

USER NEEDS STUDY

How JISC could support Business and Community Engagement

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Executive Summary.....	3
1. Terms of reference of the study and the report.....	3
2. Methodology	3
3. Findings	4
4. Recommendations.....	6
1. Terms of reference of the study and the report.....	8
2. Methodology	9
3. The Nature and Characteristics of Business and Community Engagement	12
4. How BCE uses ICT.....	19
5. What sort of ICT support is needed in BCE?	21
6. Where do BCE practitioners get ICT help from now? And whose job is it to support them?	32
7. Knowledge of JISC	36
8. How JISC promotes itself	43
9. Findings	47
10. Recommendations.....	49
List of Appendices	51
Appendix A	52
Appendix B – Glossary of Acronyms.....	54

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Executive Summary

1. Terms of reference of the study and the report

1.1 The study was set up to explore the following issues:

- How ICT could support communication and collaboration in Business and Community Engagement (BCE) activities (whether through JISCmail or through blogs, Web2 applications, or other interactive environments).
- The perceptions of ICT experts in JISC and HEIs about issues around and barriers to reaching out to non-university organisations.
- The perceptions of ICT gatekeepers in HEIs about their understanding of BCE and what could be done to ensure that BCE practitioners are aware of opportunities to exploit ICT and JISC services.
- Identifying the barriers which face HEIs trying to put BCE activities together and how JISC applications could support the HEIs in their BCE activities.
- Institutional data and cross-sector communication (including firewalls and control of access to intranets).
- The nature and scope of current and planned activity in JISC, and how JISC services could help HEIs' BCE programmes.
- BCE activities in HEIs in Scotland, Wales, and Northern Ireland.
- How BCE activities operate across individual HEIs (through a small sample of case studies).

1.2 It was agreed that the research could be encapsulated in simple terms by asking the following question:

If the Business and Community agenda is about extending the boundaries of HEIs' activities, where are the pain points, and how could JISC Services help to ease the pain?

2. Methodology

2.1 The methodology adopted for this research built on the quantitative and qualitative data already obtained in the Scoping Study. Further surveys, one-to-one interviews (telephone and face-to-face), scrutiny of a variety of websites and items of literature, attendance at a number of committee and network meetings and at the JISC Conference were all used. In total 126 people were interviewed and 184 responded to a variety of surveys. This included:

- Two online surveys of Computer and IT Services staff, Librarians and Learning Technologists, one aimed at FE and the other at HE, to which a total of 154 people replied, from 103 institutions in England, Scotland, Northern Ireland and Wales¹.
- A small-scale survey of, and one-to-one discussions with, 14 people involved in Community Engagement activity.

¹ See Appendix A for the full list of institutions.

- Telephone or face-to-face interviews with 34 people at 10 institutions selected to represent a cross section of types of institutions and to provide further information to illustrate the variety of ways in which BCE is organised within institutions. Findings from these Case Studies are incorporated in the report, but they are not presented in full in order to preserve the anonymity of respondent institutions, which are at variant stages of development in the process towards embedding BCE.
- Telephone interviews with 26 people working in various ways within BCE who responded to the Scoping Study survey.
- Telephone interviews with seven Librarians, Computer Service staff and Learning Technologists to inform the design of the survey, and follow up phone interviews with ten further respondents to the survey to gain additional information about certain key questions.
- Telephone interviews with representatives of each of the 22 Centres for Knowledge Exchange (CKE).
- An online survey of the 104 Knowledge Transfer Partnership (KTP)² offices in HEIs throughout the UK (with a return rate of 18%).
- Meetings and discussions with members of JISC staff, including the heads of the Advisory Services, senior representatives of MIMAS, JISC Marketing, the lead for BCE developments within JISC, the head of e-Learning, the BCE Working Party.

3. Findings

1. The conclusions from the Scoping Study still hold.
2. The way that BCE is carried out across and within institutions is complex and complicated, and will become increasingly so as this work is further embedded within the work of institutions. This creates a challenging and difficult area of work for JISC to engage with and from which to deliver measurable outcomes.
3. The number of people dedicated to BCE, although relatively small in relation to the total number of staff employed in HE and FE, is growing, and through the work of the IKT will become increasingly professionalised and recognised.
4. JISC needs to understand how its market and audiences are differentiated and segmented, and respond in a more tailored way to ensure greater awareness of its work and services.
5. JISC services are not always joined up or cross-related. Thus at the moment the Advisory Services are individual services working in different areas, and are not presented as a co-ordinated set of services under one umbrella, separate from all the other JISC activities (*cf* JISC Collections, which has its own website).
6. Potential users have great difficulty in understanding JISC terminology.
7. A significant number of respondents expressed the view that JISC's publications and website were written in language which was more suitable for JISC staff than for the practitioners who were the indicated audience.
8. JISC could have a more explicit interpretational role. Practitioners need help in acquainting themselves with and understanding ICT applications and would welcome something that is a straightforward summary of new developments with examples of

² See the Glossary at Appendix B for explanations of acronyms.

applications (like the Educause “Seven things you need to know about....”³). Whilst this should not necessarily be accomplished through the RSCs, the models for communication and brokering used by the RSCs could be transferred to other aspect of the JISC’s activities.

9. Constraints on users’ time are highly significant – people supporting and active in BCE do not have time to search for and understand what is possible. At the same time, as the use of ICT becomes more and more extensive and resources increasingly migrate to electronic format, the key intermediaries that JISC prioritises in its communication strategy, i.e. IT/Computer Service staff, Librarians and Learning Technologists, are increasingly stretched and the strategic priorities of such staff may not be ones which address the range of interests of BCE staff.
10. There is now even more interest in CRM, with Business and Community focused units at different stages of development. In some cases HEIs have already committed to substantial investment in new, institution-wide systems, so further work by JISC would need to take account of this and look at what is already happening. Equally, some institutions are only just looking into CRM and would welcome guidance on the choice of appropriate software and systems.
11. Web2 technology is developing and becoming of growing interest to end users. However, many BCE staff are interested in a wide range of ICT tools for collaboration, including more established technologies such as web technologies and video-conferencing, etc. In addition, the nature of the ways in which these technologies might be used may vary between Business and Community Engagement. At this time interest in Web2 seems to be greater in Community than in Business Engagement.
12. Concerns about legal and security issues related to the use of JISC and HE funded services and resources in work with businesses and the community are also becoming more noticeable.
13. Issues about licensing, exploitation and legal matters are not just about clarification, but about opening up access to commercial and wider use, especially to users in less well resourced domains such as SMEs and the voluntary and community sectors.
14. Responses to surveys indicated that there is a desire for an integrated and accessible package of training opportunities.

³ http://www.educause.edu/content.asp?page_id=7495&bhcp=1 “7 Things You Should Know About...pieces provide quick, no-jargon overviews of technologies and related practices that have demonstrated or may demonstrate positive learning impacts. Any time you need to explain a new learning technology or practice quickly and clearly, look for a 7 Things You Should Know About... brief from ELI”

4. Recommendations

There are a number of recommendations which flow from this work. The JISC should:

1. consider sustaining a specific focus on the needs of BCE and extending the life of the BCE Working Group to support this, because as BCE work becomes more embedded in institutions it may become more difficult for the JISC to isolate its specific needs.
2. give careful consideration to how it addresses the interests of BCE staff when their priorities are not the same as those of the IT Services in institutions.
3. in order to establish and sustain communication channels with BCE staff, both continue to work through intermediaries such as Computer Services, Librarians and Learning Technologists, but also develop its relationships with representative and professional bodies such as the HEFCE BCE Good Practice Networks, AURIL and the IKT. The JISC should also consider how it can, through such links, offer support to BCE intermediaries such as business development managers and KTP managers to improve their understanding of the ways in which ICT might contribute to effective BCE activity.
4. create a JISC Advisory Centre to bring together information about the JISC services, and to act as a one-stop shop for academics and others seeking advice about how JISC could support their BCE-related activities.
5. consider differentiated navigation through its website, so that different users can find what they are interested in more quickly. (For example, in the same way that most HEI websites support navigation for users based on their interests such as employers/prospective students, current students/staff, etc.) It may even be that more than one website is needed, to separate out the very technical information, invitations to tender etc, from the more promotional content about JISC funded services, etc. It is recognised that each service has its own website, but as already mentioned, it is not always easy to understand the relationship between them.
6. find ways to respond to bottom-up expressions of need from academic staff – through helping them find out about what might be possible.
7. categorise services to make them more manageable, and do it from a user's perspective.
8. promote the Advisory Services as one discrete set of services, and get them working together more effectively so that they work as a package and do not overlap or compete.
9. consider how internal staff development activities could support JISC staff in understanding better the context within which BCE practitioners are operating and can quickly raise levels of awareness so that it becomes routine to consider the needs of BCE in programme planning and service enhancements.
10. produce toolkits or guidance to help BCE practitioners evaluate software applications, and in particular CRM systems.
11. pursue work on CRM, since this is clearly a sector wide and immediate need, which will help not only to improve BCE activity but also to integrate it in a more strategic way into the work of institutions. At the same time ensure that the guidance helps institutions implement CRM systems in a way which integrates with other institutional systems in line with the e-framework strategy.

