

## Banff & Buchan College

### Environment for Learning

#### *Institutional context*

Serving the communities of north-east Scotland, Banff & Buchan College is a small, rural college situated in the fishing town of Fraserburgh, some 40 miles north of Aberdeen. The college holds strongly to its mission to meet the needs of the local economy, which has a very tight labour market and less than 1% unemployment. Despite its size, Banff & Buchan College has significant activity in engineering courses. There is also a wide curriculum base in maritime-related provision and service industries, particularly hospitality and catering. Outreach provision has been developed in association with a range of external partners, and the college provides programmes in many locations throughout north Aberdeenshire.

There are approximately 300 staff and around 10,000 students, of whom 1,300 are full time (approximately 3,000 FTE). The college is situated in a residential area on the edge of the town, and the buildings have been extended several times to accommodate the growth in student numbers and to upgrade the teaching environment in specific curriculum areas.

Recognising the need to diversify income from an over-reliance on central funding, a business development unit was established in early 2004. The wide availability of broadband in this area is a relatively recent development, in which the college had a major role through the Aberdeenshire Towns Partnership<sup>1</sup>.

#### *Current MLE*

Student Record System	SITS <sup>2</sup>
Management Information for Staff	B-Net, in-house intranet, developed in Microsoft .NET <sup>3</sup>
Virtual Learning Environment	Skillnet (learndirect scotland VLE using Saba Learning) <sup>4</sup>
Library	Glass
Timetabling	In-house spreadsheet tool
Registers	SITS
Retention/Achievement/ Progression	Course evaluations and assessments (start and end dates)
Curriculum Planning	In-house spreadsheet tool
Finance	Sun Systems (v.4) <sup>5</sup>
Human Resources	CHRIS <sup>6</sup>
Staff Portal	B-Net
Student Portal	B-Net

<sup>1</sup> See <http://www.atap.org.uk/home.htm>

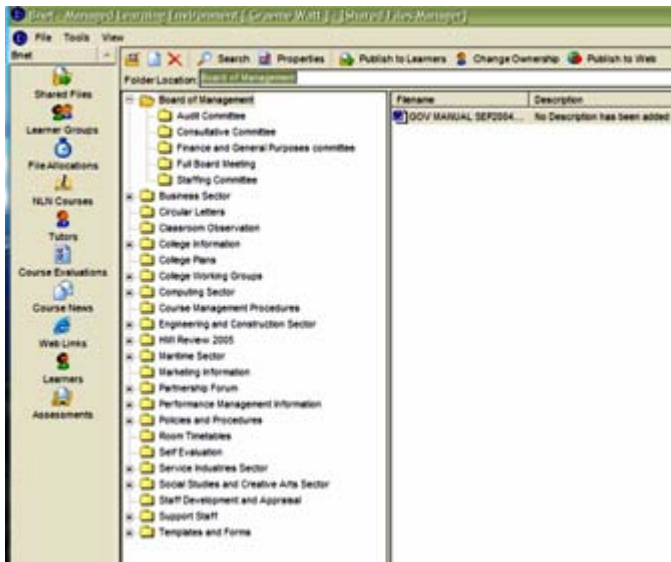
<sup>2</sup> [http://www.tribaltechnology.co.uk/html/products/education\\_systems/sits\\_vision.htm](http://www.tribaltechnology.co.uk/html/products/education_systems/sits_vision.htm)

<sup>3</sup> [http://www.microsoft.com/Net/industries\\_education.aspx](http://www.microsoft.com/Net/industries_education.aspx)

