

Periodic Review Report Template

School	CEIS
Discipline Name	Business and Information Systems
Date of Review	2 - 3 December 2009
Review Panel (approved by University Learning and Teaching Committee)	<p><u>Internal Reviewers:</u></p> <p>Peter Francis (Chair): Head of Department of Arts, School of Arts and Social Sciences;</p> <p>Gerhard Fehringer: Programme Director (Undergraduate Engineering), School of Computing, Engineering and Information Sciences;</p> <p>Alan Gregg: Principal Lecturer/Programme Manager (Nursing & Health Care), School of Health Community and Education Studies;</p> <p>Adam White: Students' Union Vice President, Academic Affairs.</p> <p><u>External Reviewers:</u></p> <p>Professor Helen Edwards: Professor of Software Engineering, Sunderland University/Principal Consultant, Hazel Insight.</p> <p><u>Facilitators:</u></p> <p>Sally Iles, Academic Advisor, Academic Registry;</p> <p>Simon Moore, Administrator (Reviews), Academic Registry;</p> <p>Nicola Robson, Assistant Administrator, Academic Registry.</p>
Method of Review	This review was conducted using the periodic review procedure defined in Northumbria's Review Handbook (2008 version), available from http://northumbria.ac.uk/sd/central/ar/lts/review/intrev/

Section 1	Discipline Aims and Context
<p>This Periodic Review, undertaken in line with Northumbria University Review Handbook guidelines, was carried out on the 2nd and 3rd of December 2009 and concentrated on the undergraduate and postgraduate programmes delivered by the Business Information Systems (BIS) Subject Area, one of seven subject areas operating in the School of Computing, Engineering and Information Sciences (CEIS).</p> <p>The School of CEIS was formed in December 2004 from a merger of the School of Engineering and Technology and the School of Informatics, including Business Information Systems that was originally part of Newcastle Business School. Since its emergence, the School has worked to develop coherent and robust subject areas delivering cost effective, current and high quality programmes at undergraduate and postgraduate levels. This process has involved the rationalisation and development of curricula and delivery frameworks, one of which is ongoing with current review of level 4 and 7 provision.</p> <p>With its previous connections to the Business School, and its location in the School of CEIS, the BIS Subject Area has similarly experienced a period of development and transformation, with a focus on rationalising the curriculum and its delivery whilst developing and maintaining sustainable and relevant programmes of study at undergraduate and postgraduate levels. This has involved enhancing some programmes and developing new areas for delivery in line with market trends and recruitment potential such as entrepreneurship. It has been informed by a strong connection with business and industry, and has involved developing formal mechanisms of employer engagement.</p> <p>The aims of the discipline are to provide a range of high quality vocationally orientated qualifications and to develop the professional and academic potential of students. As detailed in the SED, "programmes are</p>	

designed to equip students with the knowledge and skills to enable them to enter a range of careers in both technical and managerial roles or to pursue further study opportunities” (BIS, SED, 2009: 2). The Subject Area emphasises cross school collaborative working, research and enterprise informed learning, and collaboration with business and industry as central to delivering a range of programmes able to satisfy the growing demand from business and industry for ‘hybrid managers’, namely “graduates who have developed a balance between technical skills and business knowledge and are capable of understanding and delivering ‘future possibilities for information systems’ new business modules and solutions” (BIS, SED, 2009: 2, emphasis in original).

The eight programmes included in the review are as follows:

BSc Business Information Management (21FBIN-NBIM1);
 BSc Business Information Systems (21SBIS-NBIS1);
 BSc Business Information Technology (21SBIS-NBIT1);
 BSc Information Technology Management for Business (21SBIS-NIMB1);
 BSc Business Information Technology with Entrepreneurship (21SBIS-NBIT3ENT);
 MSc Business Information Systems Management (14FBIS-NBIS6);
 MSc Business Information Technology (14FBIS-NBIT6); and
 MSc Technology Innovation and Entrepreneurship (14FBIS-NTIE6).