12. pursue the planned Social Software pilot, but recognise that this appears to be of more interest to people involved with Community Engagement than Business Engagement.
13. pursue plans to support the effective exploitation of Web 2 technologies, but recognise that most of the respondents in our research had little experience of it and little time to develop applications for it. They therefore need information in non-technical terms with practical examples of how this technology might support BCE activity.
14. pursue work on licensing and legal issues, but widen this to consult about issues of widening access to people outside the HE/FE community.
15. co-ordinate training opportunities in order to promote an integrated training programme (they are currently scattered around the services).
16. provide more support and development for intermediaries (Librarians, IT specialists, *etc*) to help them understand BCE.

User Needs Study

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1.3 In the six months which have passed since our Scoping Study and first report, we have seen the shift in terminology from 'Third Stream' to 'Business and Community Engagement' (BCE). This reflects on-going and progressive embedding of BCE activities in the missions and operations of HEIs. The research was focused on the potential of JISC Services and ICT applications to support HEIs in their BCE activities, but, as in 2006, research was complicated by the fact that what constitutes BCE is inconsistently understood across the sector (see Section 3).

1.4 This report presents findings from research conducted as an extension of the scoping study carried out in 2006.⁴ The findings from the first phase of research have been further analysed for this report and incorporated within it. New material includes analytical material acquired through interviews conducted with respondents to the original survey who expressed their willingness to be consulted personally. Further survey work has also been conducted with the purpose of exploring the perceptions of significant players, including Computer and IT Services staff, Librarians and Learning Technologists, operating at different points in the spectrum of HE activities around BCE.

⁴ Stephen Hill and Julie Farmer, *JISC Services and Third Stream, Evaluation Report*, 1 September 2006

2. Methodology

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Difficulties encountered: “Survey overload”

2.2 UCISA and SCONUL were both helpful in circulating the invitation to the online surveys, but both reported that they were dealing with two or three other requests for surveys on the same day. In Scotland, HE staff were in the throes of completing a very detailed e-Learning survey for the Scottish Executive. JISC Marketing is now monitoring this, and noticed that our surveys went out at the same time as several others from JISC. This, we expect, has had an impact on the take up of the survey, although the numbers of returns achieved are sufficient to give us a reliable picture of the situation.

The Surveys

2.3 As the Scoping Study illustrated, and as further sections of this report will discuss, the range and number of people involved in BCE is extensive and distributed throughout all institutions within the HE and FE sectors. In addition, the titles by which such people are known are varied, and they are located within a wide range of different organisational structures, sometimes working closely together, and sometimes working in units which have little or no contact with, or even knowledge

⁵ See Appendix A for the full list of institutions.

⁶ See the Glossary at Appendix B for explanations of acronyms.

of, each other. There are relatively small numbers of staff involved in the management and administration of BCE, but much greater numbers of academics who actually carry out the work and who are typically distributed across departments and faculties throughout institutions. Focusing on staff who are in roles which are dedicated to Knowledge Exchange/BCE is therefore relatively easy, but obtaining the views of individual academics who at various times may be engaged in the direct work with employers or the public through BCE-related projects is extremely challenging. In order to reach the first group of people for the Scoping Study we circulated survey invitations through appropriate representative organisations such as the Association of Business Schools (ABS), AURIL, KTP Regional Offices, etc. The very wide range of types of activity and the names given to them was illustrated by the responses to that survey; and, although 8 categories were provided, 41% of responses were in the “other category”⁷.

2.4 This further demonstrates the wide-ranging nature of BCE, and creates challenges for further analysis of the data. It was therefore decided to cross-tabulate the responses by the respondents’ self-ascribed balance of Business or Community Activity (categories offered were Mainly Business, Only Business, Mainly Community, Only Community or Business and Community Equally). All respondents identified their activities as falling into one of these categories, and the categories also proved useful for drawing out any differences of knowledge or preference between the specific foci of activity. For reporting purposes, the category of Only Business was merged with Mainly Business to create “Business”, and Only Community merged with Mainly Community to create “Community”. “Business and Community Equally” is reported as B&C. The raw data from the Scoping Study, cross-tabulated against these categories, is available at Appendix C.

2.5 The Scoping Study showed that levels of awareness of most of the key JISC services were very low, although there were quite high levels of interest in finding support for a variety of aspects of the use of ICT in BCE activity. The view was taken that the best way forward was to make more detailed use of the data that emanated from this study, backed up by in-depth interviews with respondents to the survey who had agreed to be contacted. 40 respondents were contacted, and semi-structured telephone interviews were carried out with 26 of them, ensuring as far as possible an even representation of the various types of BCE activity. In addition, 24 further interviews were carried out with representatives of BCE (at least one of each) in ten HEIs to provide further data and to inform small-scale institutional case studies. In addition, account was taken of the fact that the Scoping Study had made it clear that there were key people within institutions whose roles were significant in mediating information emanating from JISC, and in supporting any developments in the use of ICT in BCE activity. These included Librarians Computer and IT Services staff, Librarians and Learning Technologists.

2.6 It was agreed, therefore, that there should be a survey of these staff designed to find out more about their role in supporting BCE, including promoting information about JISC. Two almost identical surveys were set up to cover FE and HE, and these were distributed through a number of relevant JISCmail groups (JIBS User Group, UCISA, SCONUL and the ALT), as well as through the JISC Regional Support Centres in order to reach staff in FE. In some cases the RSCs were not able to help, and this has impacted on the FE results; thus there are significant numbers of respondents from the Southwest Region, but no respondents from London. The raw data from these surveys is available at Appendices D and E. It is presented in the form of the cross-tabulation against the three types of staff (Computer Services, Librarians and Learning Technologists). In the HE survey, respondents were fairly evenly distributed between the three areas of expertise, and 26% of respondents were in the “other” category. The list of units where respondents were employed indicates a growing convergence of these roles, as well as illustrating that some are based within academic faculties or schools.

⁷ See Appendix C for details.

Table 1: Survey of Computing/IT Services, Librarians and Learning Technologists: The Institutional base for HE respondents in the “other” category for the question: “The Type of department/unit/service you work for”.

Institutional Base	Number
Based in Faculties or Schools	12
Combined services (computing/library/learning technology/media/AV/Student IT Support/careers)	6
Learning & Teaching Department/development Unit/production unit/technology research	5
Educational Development	2
Library, Archives, Museums	1
Staff and Educational Development	1
A pan-university institute	1

2.7 54.9% of the respondents to the FE survey were Librarians, with 21.6% Computing/ICT Support/Services, and 11.8% Learning Technologists. The 11.8% in the “other” category represented a number of different services, as in Table 2. For this reason, the “Other” category is included in all the reported data from these surveys, and the significance of these converged roles commented on where appropriate.

Table 2: Survey of Computing/IT Services, Librarians and Learning Technologists The Institutional base for FE respondents in the “other” Category for the question: “The Type of department/unit/service you work for”.

Institutional Base	Number
Integrated Learning Centre	1
Learner Services	1
Library and Reprographics and Media Resources	1
Quality and Staff Training	1
Whole College	1
Work Based Learning	1

3. The Nature and Characteristics of Business and Community Engagement

Business needs are fast-changing and responsive, but universities move slowly.

'It's a relief to see that the Third Stream is being called Business and Community Engagement, but I'm fed up with being told we have to secure culture change, when we need support to do what we do already more effectively.'

Definition

3.1 Business and community engagement (BCE) comprises a wide range of different areas and different institutions have interpreted the scope of the activities in different ways. Some have focused mainly on business and commercial engagement, while for others the scope covers areas such as public engagement (including communication of research findings to the broad public), widening participation, access, and lifelong learning. For the purposes of this study we will follow the HE-BCI Survey definition. This survey defines BCE as covering a range of activities 'from the commercialisation of new knowledge through the delivery of professional training, consultancy and services, to activities intended to have direct social benefits'. 'Business' in this context refers to both public and private sector partners of all sizes and sectors, with which HEIs have a broad spectrum of interactions. 'Community' in this context is taken to mean society as a whole outside the HEI, including all social, civic and cultural organisations and individuals.'

3.2 Over the past three or four years there has been considerable growth in this area of work, the HE-BCI survey of 2003-04 reported around 5,000 dedicated staff, and it seems reasonable to expect that this number has grown since then. Almost all institutions now include BCE in their strategic plans. The change from 'third stream' to 'business and community engagement' indicates that the activity is now becoming embedded and is seen as a central function of HEIs. In parallel with this development the role of people working in KT or KE is becoming increasingly professionalised, marked by the recent development of the Institute of Knowledge Transfer and the publication of the Continuing Professional Development Framework for Knowledge Transfer Practitioners. A point to note is that the functions described within this framework include quite sophisticated levels of IT literacy. However, there continues to be a variable and unknowable number of academics who are involved in BCE activities at any one time, while at the same time quite possibly also pursuing their research or teaching activities. BCE staff who were interviewed consistently reported figures of core staffing of anything between 5 and 40 people on the business side, generally much smaller figures of 1 to 5 on the community side, but with quite often the whole academic body of an institution as potential participants in activities. They also reported variously being actively engaged with anything from 20 to 100, and occasionally more, academics at any one time. These academics could be from any discipline, and performing a variety of roles and functions, as discussed later in this section in the paragraphs on activity.