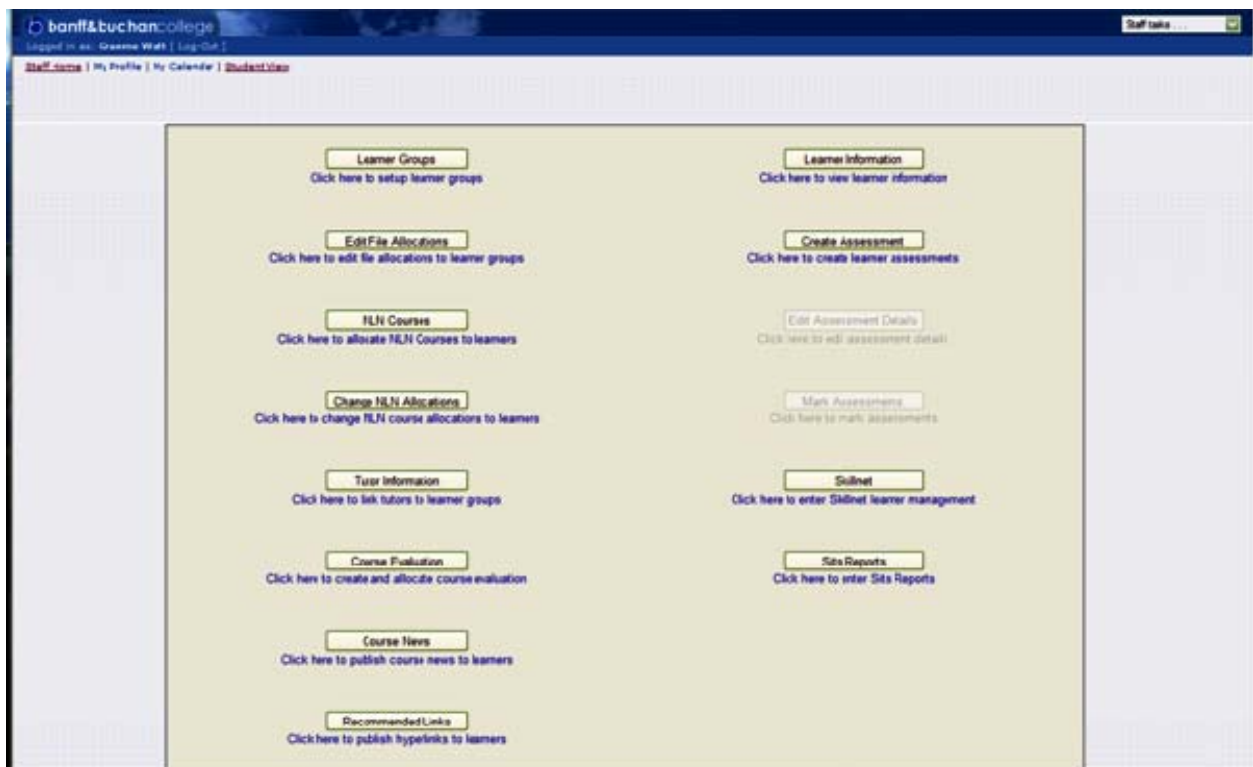
<sup>4</sup> [http://www.saba.com/products/learning/saba\\_learning.htm](http://www.saba.com/products/learning/saba_learning.htm)

<sup>5</sup> <http://www.sunsystems.co.uk/content.cfm?PageID=882>

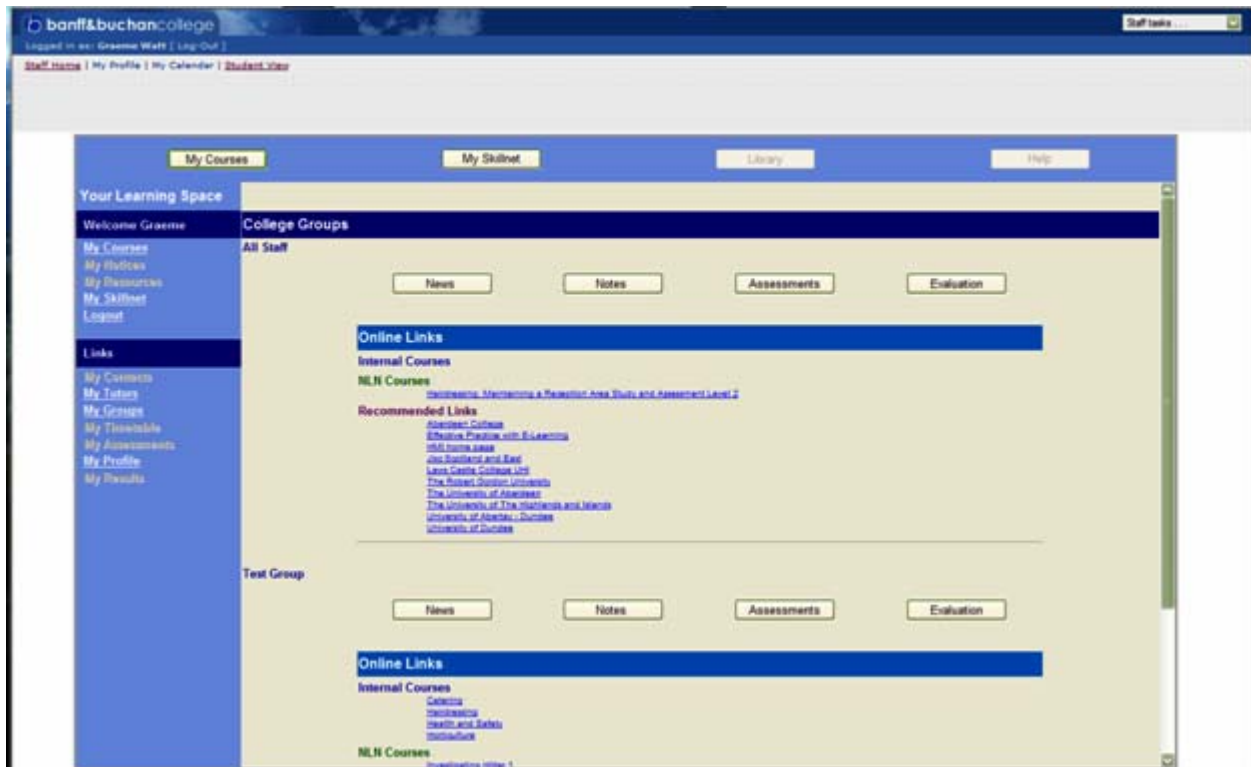
<sup>6</sup> <http://www.frontiersoftware.com/product.information/index.asp>