The Subject area is responsible for 365 FTE students of which 96% study at the Newcastle City Campus with the remainder consisting of a small CV postgraduate provision at KDU, Kuala Lumpur, Malaysia. Of this overall total FTE student population, 72% comprise undergraduate students and 28% postgraduate students. The School manages targets at school level rather than programme level, thus the targets per programme are not particularly important although the School does look to have vibrant programmes across all areas. Thus the programme targets are very much for guidance rather than being ‘strict’ targets. The following tables present enrolment and target data thus:

Enrolments - Level 4 Only

	2007/8			2008/9			2009/10		
	Actual	Target		Actual	Target		Actual	Target	
BSc BIM	<u>40</u>	<u>30</u>	133%	<u>36</u>	<u>44</u>	82%	<u>47</u>	<u>40</u>	118%
BSc BIS	13	11	118%	13	17	76%	14	16	88%
BSc BIT	19	20	95%	26	24	108%	48	20	240%
BSc BITE	Not running			11	0		20	17	118%
BSc ITMB	10	15	67%	7	15	47%	10	15	67%
Total	<u>42</u>	<u>46</u>	91%	<u>55</u>	<u>56</u>	102%	<u>92</u>	<u>68</u>	135%

The postgraduate programmes are subject to significant fluctuation regarding recruitment as can be seen below:

Enrolments – Postgraduate

	2006/7			2007/8			2008/9			2009/10		
	Act.	Target		Act.	Target		Act.	Target		Act.	Target	
MSc BISM	0	0		7	0	-	30	6	500%	24	30	80%
MSc BIT	51	48	106%	34	62	55%	20	31	65%	29	26	%
MSc TIE	0	0		0	0		7	0		2	9	22%
Totals	51	48	106%	41	62	66%	57	37	154%	55	65	85%

In total BIS has 12 full time and 2 fractional members of staff. In addition, other academic staff in the School deliver specialist teaching relevant to BIS programmes, such as Database Design and Development and

Software Development. In return the BIS subject team provide specialist teaching such as Entrepreneurship and Information Systems and the Business Environment to a wide range of programmes within the School.

Line management is divided across the Subject Area and School. Grade 7 staff and below are line managed by the Head of Subject, who is managed by the AD Staff and Student Affairs, while other Grade 8 staff are allocated other line managers. The BIS Subject Area shares an undergraduate Programme Director with the ICM Subject Area, and a postgraduate Programme Director with the rest of the School. Programme Directors report directly to the AD Teaching and Learning. School Administrators and Technical staff directly support the academic staff. Managed by the School Registrar and two Principal Administrators, the administrative staff are organised principally into programme clusters, Learning and Teaching and Student Support Teams with the objective of enhancing the student experience and supporting programme delivery.

At the time of the review, three external examiners were principally responsible for the moderation of the modules which constitute the programmes.

The BIS subject team are located within Pandon Building where they deliver much of their teaching, although the specialist laboratory facilities and some classrooms in Ellison are also used. These facilities have been enhanced by a major £10 million refurbishment providing new rooms and hardware for both buildings and includes:

- Two double 48 seat IT labs;
- Four 24 seat IT labs;
- Separate specialist labs for forensics, games, multimedia, real time (Linux) computing, data base administration, maths, mechanical engineering, electrical engineering, computer networks and level 6/7 projects;
- One double 48 seat lecture room;
- One 24 seat class room;
- One flexible learning space;
- A large and popular Open Access Area with 165 PCs and Citrix terminals, specialist software in clustered sections for all programmes, and 24/7 student access via swipe card;
- Open access area in Ellison Building; and
- Hotspots throughout the Building for laptop use.

In addition to the major refurbishment of Pandon and Ellison Building, and following the School ADP of 2006/7, capital investment of £1.3 million over five years was agreed for further enhancements to the Schools facilities most of which are now in place.

Over the course of the review the panel met 14 academic staff, 6 members of the School's senior management team, 2 administrative staff, 7 students, 5 employer representatives and 2 graduates

Section 2

Curricula and Standards

The Panel identified the following strengths:

- The programmes reviewed are at the appropriate level and academic staff, students, graduates, employers and External Examiners confirm this.
- The Subject Area and School have relevant operational mechanisms able to ensure that the standard of each programme is maintained at a suitable level and where appropriate relevant subject benchmarks are adhered to.
- There is significant evidence of collaboration with external stakeholders including employers and it is evident that this adds value in ensuring that the programmes remain current and valid in light of developing knowledge in the disciplines, and that learners benefit from these collaborative arrangements through opportunities for placements.
- There is a developing vision for the Subject Area and a commitment to develop effective, current and relevant provision able to fit the needs of learners and employers.
- There is evidence that there are appropriate learning resources and that information technology is being capitalised upon to facilitate learning.
- Innovation and enhancement activity is taken seriously by the subject team as demonstrated by its use of pebble pad in modules, success in securing APT awards, delivery of entrepreneurship across its programmes and as acknowledged by students and employers.

