Policy	Planning	Delivery	Management	Optimisation
L1: e-learning is subject to formalised teaching & learning design procedures	N	P	L	F	P
L2: Learning skills are developed explicitly & incrementally during courses	P	F	P	P	P
L3: Peer & tutor interactions are provided explicitly during course delivery	P	P	N	P	P
L4: Student workload & assessment are designed to progressively build competence	P	P	N	L	P
L5: Courses actively engage students	P	P	P	P	N
L6: College defined (optional)	n/a	n/a	n/a	n/a	n/a

In this grid the rows are the *processes*; the columns are the *dimensions of capacity*; and the cells are generated through self-assessment of *practices* on a four-point scale from 'not adequate' [N] through 'partially adequate' [P] and 'largely adequate' [L] to 'fully adequate' [F]

The processes are grouped into:

- *Learning*: processes that directly impact on pedagogical aspects of e-learning.

- *Development*: processes that surround the creation and maintenance of resources.

- *Support:* processes surrounding oversight and management.

- *Evaluation*: processes surrounding evaluation and quality control.

- *Organisation:* processes associated with planning and management.

The columns of the DSA output grid are five dimensions of capability which assess the distance travelled by a College in implementing a process.

Policy covers the use of institutionally defined and documented standards, guidelines, templates and policies during the process implementation. An institution operating effectively within this dimension has clearly defined how a given process should be performed.

Planning assesses the use of predefined objectives and plans in conducting the work of the process. The use of predefined plans potentially makes process outcomes more able to be managed effectively and reproduced if successful.

Delivery is concerned with the creation and delivery of process outcomes. Evaluation is aimed at determining the extent to which the process is seen to operate within the institution. Even if institutions have extremely effective processes operating within this dimension, in the absence of capability in other dimensions, there is risk of failure or unsustainable delivery and resource waste through needless duplication.

Management is concerned with how the institution manages the process implementation and ensures the quality of the outcomes. Capability within this dimension reflects the extent of measurement and control of the outcomes and the way in which the practices are performed by the staff of the institution.

Optimisation captures the extent to which an institution is using approaches to improve capability measured within the other dimensions of this process. Capability of this dimension reflects a culture of continuous improvement. For the purposes of this study, this dimension was renamed *Improvement*.

The cells of the DSA output grid are generated through self-evaluation using a four-point scale. *Not adequate* indicates that there is currently no evidence of the practice occurring in the college. *Partially adequate* indicates that there are major shortcomings or limitations in practice outcomes. *Largely adequate* indicates that the practice outcomes are being achieved but that more formalisation is needed to ensure sustainability, or that a more systematic consideration of activities has been lacking. *Fully adequate* indicates that the practice outcomes are currently clear and are sustainably addressed and achieved.

3.2 Scale

The DSA was designed to provide a system-wide view of e-capability across a sector and also to provide a tool which individual colleges, or groups of colleges, could develop and adapt for their own purposes. Between 150 and 200 staff were involved in DSA initial completion in 40 colleges across Scotland. Forth Valley College is the fifth largest college in Scotland, delivering more than 750 courses from three main campuses in Alloa, Falkirk and Stirling and at more than 30 outreach centres across the region. 600 staff and 25,000 learners at Forth Valley College are now involved in taking the project forward across the college's work.

3.3 Impact…

… on learners, teachers, partners, staff, etc

Measurable outputs include a lecturer forum embedding good practice examples across campuses and curricular areas. This forum delivers staff development content utilising novel delivery methodologies to all teaching staff. There is implementation of standard classroom ICT and learning tools in all teaching areas, actively engaged learners and focussed discussion on learning and teaching at all levels.

… on the organisations involved

The Forth Valley case study illustrates how the process of undertaking the audit identifies both unexpected strengths and weaknesses within an organisation and stimulates discussion and actions to address these. The outputs of the DSA audit indicated that although there were examples of good practice in using technologies for learning at Forth Valley College, a central strategy and robust policies were required in some areas. The self-audit has been used to address identified areas of relative weakness. To improve the learner experience, learner engagement was used to develop a strategic approach to improving the level of service and embedding examples of best practice.

4. Lessons, caveats and implications

4.1 for the organisation involved

The DSA outputs raised the need for a college learning strategy. This strategy was developed through learner, lecturer and employer consultation and highlights what the college must do to deliver excellence in learning. The strategy reflects the college core business identifying staff development requirements, facilities and equipment requirements, the role of leaders and managers while embedding the exploitation of new technologies, embedding best practice. The strategy includes seven strategic objectives:

1. Ensure learners are well-prepared for their learning experience

2. Provide learning experiences which engage, inspire and motivate learners

3. Develop effective learners capable of sustaining employment and participating in active citizenship

4. Provide high quality, engaging, interactive and comprehensive self-study learning resources

5. Provide access to fair, reliable and achievable assessment

6. Provide fair and accessible learning for all with support mechanisms in place at pre-entry, entry, ongoing and pre-exit

7. Give learners a clear voice in determining the nature of their learning experiences

And cross cutting themes of exploitation of new technologies to enhance learning and ambitious continuing professional development for staff.

In order to identify specific actions to improve performance in learning and teaching leadership, Forth Valley College engaged learners in the pedagogical process. The key things that learners want have impacted on college management and leadership emphasising the need to embed a culture of ILT pervasiveness across the whole college.

Key issues for Forth Valley learners include the following:

- Being actively involved in the learning process: experiential/participative group and pair-based tasks with discussion which is hands on and fun.

- Lecturing limited to introduction and brief input on topics and reinforcement only.

- Learning that is contextualised and real-work related, even when covering theory.

- Variety in a blended approach.

- Ability to work at students' own pace and in groups to agreed deadlines.

- Work placements and/or visits in all courses.

- More use of ILT in all classes and lists of useful websites for all topics.

- Professionally produced notes which are accessible online and outside class times.

- Learning materials (e.g. workbooks) which can be worked on at one's own pace.

- Being well-prepared for assessment

- More online assessment and assessment (formative and summative) on demand.

The college supports embedding of best practice and engagement with ILT by utilising the lecturer forum, extensive staff development and an environment where staff and learners engage in discussions about learning and while there is a standard classroom technology resource.

5. Contact details

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