Funding

3.3 Funding is divided between core and 'soft money' (mainly HEIF, ACF, and ESF). Some institutions use the 'soft money' for projects ('risk activities') while staffing is core funded, but in others the BCE activity is entirely dependent upon it. There is some income generation in some institutions but in general this does not support practitioners across the sector. There is therefore the question of whether all of this activity would survive if the funding streams were withdrawn. The fragility of units operating in BCE is well illustrated by the significant reduction in the size of units in at least two institutions between last year's survey and this one, and respondents expressed anxiety, for example, about the amalgamation of the Active Community Fund (ACF) into the Teaching Quality Enhancement Fund (TQEF). Equally, HEFCE's intention is to move to formula funding for this activity, as it is embedded within the overall work of an institution, and institutions will therefore have more discretion about if and how it is carried out. If BCE becomes

fully embedded and less visible as a separate strand of activity, this will have the potential to make it harder for the JISC to identify discrete projects with BCE, and also more difficult to report clear and measurable outcomes and deliverables for any projects specifically funded to support BCE activity.

Where is BCE situated?

3.4 The permissive approach to the development of BCE has created issues in that it is not situated in the same way in different institutions. There is very variable practice within HEIs about where those working in BCE are located, and about how they fit into institutional structures. KE-related units may be described in terms of innovation, research development and support, business development. The distribution of KE-related functions tends to reflect the management structures of an HEI. Thus, where management structures are “tighter or flatter”, BCE activity is generally more coordinated and centralised. Some sections are placed within a faculty, while others constitute a separate service, which may report to central university management. Those on the business side may sit in a separate unit or wholly or partly owned company, or within an amalgamation of both. Some BCE staff have an integrated function across the whole or part of an institution. Community practitioners may sit within Lifelong Learning, Careers, a Communications and Marketing Section, or Central Administration, or may belong in a separate Outreach Centre or Community Engagement unit. Thus, there is no simple way of accessing all those working in this disparate field.

3.5 In general, the two sides of BCE work independently of each other, and, indeed, case studies show that the staff may even be unaware of who else within their own institution is involved in the other activity (or even the same activity). Further there is indication that in some institutions there may be much engagement (particular BE) happening which is independent of any central KT office or equivalent. One HEI quoted the extensive links between individual academics and industry because of its status as a research-led institution, and stated that the work of the unit, styled as Research Development Services, played only a small part in the overall engagement of the institution with industry. The academics involved in BCE activities and partnerships may, simultaneously or sequentially, be involved in a fluid range of activities (from communicating research, to teaching with businesses and the community – as well as being on the sharp end of the CRM systems - entering data *etc.*)

3.6 Case study examples: three contrasting HEIs

HEI1: Community engagement comes under a Centre for Lifelong Learning which covers three educational areas of work – a Foundation Studies Unit, Outreach, and schools related work. A new Regeneration Hub will comprise three areas – community regeneration, building projects, education. The three sections are separate but will provide a brand name to outsiders, so there will be one gateway. Business engagement is dealt with through the commercial services office, the traditional interface of the university with business and a department within the university, while work which attracts VAT goes through a wholly owned subsidiary. Business and community are totally separate but work closely alongside each other within same building.

HEI2: The business unit, which fits into research and business services, provides a single point of entry for anyone with a business related enquiry and acts as an interface between them and the academic community. It reports through a steering group to Senate committees. The community section covers the following basic areas - careers/employability, continuing professional development, courses for business, widening participation, research in Primary Schools Science, and also has academic function. It is part of the Academic Secretary's Office but for academic issues comes within a Social Studies Faculty.

HEI3: The institutional strategic plan demonstrates that there is high-level commitment to BCE as an integrated and embedded activity with careful thought having been given to striving to integrate BCE across institutional functions and organisational units, whether these are in academic contexts or support services. There are separate units covering lifelong learning, regional affairs and knowledge exchange, all of which are highly active in supporting and conducting BCE activities. Although the strategic plan claimed a high degree of inter-connectedness between these units, they are located in widely separated buildings, and members of staff in one unit were unaware of the activities of the two other units. Staff in all three units reported that, whilst they were able to support BCE activities undertaken by recognised groups of academics (referred to by one unit as 'the usual suspects'), there was need to conduct an institution-wide audit in order to establish the scope and nature of activities in order to secure fuller articulation and greater effectiveness.

Centres for Knowledge Exchange (CKEs)

3.7 There has been a growth in Centres for Knowledge Exchange. Again the 22 CKEs are nearly all different in approach, structure and function, reflecting their different missions. The range of activities covered includes technology and academic transfer, business start-up and development, school education links, social inclusion, commercialisation of university software, and provision of web and digital solutions for business. There are some CKEs dedicated to technology transfer, and these clearly have significant ICT expertise of their own. About 40% are linked to business organisations, through their websites, and act as links between external partners and the host universities. Some have minimal links and six have partners in Further Education. They may have only a small core staff but are working potentially, and at various times, with thousands of academics within institutions (who are of course teaching or researching during the rest of the time). It is indicative of the complexity of the portfolios of the CKEs that some are striving to articulate the KE activities of up to eight HEIs. This approach to inter-institutional working demonstrates how the CKEs can operate both regionally and nationally, and has generated a need for experimental approaches to partnership working, with four CKEs actually developing their web services entirely outside the JANET network.

3.8 The effectiveness of the CKEs is still to be gauged, but they do represent the growing development of organisations which are expected to work with a number of HE institutions (and in some cases FE) and have an identity independent of any one of the partner institutions. In some cases this represents regional working and in others national working. This in itself has been making more obvious the problems of using JISC- and HE-funded services which such ways of operating may encounter, in addition to the problems of working in partnerships with business and community organisations.

Working across the boundary

3.9 BCE practitioners work with a wide range of partners, contacts and networks. By definition, the majority of these relationships are with organisations external to an HEI or FEC. Core staff make contact with and respond to queries from businesses or community organisations. Thousands of academics are involved in research projects with businesses, brought about through a variety of mechanisms and arrangements. Clients or partners may include groups of non-traditional students, employees in business contexts, graduate students undertaking work placements linked to businesses in a Knowledge Transfer Partnership, or undergraduates undertaking voluntary work in the community, or working with community groups on research or regeneration projects. Other BCE partners may be academics in the same institution or in other institutions, or public bodies such as development agencies or local authorities. Other networks may be communities of practice or groups working in the same field, or professional bodies. Many work with or act as brokers for work with schools. Networks of alumni also feature in BCE work. Many Librarians also consider themselves to be part of this agenda, as they work to open up their libraries and services to the public.

3.10 In all of this activity staff find themselves working across the boundary between the HE and FE sectors and the world of commerce and community. In some more recent developments this is particularly marked, such as the significant focus on community education in Wales, or the regional or sub-regional focus of many of the CKEs (echoed also by the structures underpinning Lifelong Learning Networks and Aimhigher Partnerships). This has brought with it a number of challenges associated with the technical and legal use of ICT which are discussed later in this report.

Activities

3.11 Again there is a wide range of different activities covered by BCE practitioners. On the business side, this ranges from specific work for business partners (e.g. advising a bank on business proposals or research for the aerospace industry), to general provision of staff CPD, short courses, product evaluation, work with partners on product development or commercialisation of ideas. Research and development for the market place forms the main focus of this aspect of BCE.

3.12 For example, one institution has a Corporate Development Centre the work of which encompasses: Consultancy, KTP, Enterprise Fellowship Scheme; Placements; Research; Training (CPD and commercial training programmes, and some programmes specifically for SMEs); Knowledge Exchange (part of a CKE); Foundation degrees, business solutions, short courses. It is also linked to a Technology Innovation Centre and research academics based in seven faculties and six research centres within the institution.

3.13 Community engagement spans short courses for non-traditional students, liaison with young people in schools or colleges, projects with community groups and work with volunteers, public lectures, the opening-up to the public of HEI-owned facilities such as museums and botanical gardens), as well as research with and within the community. This last can range from straightforward Knowledge Transfer activity communicating the outcomes of research to the public, to more bottom-up and two-way activities involving research with, rather than on, the community, and to co-generation of knowledge involving research on issues of public interest, which may have been suggested by community-based organisations. Widening participation often forms one of the core activities of community engagement. It is, accordingly, difficult to draw meaningful boundaries between this and other forms of community-focused activity. Much of this work has grown from traditional forms of outreach, such as continuing education, and demonstrates an ongoing interest in the technologies developed to support teaching and learning.