Screenshot 1: B-Net Staff Portal using Microsoft style navigation



Screenshot 2: Course Management Options



**Screenshot 3: Student view of B-Net**

### *Standards and specifications*

In 2002/03, Banff & Buchan College led a JISC SWaNI project in association with the Scottish University for Industry (SUfi)/learndirect scotland exploring interoperability between the student record system (SITS), the B-Net intranet and the SUfi Skillnet VLE/learning management system, using IMS Enterprise. Through this project, college staff gained experience and understanding of the role of specifications and standards, including IMS LIP.

Standards-based protocols are not used for internal data exchange. However, staff are aware of the benefits of a standards-based approach for third party data transfer, and are exploring data transfer protocols for articulation agreements with HE partner institutions.

### *Institutional strategy and policy*

MLE developments at Banff & Buchan College are driven at senior management level as an incremental and iterative process with no pre-arranged 'big blueprint'. Partly in response to data protection and freedom of information legislation, there has been a strong management steer to encourage staff to use the central student database to extract and store all learner information. Staff can only develop and maintain a bespoke database of student information if the main college student information system cannot provide what they require.

Curriculum planning takes place using a spreadsheet of courses, anticipated student numbers and projected funded student units of measurement (SUMS), and predictions based on past experience. Managers are reluctant to pursue a mechanistic approach to break-even course viability calculation as this could conflict with the college's inclusivity and widening participation agendas, and impact on the mission to provide the curriculum that is required by the local community.

### *Rationale and context for MLE development*

The college began to develop the functionality of B-Net in September 2002, at the start of the SWaNI interoperability pilot. Before then, the system had been limited to a shared area on the intranet, with no remote access. Discussions with SUfi during the interoperability project had a significant impact on the design of the system and interoperability requirements. Staff across the college were also engaged in dialogue about the functionality they required, and involved in the

ongoing development of the system. There is a three-year agreement to operate the Skillnet system in the college.

B-Net is basically a content management system. While the logic in joining up systems is recognised, developments to date have concentrated on curriculum and course management activities. Originally developed in PHP<sup>7</sup>, the code is now being translated to MS .NET for commonality with the Windows operating system, and to improve future-proofing. Students have automated and seamless log-in to B-Net through SITS.

The creation and maintenance of 'groups' is a key element in college organisation. Any member of staff can create a group as a combination of students and/or staff. Course materials, assessments, evaluations and other relevant documents can be created and assigned to particular groups. There are particular advantages in using this technology to reduce paper work for dispersed groups, and provide remote access to course materials and resources. Extensive and increasing use is being made of NLN materials and resources.

The college is also aware that students are starting to see the benefits to them of online resource provision, and the student voice is making increasing demands for materials to be available online across a range of curriculum areas.

#### *Access to resources*

In terms of estates strategy for ICT access, the college recognises that a larger, flexible resource is required. There are no obvious spaces that can be converted into an open access centre at the main college site, so use is made of portable trolleys with laptops, and wireless networking.

It was recognised that a reliable high speed connection to the college outreach centres was required. This was introduced in November 2002, using a Frame Relay connection back to the main college campus. This has ensured that all users of the MLE get equal functionality in any of the college's centres.