The Panel made the following recommendations for further development:

The discipline should:

- Accelerate programme review and development across all levels to demonstrate distinctiveness in marketplace to students and employers.
- Further review arrangements for the marketing of placements to improve uptake and underpin the vocational nature of the programmes.
- Further embed formal employer engagement across all elements of undergraduate and postgraduate programmes from planning to delivery to evaluation.
- Bring forward the implementation of assessment rationalization and management across all levels and programmes.
- Develop an action plan for responding to External Examiners to demonstrate explicit closure of issues raised.
- Review workload of External Examiners.
- Reconsider the place and purpose of PRINCE2 within the curriculum.

Section 3**Management Information****The Panel identified the following strengths:**

- The discipline demonstrated its growing utilization of management information to inform action planning and business development, for example around BSc Business Information Management.

The Panel made the following recommendations for further development:

The discipline should:

- Encourage decisiveness in acting upon management information. Management information is used to inform discipline activities, and the discipline is encouraged to further use this data to inform its decision making about programme development.
- Manage effectively the process of recruitment and workload planning. As detailed in Section 1 there is variation in recruitment across programmes at undergraduate and postgraduate levels and the panel encourages the discipline to ensure that this does not impact negatively upon workloads within the discipline.

Section 4**Student Experience****The Panel identified the following strengths:**

- The discipline's investment in developing and delivering Entrepreneurship through its curricular and extra-curricular activities.
- The accessibility of staff, and student appreciation of staff responsiveness.
- The continuing improvement in information provided to students as demonstrated in school guides and programme handbooks.

The Panel made the following recommendations for further development:

The discipline should:

- Review assessment and feedback strategies in order to address assessment bunching and overload, and nature and timeliness of feedback.
- Ensure mechanisms are in place to communicate module and programme changes to the student body.

Section 5**Enhancement Strategies****The Panel identified the following strengths:**

- The discipline's innovations around supporting student reflective practice.
- The discipline's commitment to developing entrepreneurship across its provision.

The Panel made the following recommendations for further development:

The discipline should:

- Build on its strengths in developing and delivering learning through reflective practice.
- More formally embed peer support mechanisms as required by the university across the discipline team.
- Further utilise its strategic and employer partnerships as a vehicle to develop enhancement activity.
- Investigate the importance of feed-forward in supporting student learning and progression in and between levels.

Section 6	Discipline Response to Report
<p>Short summary response by Discipline on follow up action for inclusion in published report:</p> <p><u>Curricula and Standards:</u></p> <p>* Development area: accelerate programme review and development across all levels to demonstrate distinctiveness in marketplace to students and employers.</p> <p><i>Review of Levels 4 and 7 is complete. Review of Levels 5 and 6 is nearing completion and will be implemented for 2011/12 following consultation with External Examiners and the Employers Advisory Panel. The BIS programmes have been reviewed and the undergraduate portfolio reduced to two demonstrating clear distinctiveness.</i></p> <p>* Development area: further review arrangements for the marketing of placements to improve uptake and underpin the vocational nature of the programmes.</p> <p><i>This is an ongoing process, which is being driven by the School Executive. Programme Leaders are monitoring the take up of placements and actively encouraging students to engage. IS0523 will continue to be used to raise the importance of placements and to prepare students for the process.</i></p> <p><i>School action and guidance also now being discussed with ULT in order to raise the placement profile across a number of programmes.</i></p> <p><i>The recently appointed Enterprise Directors are augmenting and developing marketing placements to students. The development of a 20 credit level 6 module based on placement experience is under development and will be trialled within BIS.</i></p> <p>* Development area: further embed formal employer engagement across all elements of undergraduate and postgraduate programmes from planning to delivery to evaluation.</p> <p><i>This has been an ongoing and successful initiative over the last two years. Closer ties continue to be developed with leading software application providers and e-skills primarily driven via the Employer Advisory Panel supported by formal agreements.</i></p> <p><i>The use of guest lecturers / industrial speakers to further highlight to students the vocational relevance of their studies is being encouraged. Current examples of this include the e-skills guru lecture programme and use of external entrepreneurial speakers.</i></p> <p><i>Links with external organisations in the undergraduate and postgraduate consultancy project modules have been further strengthened.</i></p> <p><i>There have been increased links related to the music technology modules i.e. Sage Gateshead.</i></p> <p>* Development area: bringing forward the implementation of assessment rationalisation and management across all levels and programmes.</p> <p><i>Partially complete in line with the School ADP. Scheduled for completion in line with the programme review by the end of 2010/11.</i></p> <p><i>Every module has been subject to an assessment rationalisation exercise through the Levels 4 & 7 and Levels 5 & 6 reviews. This process will be maintained via the annual module review process.</i></p> <p>* Development area: develop an action plan for responding to External Examiners to demonstrate explicit closure of issues raised.</p> <p><i>External examiners' comments with respect to specific modules are included in the module review process and are included within the APM reports. External examiners' reports and responses are now presented at Programme Committees where actions are recorded in the minutes and reviewed at the following meeting.</i></p>	