3.14 As Table 3 demonstrates, the level of involvement in various types of BCE activity varies between units with a mainly business or community focus. For example, 70% of the Business category is involved in KTPs, 62% of B&C, but only 24% of Community. Involvement in e-Learning ranges from 64% for B&C, to 40% for Community and only 22% for Business. Not surprisingly, Community involvement in the most obviously business-related activities (Business start up, etc) is consistently less than 20%.

Table 3: Scoping Study Survey: Types of Business and Community Engagement activities undertaken – the number of times a BCE activity was mentioned by respondents as part of the remit of their unit, cross-tabulated by main focus of activity and ranked in descending order.

Mainly Business/Only Business	No of units involved (% of total)	Business and Community equally	No of units involved (% of total)	Mainly/only Community	No of units involved (% of total)
Knowledge Transfer Partnership	70% (42)	Public/community engagement	87% (34)	Public/community engagement	68% (17)
Business/organisational development	68% (41)	CPD for employees of external business organisations	77% (30)	Developing or supporting community/ies of practice	60% (15)
CPD for employees of external business organisations	58% (35)	Developing or supporting community/ies of practice	77% (30)	Work-based learning	40% (10)
Business start up	58% (35)	Work-based learning	67% (26)	e-Learning	40% (10)
Product development /exploitation	58% (35)	Business/organisational development	64% (25)	CPD for employees of external business organisations	32%(8)
Business – spin-out	55% (33)	e-Learning	64% (25)	Research communication	32%(8)
Development of research capacity in a business or community organisation	45% (27)	Knowledge Transfer Partnership	62% (24)	Knowledge Transfer Partnership	24%(6)
Work-based learning	43% (25)	Business start up	54% (21)	Business start up	16%(4)
Business incubation	42% (25)	Development of research capacity in a business or community organisation	51% (20)	Product development /exploitation	16%(4)
Public/community engagement	40% (24)	Business incubation	51% (20)	Science communication	16%(4)
Research communication	38% (23)	Product development /exploitation	46% (18)	e-assessment	16%(4)
Developing or supporting community/ies of practice	33% (20)	Business – spin-out	41% (16)	Business incubation	12%(3)
Centre for Knowledge Exchange	32% (19)	Research communication	36% (14)	Development of research capacity in a business or community organisation	8%(2)
e-Learning	22% (13)	Centre for Knowledge Exchange	33% (13)	Centre for Knowledge Exchange	8%(2)
Science communication	22% (13)	Science communication	26% (10)	Business/organisational development	4%(1)
e-assessment	15% (9)	e-assessment	26% (10)	Business – spin-out	4%(1)

KT, KE and co-generation of knowledge

3.15 The Office of Science and Technology (OST) offers a narrow definition of knowledge transfer as being ‘about transferring good ideas, research results and skills between universities, other research organisations, business and the wider community to enable innovative new products and services to be developed.’ The emphasis here seems to be purely on the economy. The Russell Group takes a broader view of knowledge transfer as ‘activities which are concerned with the generation, use, application and exploitation of knowledge and other university capabilities outside academic environments’. Perhaps more satisfactory is the idea that ‘to exploit fully the new knowledge and learning that are generated in higher education institutions, they have to be applied to areas of life where they can make a difference’ (AHRC). The Council goes on to say that this wide definition covers business interactions, knowledge transfer with a business and economic focus, as well as knowledge interaction with other audiences including the public and voluntary sectors, and also encompasses public engagement and understanding.

3.16 Knowledge transfer is seen as a process and system by RCUK, OSI and the Research Councils, while knowledge exchange is a two-way dynamic interaction. Their vision of knowledge exchange is ‘to seek to accelerate the two-way flow of people and ideas between the research environment and wider economy, and thereby contribute to national prosperity, the quality of life of UK citizens, and cultural enrichment of our society. Knowledge Transfer encompasses the systems and processes by which knowledge, expertise and skilled people transfer between the research environment (universities, centres and institutes) and its user communities in industry, commerce, public and service sectors.’ Taking this a stage further is co-generation of knowledge, where the end-users of the research outcomes are involved in the process of setting research questions and synthesising the findings from research in order to generate new knowledge.

3.17 The move to establish ‘Science Shops’, which serve as brokers between HEIs and business and community organisations whilst simultaneously generating new research questions is a significant development, and one which seems likely to grow in the medium term. The interface between KT and KE and teaching and learning is represented by service learning, enterprise learning and, to some extent, by work-based learning. All these activities fall within the scope of BCE practitioners in HE and FE. They give rise to questions about the extent to which JISC services that are traditionally connected with teaching and learning could support BCE functions.

Business and Community Engagement in Scotland, Wales, and Northern Ireland

3.18 While the activities carried out in Scotland, Wales and Northern Ireland are similar to those in England (for example matching businesses with academics for research projects, providing CPD for employees or organising public events), there is a difference in approach, funding and terminology. The small size of the tertiary education sector in these countries and regions also permits a more cohesive approach (Scotland has 20 HEIs, Wales has 12 and Northern Ireland has only three (including the Open University), as opposed to 132 in England).

3.19 What in England is referred to as ‘third stream’ or ‘business and community engagement’ is called ‘knowledge exchange’ or sometimes referred to as ‘knowledge transfer’ in Scotland. The Scottish Funding Council has as one of its aims for ‘Scotland’s colleges and universities to generate effective knowledge exchange that stimulates innovation and development in public and private sector organisations and enterprises’. To this end knowledge exchange activities have been divided into four strands - Further Education, Economic Development, Public Policy

and Cultural Engagement - with a task force to oversee the development of each. The main emphasis in the past has been on Economic Development, which has had a metrics basis to drive the funding. There are difficulties in creating a similar set of metrics for Cultural Engagement but the task force is working on the development of this. Initially funding for Cultural Engagement was awarded on the basis of a volume-formula with each institution having to provide a strategic plan to show how such engagement would be developed. The FE sector has a long tradition of working with SMEs on skills training and the aim is to extend this further. With regard to the development of Public Policy KE, there is a huge amount of expertise in HEIs which can be drawn upon to support policy and to develop new policy areas. Thus, BCE in Scotland is driven in a more corporate way than in England. A further approach which has been encouraged is the pooling of research activity, which has seen a rise in the quantity and quality of research. The SFC supports Interface, which is a central access point for industry to Scotland's university research base.

3.20 The HEFCW Corporate Strategy to 2010 reflects the aims outlined in *Reaching Higher* (the Welsh Assembly Government's 10 year strategy for higher education) for business and community engagement, often referred to as the 'third mission'. A Third Mission Committee works with key public sector partners and business to guide this work, which is supported in HEIs by a Third Mission Fund. As in Scotland this over-arching strategy means that BCE is well-developed. Thus all HEIs in Wales have an Industrial Liaison Officer and dedicated point of contact for business, while there is a drive to support communities and society through community amenities, opportunities for study at community venues, and links with local decision makers. For example, the Community University of the Valleys project is delivered through a collaboration of 20 organisations, including 3 HEIs, and makes extensive use of ICT to support learning in a wide range of settings. While HEFCW recognises diversity and encourages HEIs to play to their individual strengths, the strategic commitment of HEFCW does mean that business and community engagement is well and consistently developed across the country.

3.21 In Northern Ireland there is no separate 'Third Stream' or 'Business and Community Engagement' policy or programme. The Department of Employment and Learning, which acts as the funding body for Higher and Further Education, includes general strategies and key actions which relate towards economic development with a focus on employability and skills development in its strategic plan (DELNI Corporate Plan 2005-8). The Regional Innovation Strategy developed by the Department of Enterprise, Trade and Investment in collaboration with other departments includes aims for the resourcing of research and development, supporting knowledge and technology transfer, promoting cross-sectoral collaboration and enhancing inter-regional collaboration (DETINI, Regional Innovation Strategy, 2005). The HEIF and other funding is mainly directed towards economic development. Although there is no over-arching strategy for BCE, the two Northern Ireland universities include both business and community engagement in their strategic plans. Similarly the FE colleges address the business and community agenda.

3.22 Generally speaking, it does seem to be the case that there is slightly more emphasis within Wales on the Community dimension of BCE and in Scotland on business development and inter-institutional work (such as greater research collaboration). However, within the institutions themselves the activities and methods of collaboration remain very similar, and the needs in terms of support are broadly the same across all parts of the UK. Discussions with key members of staff in institutions in each of these countries confirmed this view.

4. How BCE uses ICT

4.1 Through the surveys and interviews, information was gathered about the current use of software by BCE practitioners. The majority of people consulted support their KE work through standard Microsoft Office applications, such as Access, Excel and Outlook. Beyond this there is little consistency in the choice or use of different software, with a variety of commercial software applications being used.⁸

4.2 As indicated in the previous report, there is an increasing awareness of the need for CRM systems, and to this end 37 individual institutions were found to be developing or purchasing a variety of different packages for this purpose, ranging from 'home-grown' systems based on Outlook or Access to bespoke systems such as those being developed by Nirvana or LG01. 18 institutions had purchased commercial systems, with three using or considering Inteum. Five institutions had commissioned bespoke systems. Four respondents expressed the view that institutional systems were not well chosen or were inadequate.