#### *Functional access issues*

Staff use of the B-Net system thrives on familiarity. B-Net is written to appear on screen as similar to MS Outlook – 'the more it looks like a Windows environment the less staff development we have to do'. Use of the system is not yet widespread in the college, but it is growing, facilitated by the Scottish Funding Council's (SFC) eMerge staff development programme to support colleges in developing their e-learning provision.<sup>8</sup>

Staff use Skillnet to access courses specifically for their own professional development, but also to experience the e-environment for themselves as they encourage learners to access online materials. The college is also aware of the need for IT staff development, recognising the changing nature of IT support over recent years from mainly system and software installation to complex network development and systems support.

## **Pedagogical Aspects**

#### *Curriculum and quality issues*

There is substantial use of online resources for engineering provision. Materials available in Skillnet are also used to support Business Studies students in particular areas, especially finance. They are also used as extension materials to challenge those making good progress and help them prepare for more advanced courses.

The college is involved in supporting CPD programmes for over 800 primary and secondary school teachers in Aberdeenshire, using Skillnet to access e-learning materials and log their CPD record. This functionality was a major driver in securing the CPD contract with the local education authority.

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<sup>7</sup> A scripting language used to create dynamic web pages

<sup>8</sup> See <http://www.emerge.org.uk>

NLN materials have set a benchmark for quality and accessibility. Staff in some curriculum areas are currently experiencing some issues with finding additional good quality resources to make available to classes and groups.

### *Support for learning*

One of the principal aims in developing online systems in the college is to provide as much information as possible to learners, to encourage them to take responsibility for checking and verifying the information held by the college, and addressing any issues as they arise. In this context, attendance monitoring is a key function of the system, which is being developed to enable students to view their attendance profile and issue a warning when attendance is about to fall below the level at which their bursary or EMA will be stopped. Digital cameras have been provided in outreach centres to produce student enrolment and identity cards without requiring attendance at the main college site.

### *Assessment*

Staff do not make use of online assessment engines at the moment, but are aware of developments in the area, particularly through the Scottish Colleges Open Learning Exchange Group (COLEG) Online Assessment Project (COLA) developed in association with the Scottish Further Education Unit (SFEU). Staff development in using online assessment methods is ongoing through the SFC eMerge programme.

## **Reflections**

### *Benefits and opportunities*

College managers are keen to exploit technology to reduce the administrative burden on all staff. They recognise that future IT strategies should now place less emphasis on procuring hardware, and more on making the system deliver meaningful efficiencies for staff and students.

### *Risks and challenges*

It is recognised that for systems development, interoperability depends on human interactions and communication as well as technical interfaces and compatibility. There is a need to review business processes and communication across the whole organisation.

One of the main risks identified by managers is that the development of the system and its components to date has been the responsibility of a small number of individuals in the college, with little general understanding of the processes, and little or no documentation available.

A number of challenges were encountered with file management in B-Net. Folder creation is restricted to senior managers and curriculum leaders, with all staff entitled to upload files once the folder has been created. The development of keywords for access to folders and materials is time-consuming and complex. Initially, management had to be quite ruthless in their judgement of acceptable keywords, but now that the system is operating successfully there is more flexibility, and compromises are possible to encourage more staff to make materials available.

Compared to larger colleges in urban areas, security not a major issue at Banff & Buchan College. Managers are aware that the introduction of security guards might generate antagonism and lead to a self-fulfilling prophecy of security issues that currently do not exist.

College risk management strategies include contingency plans for business continuity and disaster recovery through a premium for continued access to JANET and a ghost version of the Aberdeen Metropolitan Area Network (AbMAN).

### *Future plans and vision*

In a wider context, the college is reviewing its management information with a view to improving business processes in general. Managers recognise that the student information system is not used to maximum effect, and that a review of the college admissions system could enable further exploitation of the full functionality of the system on a 'capture once, use many' basis. A re-evaluation of college information management processes could recommend the development of one central information repository from which information could be extracted for various

purposes, such as prospectuses, course information, timetables and staffing arrangements. The launch of B-solutions business development initiative in January 2005 requires the development of a database of external clients linking to the student information system.

College strategic and operational plans include targets for the development of e-learning and flexible approaches. New systems all have to be able to interoperate and exchange data as appropriate. There are plans to join the library system to B-Net, and to continue to develop and populate the system with online resources. Managers are now starting to question whether a VLE is the most appropriate way forward for this college. There is some uncertainty about what a VLE can actually add to the functionality available through the in-house system.

In the longer term, the college is considering the implementation of online enrolment, and considering online payment systems such as WorldPay<sup>9</sup>, ultimately linked to the finance and student records systems. Opportunities are seen for linking bursary and fee information to the student portal, enabling students to access their payment profile and plan.

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<sup>9</sup> <http://www.worldpay.co.uk/>