* Development area: review workload of External Examiners.

This is now complete. The distribution of workload is reviewed annually and additionally upon retirement of External Examiners. Workload is agreed with them on this basis.

* Development area: reconsider the place and purpose of PRINCE2 within the curriculum.

This module is undergoing a further review in consultation with the University Copyright Clearance Centre. It is expected that revisions will be submitted to SLTA in February 2011.

Management Information:

* Development area: encourage decisiveness in acting upon management information. Management information is used to inform discipline activities, and the discipline is encouraged to further use this data to inform its decision making about programme development.

Management information is used on a regular basis to monitor emergent trends and this informs the subject team ADP, which each subject team is required to produce. This ADP directly inputs into the School ADP.

Key statistics for each programme are now included in the APM and reviewed by the Committee.

* Development area: effective management of the recruitment and workload planning process.

The design of programmes at both postgraduate and undergraduate levels maximises module efficiency and helps to mitigate against fluctuation in recruitment across programmes.

A major review of the programme portfolio has now been completed across the School to rationalise where student numbers are low. This situation will be monitored on an annual basis ensuring further rationalisation is carried out where appropriate.

Student Experience:

* Development area: review assessment and feedback strategies in order to address assessment bunching and overload, and nature and timeliness of feedback.

This forms part of the School wide review which is ongoing. Assessment and feedback matrices are being produced for each programme to help identify where assessment bunching may be taking place.

The assessment and feedback matrices have been included in Programme Handbooks. They have facilitated the identification of assessment bunching and requests for minor amendment by students' representatives.

* Development area: ensure mechanisms are in place to communicate module and programme changes to the student body.

Major changes are communicated via the Staff – Student Liaison Committee and Programme Committee Structures within the School. Minor programme changes are communicated via the School Office and the eLP School community site and minor module changes via module eLP sites.

Enhancement Strategies:

* Development area: build on its strengths in developing and delivering learning through reflective practice.

Reflective practice is incorporated into appropriate modules as they are subject to review. This forms part of the assessment review and the regular module review cycle.

* Development area: more formally embed peer support mechanisms as required by the University across the discipline team.

All staff are expected to participate in the staff peer support scheme and to complete the supporting documentation.

* Development area: further utilise its strategic and employer partnerships as a vehicle to develop enhancement activity.

Opportunities are being taken to incorporate employers into suitable modules for the purposes of adding value e.g. SAS in Business Intelligence; SAP and HP in Enterprise Systems.

Two 20 credit modules have been developed, one at each of levels 5 and 6 and further developments are level 7 will reinforce and build further upon these partnerships.

* Development area: investigate the importance of feed-forward in supporting student learning and progression in and

between levels.

Levels 5 and 6 induction activities are to include reflection upon the differences between levels of study and how feed-forward from previous study can be used. Continuing students are encouraged to participate in induction activities in which they reflect on the skills they have learnt in previous years and how these will be used in forthcoming modules. Placement reports and poster events at Level 6 induction encourage this activity and also benefit the Level 5 students who participate in this event.

An example of feed-forward throughout the programmes is the core element of project management. The first year module is being extended to become year long. The skills learnt will be fed forward into a number of modules and progressed further e.g. the consultancy module, enterprise project management. This leads further into the placement year and finally into the dissertation.

Professional and academic skills (including the importance of feedback and feed-forward) are explicitly supported within the modules IS0472 'Skills for the Information Professional and IS0523 Professional Development Planning for IT/IS professionals.