4.3 Respondents wanted systems not only to record customers, contracts, finance, etc but also to generate data in forms that would allow reporting for a range of purposes, including the HEBCI survey. A comment was made that

'CRM is seen as a bit of a panacea, but when you ask what people want it to deliver they don't know. It is important to have the process clear before you bring in the technology.'

4.4 Limiting factors described were cost, lack of time to investigate, the constraining effect of having to work with software already purchased by a university, staff resistance to the time taken to keep such systems up-to-date, and concern about access versus privacy.

4.5 With regard to e-Learning, a number of institutions use Blackboard, while some use WebCT and a few are beginning to use Moodle. There is some use of the Web as a tool for communication, and there is evidence of some BCE-related units using their institution's VLE systems to support group communication and collaboration. Some institutions use hosted websites (e.g. Learn Direct). Sharepoint is also used as a communication and shared workspace vehicle.

General Use of Websites

4.6 Websites are of course of increasing importance. Most of our interviewees reported being in the process of just having changed their website, or hoping to do so in the near future. Many felt that their current website was not easy to navigate and did not provide a helpful representation of the work that was being carried out, particularly where they were considering the way that BCE work is presented within an institutional website. In many cases the website functions as an important portal to provide information about the range of services available but also to provide searchable databases of projects and in some cases expertise. At the same time, responsibility for the content of the web sites or pages of particular services is increasingly residing with the people responsible for that service, generally subject to checking by their marketing or PR department. None of this is surprising, but does provide further examples of the wide range of ICT-related communication facilities which people are using and which make increasing demands on their time.

⁸ see Appendix F for more details

Web2

4.7 There were a few examples of the use of WIKIs and Blogs being used for BCE purposes, but no instances yet of the use of social networking software. Six of the community engagement units which we talked to are already using podcasting. Generally, however, there was a lack of knowledge about what new technologies could offer, and people felt that they did not have enough time to find out about them. Some doubts were expressed about the usefulness and applicability of new technologies. In the Scoping Study survey practitioners were asking for better ways of communicating and collaborating with partners, but it appears that they do not all appreciate that this could be achieved through the new technologies.

5. What sort of ICT support is needed in BCE?

5.1 The Scoping Study asked respondents to indicate their interest in securing help with a number of ICT-based activities that they might use to support their BCE work. It emerges from further analysis of this data that there are common key priorities for all aspects of BCE, but that beyond that there are some important differences. Tables 4, 5 and 6 show the results of this analysis.

Commentary on Tables 4, 5 and 6.

5.2 From Table 4 it is apparent that there is some interest in all of the types of electronic activity listed, but with some identifiable differences in levels of interest below the top five priorities. For example, for all three groups - Mainly/Only Business (Business), Business and Community equally (B&C), and Mainly/Only Community (Community) - an interest in electronic collaboration and networking is very high on the list, appearing consistently in the top five choices. Understandably, however, the interest for the Business group is in collaborating with business organisations and with other academics, while B&C are interested almost equally in electronic networking to support partnership working with business *and* community organisations. As it is likely that the different audiences of interest may be best reached using different collaboration tools, or the same tools in different ways, it would seem that any response from JISC would, therefore, need to differentiate between these different purposes and needs. Customer/client contact management systems (CRM) were of less immediate interest to Community, coming 9th in their list, with 32% interest compared with 52% for Business and 62% for B&C. Discussions with people involved in community engagement indicated that many of them are still at the stage of trying to establish good systems for recording the range and nature of interactions with the community throughout their institutions – or simply creating directories of contacts, and had not yet viewed meeting this need as indicating the need for a CRM system, although they did acknowledge after discussion that it could do so.

5.3 The breakdown for Table 5 both supports and adds to the results in Table 4. Greatest interest is shown from all three groups in advice and guidance in ‘tools to improve collaboration and communication between different organisations during partnership activities’ (with scores of 56% to 60%). This data also shows that legal issues and improving accessibility are high on all three groups’ lists, with scores between 38% and 54% for legal issues, and 54% for both B&C and Community, and 38% for Business for Improving Accessibility.

5.4 Table 6 shows the inverse of Table 4. This presents the aggregation of responses which related to not knowing or not understanding what the statement in the question meant. Scores generally are lower here, but there are still areas of ICT activity that are not well understood by the BCE community. For example, “Creating Repositories” and “Preserving Digital Data” get quite high scores, as does “Improving the Accessibility of Electronic Information”, “Legal issues” and “Security of data” in the Community group. All groups have quite high scores too for “Electronic Portfolios”, with a score of 52% in Business, 47% in B&C and 40% in Community. It seems therefore that there is much JISC could do to help with in terms of raising awareness of the advice and support it can already provide around developments in which it has considerable experience, but which are still not understood by everyone within BCE.

5.5 However, there is a note of caution attached to this too. As one respondent pointed out, much work is being undertaken by other agencies, such as Sector Skills Councils and Lifelong Learning Networks, on electronic portfolios, and the JISC should ensure that its work on this ties up with these developments in some way, in order to avoid duplicating effort and unnecessary expenditure of public money.

5.6 In many of the responses to interviews there was a clear message that people 'didn't know what they didn't know' or what they ought to know, and that, although they were aware of this, they also felt they did not know where to start or how to find the time needed to find out. Given the massive growth in ICT activity and the apparently growing need (discussed later) for people to become ICT-literate and drive their own development programmes, it would seem worthwhile to try to find straightforward ways to raise awareness about the possibilities inherent in the use of ICT and to provide non-technical information about this.

5.7 It should be noted too that respondents were also given the opportunity to indicate that they already engage in these activities, so the lower levels of interest in e-Learning and assessment are a reflection of the fact that many organisations are already engaging in these activities and are content with how they are currently working, rather than of a lack of interest.

Table 4: Responses to Scoping Study Survey, Question 9. in the categories “We would like to do it / we do it but the system/software we are using doesn’t meet our needs” with items presented in descending rank order by Business/Community focus

Mainly/Only Business	Total = 60	Business and Community equally	Total = 39	Mainly/Only Community	Total = 25
9.i. Software or systems to improve collaboration between HEIs and partners	62% (37)	9.h. Customer/client/contact Management Systems	62% (24)	9.e. Electronic networking to support partnerships with others within the academic community engaged in similar work *	52% (13)
9.f. Electronic networking to support partnerships/collaboration with business organisations	54% (31)	9.i. Software or systems to improve collaboration between HEIs and partners	59% (23)	9.i. Software or systems to improve collaboration between HEIs and partners	52% (13)
9.h. Customer/client/contact Management Systems	52% (31)	9.j. Electronic portfolios	47% (19)	9.m. Video conferencing	44% (11)
9.j. Electronic portfolios	52% (31)	9.f. Electronic networking to support partnerships/collaboration with business organisations*	46% (18)	9.g. Electronic networking to support partnerships/collaboration with community organisations	40% (10)
9.e. Electronic networking to support partnerships with others within the academic community engaged in similar work ⁹)	45% (27)	9.g. Electronic networking to support partnerships/collaboration with community organisations	46% (18)	9.j. Electronic portfolios	40% (10)
9.g. Electronic networking to support partnerships/collaboration with community organisations	43% (26)	9.i. Electronic personal development planning	44% (17)	9.k. Access to electronic or digital data resources for research	36% (9)
9.i. Electronic personal development planning	40% (24)	9.c. e-assessment: choice of software	36% (14)	9.c. e-assessment: choice of software	32% (8)
9.m. Video conferencing	30% (18)	9.e. Electronic networking to support partnerships with others within the academic community engaged in similar work	36% (14)	9.d. e-assessment: development of electronic processes and systems	32% (8)
9.k. Access to electronic or digital data resources for research	25% (15)	9.a. e-Learning: creation of content	31% (12)	9.h. Customer/client/contact Management Systems	32% (8)
9.c. e-assessment: choice of software	20% (12)	9.d. e-assessment: development of electronic processes and systems	31% (12)	9.i. Electronic personal development planning	32% (8)
9.d. e-assessment: development of electronic processes and systems	18% (11)	9.m. Video conferencing	28% (11)	9.b. e-Learning: technical presentation of content (e.g. appropriate formats)	28% (7)
9.a. e-Learning: creation of content	15% (9)	9.b. e-Learning: technical presentation of content (e.g. appropriate formats)	26% (10)	9.a. e-Learning: creation of content	24% (6)
9.b. e-Learning: technical presentation of content (e.g. appropriate formats)	15% (9)	9.k. Access to electronic or digital data resources for research	18% (7)	9.f. Electronic networking to support partnerships/collaboration with business organisations	24% (6)

⁹ *(e.g., to communicate, discuss, share information about sources of funding, share good practice, share case studies)

Table 5: Scoping Study Survey, Question 10. "In order to use ICT to support your Third Stream activity, do you need advice or guidance on any of the following?" – Answer "Yes"– cross tabulated with the balance of BCE activity and ranked in descending order for each.

Mainly/Only Business – rank order	Score for "Yes" (% of total)	B&C Equally - rank order	Score for "Yes" (% of total)	Mainly/Only Community - rank order	Score for "Yes" (% of total)
10.g. Tools to improve collaboration and communication between different organisations during partnership activities	60% (36)	10.g. Tools to improve collaboration and communication between different organisations during partnership activities	56% (22)	10.g. Tools to improve collaboration and communication between different organisations during partnership activities	60% (15)
10.b. Improving the accessibility of electronic information	38% (23)	10.b. Improving the accessibility of electronic information	54% (21)	10.e. Migrating existing data from several sources (individual data bases and old systems) to a new system	56% (14)
10.f. Legal issues related to the use of information and communications technology (e.g. copyright, intellectual property, security)	38% (23)	10.f. Legal issues related to the use of information and communications technology (e.g. copyright, intellectual property, security)	49% (19)	10.b. Improving the accessibility of electronic information	54% (13)
10.a. Choosing appropriate software	35% (21)	10.a. Choosing appropriate software	46% (18)	10.f. Legal issues related to the use of information and communications technology (e.g. copyright, intellectual property, security)	54% (13)
10.e. Migrating existing data from several sources (individual data bases and old systems) to a new system	30% (18)	10.e. Migrating existing data from several sources (individual data bases and old systems) to a new system	38% (15)	10.h. Security of data	48% (12)
10.c. Creating repositories	32% (19)	10.c. Creating repositories	33% (13)	10.d. Preserving digital data	44% (11)
10.k. Working with suppliers on the customisation of software to meet our needs	25% (15)	10.h. Security of data	33% (13)	10.i. Security of systems	36% (9)
10.h. Security of data	22% (13)	10.k. Working with suppliers on the customisation of software to meet our needs	28% (11)	10.a. Choosing appropriate software	32% (8)
10.d. Preserving digital data	20% (12)	10.d. Preserving digital data	26% (10)	10.c. Creating repositories	32% (8)
10.i. Security of systems	18% (11)	10.i. Security of systems	26% (10)	10.k. Working with suppliers on the customisation of software to meet our needs	32% (8)
10.j. Writing specifications for software against which providers can tender	17% (10)	10.j. Writing specifications for software against which providers can tender	21% (8)	10.j. Writing specifications for software against which providers can tender	16% (4)

Table 6: Scoping Study Survey: Question 10. "In order to use ICT to support your Stream activity, do you need advice or guidance on any of the following?" – answers "Don't Know/ Don't Know what this means" – cross tabulated the balance of BCE activity and ranked in descending order for each.

Mainly/ Only Business – rank order	% (no)	Business and Community equally – rank order	% (no)	Mainly /Only Community – rank order	% (no)
10.c. Creating repositories	23% (14)	10.d. Preserving digital data	44% (17)	10.c. Creating repositories	28% (7)
10.e. Migrating existing data from several sources (individual data bases and old systems) to a new system	18% (11)	10.c. Creating repositories	38% (15)	10.a. Choosing appropriate software	24% (6)
10.b. Improving the accessibility of electronic information	15% (9)	10.j. Writing specifications for software against which providers can tender	36% (14)	10.b. Improving the accessibility of electronic information	24% (6)
10.h. Security of data	15% (9)	10.k. Working with suppliers on the customisation of software to meet our needs	30% (12)	10.i. Security of systems	24% (6)
10.i. Security of systems	15% (9)	10.i. Security of systems	28% (11)	10.d. Preserving digital data	20% (5)
10.j. Writing specifications for software against which providers can tender	15% (9)	10.e. Migrating existing data from several sources (individual data bases and old systems) to a new system	26% (10)	10.f. Legal issues related to the use of information and communications technology (e.g. copyright, intellectual property, security)	20% (5)
10.k. Working with suppliers on the customisation of software to meet our needs	13% (8)	10.g. Tools to improve collaboration and communication between different organisations during partnership activities	21% (8)	10.j. Writing specifications for software against which providers can tender	20% (5)
10.f. Legal issues related to the use of information and communications technology (e.g. copyright, intellectual property, security)	12% (7)	10.a. Choosing appropriate software	18% (7)	10.k. Working with suppliers on the customisation of software to meet our needs	20% (5)
10.g. Tools to improve collaboration and communication between different organisations during partnership activities	12% (7)	10.b. Improving the accessibility of electronic information	18% (7)	10.e. Migrating existing data from several sources (individual data bases and old systems) to a new system	16% (4)
10.a. Choosing appropriate software	10% (6)	10.h. Security of data	18% (7)	10.h. Security of data	16% (4)
10.d. Preserving digital data	2% (1)	10.f. Legal issues related to the use of information and communications technology (e.g. copyright, intellectual property, security)	13% (5)	10.g. Tools to improve collaboration and communication between different organisations during partnership activities	12% (3)

5.8 The surveys of Computer Services/Librarians and Learning Technologists asked them to communicate any plans they had for ICT developments to support BCE. 26% of HE respondents, and said yes to this, and 18% of FE respondents. The details of those plans, given below, demonstrate a wide range of new projects.

5.9 HE Plans:

- A number of options being explored including shared workspaces, recording product development.
- Development of database for community activities
- Development of web resources for our Historic Collections for community engagement.
- e-APEL project (JISC funded) and related services.
- I lead on a project to provide electronic enterprise and entrepreneurship education materials to West Midlands HEIs for registered students, staff, and alumni. Includes CPD activity where participants are registered with the University. Have set up a learning content repository for partners to view and download materials. Also involved with a project called SPEED where students take a course to set-up their own business, particularly whether ICT can support this.
- IT services for university staff engaged in community and business engagement; limited IT services for some community and business partners
- local sustainability network (as part of larger initiative if there is one), e-science network (involving business and community groups e.g. in consultation exercises etc)
- Maintaining and developing regular search alerts for Business Development Office, using Lexis Nexis database
- New department of Film, Theatre and TV together with a Creative Technologies Centre involving external companies and agencies. Being planned - 2 years hence on new campus
- OSS Watch supports tech transfer units understanding and engagement with open source licensing and business models.
- Portals for WBL/Employer Engagement
- Procurement of a CRM system
- Provide instruction and support to teachers and pupils and school librarians locally to use their databases
- Providing ICT support for a digital communities project.
- Replacement of legacy Lifelong Learning systems
- Special needs, dyscalculia, new comers to university
- Support for the management of communities and resources in open source development projects within UK HE/FE
- The Library would like to be able to offer walk-in access to e-resources for external members
- University Centre Milton Keynes, with associated "enterprise hub"
- Using JISC advice generally
- Video Conferencing with Northants Adult & Community Learning
- We are doing work with Adobe and the Institute of Education on e-Learning related projects.
- We will be purchasing 3D visualisation equipment primarily for use by medical students but are looking at the possibility of allowing the general public access to this facility on "open days" etc. We would also be interested in sharing anonymised datasets (e.g. MRI) with other institutions.

5.10 FE Plans:

- Access to our ICT resources and learning materials for business partners.
- Developing use of PDAs and e-Learning
- Fire Station Laptops
- ICT support for NVQ level 3 in Business Start Up
- Implementing web based reporting for assessors.

- Looking for an in-depth data base for employers
- One of the Universities CETL projects is looking at experiential learning experiences in the University Dome. Once this is open they are hoping to open it up to the public. Their future sustainable plans involve support from the LT team.
For question 18 - once it is up and running and we know what is involved then yes I imagine advice would be very much appreciated.
- The RSC is bringing itself up to speed on BCE, as there is the possibility of a funded post.

5.11 Respondents were then asked whether there was a role for JISC in this work. 25% of HE respondents who said that they were planning new projects said that they were already using JISC advice, 15% said it was already part of a JISC project, and 15% said it would be helpful to have JISC involvement. 33.3% of FE respondents who were planning new projects said they were already using JISC advice, and 45% said it would be useful to have JISC involvement.

5.12 In addition to collecting this survey data, more information was gathered through interviews with the Scoping Study respondents, the people working in a variety of Business and Employer engagement functions in the case study HEIs and follow-up surveys with Community Engagement practitioners, the CKEs, and KTP managers. Overall there were few mentions made of plans for significant ICT developments, although there were some indications of differences in levels of interest in new developments. As might be expected, a number of the CKEs appear to be interested in developing collaborative tools and platforms to support them. The Business practitioners were used to using well-established software packages, but, unlike the Community practitioners, demonstrated less interest in the creative potential of Web 2 applications to support their work.

5.13 Research for the User Needs Study therefore confirmed the outcomes of the Scoping Study, and has identified some further areas of interest. Key amongst these are:

- CRM systems
- Tools for collaboration
- Tools for communication using new technologies from the Community group.
- The Community Engagement network was also interested in a website that they could all use to share good practice *etc*, and in the possibility of this being hosted independently, rather than located in any one of their institutions.
- Advice about legal issues relating to the use of ICT in BCE settings
- Improving accessibility
- In addition there is some interest in finding out more about Web2

CRM Systems

5.14 As has been demonstrated, the interest in CRM systems ranges from a need to implement a system from scratch to improving on one already in place or moving from a basic use of Access or Outlook to something more sophisticated, and at the far end of the spectrum interest in a system that would integrate with other systems within an institution.

If everyone had the same system, it would allow more accurate central reporting. At the moment with disparate systems, it's like the information gets thrown in a bucket, shuffled and then is put on to HERDA/HEIF systems, perhaps with bits lost on the way. Perhaps JISC could help in this.

Tools for Collaboration and Tools for communication using new technologies – not just Web2

5.15 The response of JISC to the need identified by the Scoping Study for tools to support collaboration and partnership working was to explore the promotion of Web2 technologies. Evidence from research for this report suggests that the BCE practitioners who expressed an interest in this may not have known what the appropriate response would be, and may also be just as interested in improving their use of Video conferencing and web-meetings and other more established forms of technology as well as exploring Web2. Evidence to support this is found in Table 4, where 44% of responses from Community were in the “we would like to do this” or “we do it but the systems/software we are using doesn’t meet our needs” categories, as were 30% of Business responses, and 28% of B&C. Information about the potential of all such technologies for collaboration and partnership and the process of engaging with them would therefore be of value.

Use of Web 2 technologies

5.16 We are aware that the term Web 2 encompasses a wide range of applications, including podcasting, webcasting, WIKIs and Blogs, and social networking software. Respondents were not asked to identify which of these they were particularly interested in, and of course, they are frequently used in an integrated way to support each other. As already mentioned, interest in these was substantially greater within Community Engagement than within Business Engagement.

5.17 We discovered that a number of HEIs are already using podcasts; a Google search revealed 16 HE websites that now feature podcasts. Their use seems to be mainly for “community engagement”, presenting such things as lectures by eminent academics on topical subjects, and very little use seems to be business-related. What is particularly striking is that the majority of the podcasts have appeared very recently, during the timescale of this research. There is also evidence of some use of webcasting, but this technology seems at the moment to be mainly exploited for the presentation of Graduation Ceremonies! Some of the JISC services are using blogs and WIKIs on their websites (e.g. TASI¹⁰), and a few of webcasts of lectures (JISC Legal¹¹).

Legal and technical issues in relation to use of JISC funded services or products

5.18 What clearly does make a difference between general applications of ICT and those within BCE is the need to work across the boundaries of institutions, with either commercial or community organisations. It was clear from the Scoping Study and from the current research, that this creates difficulties both in terms of the impact of security systems (e.g. firewalls) and of the licenses which affect the use of JISC/HE-funded services and resources by commercial or public individuals or organisations. There are also issues relating to IPR and copyright when organisations work together to create new knowledge and products.

5.19 We know that the JISC is fully aware of the problems created by the desire to use HE facilities and resources across the boundary of the sector into commercial and community settings. This emerged as a particular issue at the Think Tank in September 2006, and has been referred to on numerous occasions by people interviewed and surveyed for this report. For BCE activity, the problems have already led in some cases to the development of services entirely outside the JANET network. Centres of Knowledge Exchange seem to be particular examples of this: we encountered four that have set up their websites with independent ISPs.

¹⁰ <http://www.tasi.ac.uk/blog/>

¹¹ <http://www.jisclegal.ac.uk/Webcast/index.html>

5.20 One CKE described their situation:

We pay directly to an outside body for our own project IT – email, shared portal, so that it is truly location-independent – which we are. The company both supports and helps develop it.

For example, we wanted to develop an MS SharePoint site but this was then only available when sitting at a university desk. Our project IT is now web-based and can be accessed from anywhere – including sat at a university desk, as we have standard HE logons for relevant institutions. HE emails are redirected to our system so that we don't have 2 MS Outlook profiles. Sounds complicated but it is not, once set up; but is just an indication of the situation. Our HE logon gives us access to whatever we are entitled to from HE resources/intranet when within their system. HE IT is OK if you mainly sit within the system and do what it allows. There can be difficulties requesting developments and flexibility.

5.21 Another commented that getting different institutions to cooperate and move quickly enough for their needs was a problem:

Our academics move around a lot and visit different institutions. Even here it can be difficult for them to get access. We knew about JanetRoaming, but discovered that the small institutions didn't know about this yet, and the larger ones didn't know about our project, weren't keen to allow us access, and required us to go through a long process of authorisation which took time that we didn't have. We also wanted to be able to link four regional staff through Skype and found we couldn't do it. So we developed an entirely independent system, using a local data centre, and creating a Virtual Private Network. We use Sharepoint for shared workspace for our users and collaborators. Now looking at developing the system to include instant messaging, shared diaries and contacts, and use of mobiles to pick up emails.

5.22 Interviews with Librarians and Learning Technologists provided more examples of the impact of licensing and funding restrictions on their work. One Librarian reported having to explain to academics working on projects with businesses that there were licence restrictions on the use of electronic resources and then leaving it to them to ensure their own compliance with those licenses. Another described how setting up increasingly commercial contracts to provide bespoke online training programmes (as they now nearly always are) to employers involved purchasing additional licenses for journals for them to access within a dedicated VLE. In his view, this might be regarded as quite reasonable where the programme was for a large corporation, but presented greater problems where smaller businesses were concerned. A further point of view on this issue, however, was that, in the experience of one respondent, who had worked as a business consultant before working with HE, small businesses were not in fact generally interested in learned journals or HE research data, and were looking for a service that provided them with reliable and comprehensible summaries of academic reports. If this is the case, it may not be appropriate for the JISC to invest too much time and energy in finding ways of opening up academic resources and data to SMEs. People who are more likely to be interested are alumni, and several respondents reported their institution's interest in offering greater access to its resources for alumni, while recognising that this might not be attractive to publishers of journals where those alumni were working in large commercial organisations. These categories are not necessarily mutually exclusive: some respondents drew attention to cross-over issues, since alumni may come back to institutions in pursuit of further professional learning, and may well be doing so as directors and/or employees of SMEs.

5.23 The Survey of Computer Services/Librarians/ Learning Technologists (Surveys 2 and 3) asked for feedback about any issues associated with the use of JISC funded services or products. In response to the Question 'There is some concern about the ways in which JISC services and products developed with JISC funding can be exploited by HE staff working in or with businesses

or with community organisations. Has this been an issue in your institution?' 33% of HE respondents and 24% of FE respondents said 'yes'. Their comments, (presented below) when broken down by specialisms, gave examples of the issues, although some respondents do also seem to have read the question as being about information about JISC itself:

5.24 HE Computing/ICT Support/Services

- Issues usually involving licensing and access to resources.
- There appears to be a divergence between the needs of HE and business
- Use of JANET and use of JISC resources for 3rd Arm staff/organisations related to universities but no longer part of universities.
- We are really not kept informed of what is available
- Bidding for JISC funding is a very time-consuming process. Unless you have a dedicated bidding resource, you can't compete. Those who manage to get funding once, tend to get it again and again. Difficult to get your 'foot through the door'
- I have an impression that JISC engages in projects and activities without securing agreement from the community that these are appropriate uses of our top slice.

5.25 HE Library

- Access for local school pupils
- Access to JISC resources for spin-out companies on site.
- Can you monitor KTP usage so it's 'educational' or third stream related only?
- Collating and disseminating information and focusing it on end user needs
- Is likely to be an issue in near future
- JISC/NESLI2 licenses preclude commercial use. This makes usage complicated, and divisive.
- Particularly with regard to e-access and support to businesses and spin-outs working closely with our organisation.
- Problems of access to e-resources by partners in the community
- Staff working in university business unit and not directly employed and hence not eligible, within strict interpretation, for use of some licensed services/products. Yet these people are deemed by university senior management to be on a par with university employed staff.
- We have had limited success in applying for JISC funding

5.26 HE Learning Technology

- Relates to licensing agreements and to ability to define the different activities of staff engagement or predict where conflict of interest may occur in future.
- Some debate on if/how JISC services can be used by students whilst learning about entrepreneurship or enterprise activities (including social enterprise). Also how staff can use JISC services for consultancy and/or spin out activity
- We need stronger ties with community and business locally. I have ties with these outside work and many other staff do also, but it's not clear how to fund or initiate projects to exploit these links. I can think of lots of ways we can help fund projects, offer expertise and gain lots of lateral benefits. I'd love to be informed of any initiatives that would help this.
- Wider access to JORUM to include employers
- A lot of JISC publications are so generic, they are of little direct value to staff. Glossy publications and reports which do not contribute greatly to institutional requirements.
- I know it has been discussed. In Scotland some of the issues and pressures are different because of varied funding sources.
- I'm not fully aware of what JISC offers and find it difficult to find the information. And with so much out there it can be difficult knowing where to start
- Lack of communication across the institution means information about JISC services and products are not transmitted effectively.

5.27 FE respondents:

- A bit - when working with industry – it can be hard to explain the constraints on e-resources, which don't exist in the same way with hard copy items. I'm specifically thinking of lending materials, as we do here via our commercial information service, and where licences inhibit us a lot. There has to be more consideration of this issue as libraries become more dependent on e-resources.
- Issues often arise concerning sharing resources with our partner college students. This only occurs when the resources require payment. I do not really know the issues with general free resources though.
- It is likely that we have missed some opportunities to utilise available services and products. This is probably to be expected given the limited time sometimes available to research useful services/products so I am not sure if this is really an issue or not.
- Not enough notice or information beforehand for certain projects, such as FE in HE collaboration.
- Only that licence agreements preclude business "partners" from using online resources unless they are specifically registered as students. Or staff.
- Services targeted at HE and not made FE friendly.
- There is usually a problem about how to give access to JISC resources to businesses and students in the community.
- Using JANET for business incubation centre.
- We raise awareness of the services and products but I feel they are underused by lecturers.
- Costs for some resources are still too high.
- I detect a snobbery towards FE.

5.28 The conclusion from this is that the issue is not just about clarifying what is possible within the law, but also that, in view of the costs involved, the licenses should be reconsidered in order to open up greater access to employers (especially in the SME sector) and other members of the community. Some respondents mentioned that they had developed pragmatic ways round these issues, for instance by registering members of community organisations as students in order for them to be allowed to use services, or by developing 'walk-in' licenses for business representatives to be able to use services such as ATHENS.

5.29 Importantly, all of the items listed as of interest, except for CRM systems, are ones that the JISC already offers information about, sometimes from a variety of sources (i.e. JISC-funded projects and organisations). We notice that the JISC is already funding some development projects on the use of Web 2, and particularly social networking software, but that these fall under Teaching and Learning.

5.30 One important question is the extent to which the use of these ICT facilities and applications in BCE contexts is in any way different from their use in mainstream teaching and learning or research, and therefore whether information from JISC needs to be presented differently. The assumption in the Scoping Study was that this different audience needed different information, and certainly some relevant examples of these technologies being used in BCE settings would be of value. However there do seem to be key differences relating to the security and legal/commercial use of these technologies with commercial and community organisations. The other important question is the way in which such information should be made available to the BCE community (or any academics). Aspects of this are discussed later under the Section on How JISC Promotes Itself.

6. Where do BCE practitioners get ICT help from now? And whose job is it to support them?

6.1 The HE and FE sectors employ many thousands of people and the general expectation about the way JISC supports these sectors is that information is disseminated through intermediaries such as Computer Services/IT Services, Librarians and Learning Technologists, although of course the JISC website and those of the various services are all available for anyone to visit.

6.2 So where do BCE practitioners get help from now? The majority of the people interviewed reported turning to their own institutions for support. However, this was tempered by comments that this did not always result in the type of support needed. A few respondents reported that their own ICT staff were more concerned with hardware and infrastructure than software, and a number expressed the view that, with the more common forms of ICT used (including websites), it was up to individual teams and units to get this organised themselves. One respondent commented that he would go to AURIL and Unico as a channel of information.

AURIL and Unico are useful places to ask questions and get responses. There is a total variety of stuff posted there, and people are very responsive to questions.

6.3 However, there was also a widespread sense that emanated from the interviews that everyone, whatever their role, was extremely busy, with demanding workloads, and that the intermediaries had limited time to help BCE staff, and BCE staff had limited or no time to give to understanding new technology and testing and developing its application to their context. In a number of cases units and teams were buying in expertise. For example, one university External Relations department employs a Data Manager to develop and manage its database, claiming there was little of this sort of expertise within their own Computer Services Department, while others buy in consultancy support for web design or have their own IT support staff. These individuals could be key points of contact. Some FE respondents were very complimentary about the service they received from their Regional Support Centres.

6.4 Remembering, however, that many of the people involved directly in BCE activity are academics in departments, who may well be interested in using new technology to enhance their BCE work, the KTP managers and CKEs were asked if it was part of their role to be a channel of information about opportunities for exploiting ICT. The KTP Managers did not see this as part of their role, but the CKEs seemed to be more ready to attempt to provide some support.

6.5 How important are the items of interest to ICT within HEIs? This is difficult to quantify, but a recent survey by UCISA (Top Concerns Survey 2006/2007) indicates that the greatest current concerns for IT Directors and managers were those listed in Table 7.

Table 7: 2006/07 overall top 10¹²

Rank	Concern 2006/7 – Overall
1	Resources for IT
2	IT Strategy and planning
3	e-Learning
4	Business systems
5	Service availability
6	Architected IT infrastructure
7	Governance
8	Disaster Recovery
9	Information Management
10	Identity Management

6.6 In response to the question: “Which of the IT/IS related concerns below are of most importance for your institution to resolve for its strategic success?” the top four were Resources for IT, IT Strategy and planning, e-Learning and Business Systems. Social networking came 22nd, and Accessibility came 27th.

6.7 Asked, “Which of these have the potential to become much more significant in the next twelve months?” the top three were “Resources for IT”, “IT Strategy and Planning” and “Green Computing”. Social networking moves up to number 17, and emerging technologies moves from 28 to 23, with e-Learning consequently moving down to 13th. This survey seems to support the general picture that emerged during this research, and has been commented on elsewhere in this report, that ICT-related staff and services are stretched and that their priorities do not always match the immediate needs of staff in BCE.

6.8 If it is the role of Computer Services/IT Services, Librarians and Learning Technologists to support BCE activity, then how much do they know about BCE? As one Librarian pointed out, there may be no way of telling who someone is, or what their interest, when they ask a Librarian for help. Survey 2 therefore explored this issue, and the results are presented in Tables 8 and 9. As can be seen, staff in these support and technical roles are more knowingly supporting e-Learning, e- assessment, work-based learning and distance e-Learning than the more tightly business focused activities. Computer/ICT support staff are more aware of supporting business related activities such as Business Start up and Business Spin Out, but even here this only applies to 40% or less of respondents. Not surprisingly, Learning Technologists are much less likely to support these sorts of business-related activity knowingly. Indeed, it was also pointed out by the ALT that it is probably not reasonable to expect learning technologists to be fully aware of the ICT needs of business engagement activity beyond that which involves e-Learning. In FE, the profile varies again, as might be expected (see Table 9). Unlike teaching and learning, and research, therefore, where it is relatively easy for the JISC and JISC services to identify and communicate with the vast numbers of staff involved, reaching out to BCE practitioners may be more problematic and take more conscious effort.



































6.9 As might be expected, levels of involvement of the staff in FE have a slightly different profile from HE. As Table 9 shows, the FE respondents, who were mainly Librarians, were more conscious of supporting the sorts of BCE activity which are to do with e-Learning, CPD and work-based learning than the other categories provided, with a much quicker “tailing off” of involvement in these than is demonstrated by the HE profile.

¹² UCISA Top Concerns Survey 2006/2007 - Results , UCISA website. 26 March 2007

Table 8; Survey of Computing/IT Services, Librarians and Learning Technologists. Response to Q 6, cross-tabulated by type of service and then ranked in descending order of awareness of offering support to these activities. (Respondents were given more information about items marked*)

Computing/ICT Support/Services		Library		Learning Technology		Other	
6.i. e-Learning	68% (17)	6.h. Work-based learning	65% (17)	6.i. e-Learning	92% (22)	6.i. e-Learning	93% (26)
6.j. e-assessment*	44% (11)	6.i. e-Learning	54% (14)	6.h. Work-based learning	75% (18)	6.h. Work-based learning	68% (19)
6.m. Research communication	44% (11)	6.g. Distance Learning for external partners	54% (14)	6.j. e-assessment*	75% (18)	6.j. e-assessment*	68% (19)
6.h. Work-based learning	40% (10)	6.k. Continuing Professional Development for external organisations (business or community)	50% (13)	6.g. Distance Learning for external partners	67% (16)	6.g. Distance Learning for external partners	54% (15)
6.a. Knowledge Transfer Partnership	40% (10)	6.q. Public/community engagement	50% (13)	6.k. Continuing Professional Development for external organisations (business or community)	63% (15)	6.k. Continuing Professional Development for external organisations (business or community)	54% (15)
6.d. Business start up/incubation	40% (10)	6.m. Research communication	46% (12)	6.o. Student Volunteering	33% (8)	6.m. Research communication	43% (12)
6.q. Public/community engagement	32% (8)	6.a. Knowledge Transfer Partnership	38% (10)	6.q. Public/community engagement	29% (7)	6.q. Public/community engagement	36% (10)
6.c. Business – spin-out	32% (8)	6.l. Science communication	35% (9)	6.a. Knowledge Transfer Partnership	29% (7)	6.a. Knowledge Transfer Partnership	25% (7)
6.g. Distance Learning for external partners	28% (7)	6.d. Business start up/incubation	31% (8)	6.f. Product development/exploitation	29% (7)	6.p. Service learning*	25% (7)
6.k. Continuing Professional Development for external organisations (business or community)	24% (6)	6.c. Business – spin-out	27% (7)	6.m. Research communication	26% (6)	6.f. Product development/exploitation	14% (4)
6.f. Product development/exploitation	24% (6)	6.f. Product development/exploitation	23% (6)	6.e. Business development	21% (5)	6.l. Science communication	14% (4)
6.l. Science communication	24% (6)	6.j. e-assessment*	19% (5)	6.d. Business start up/incubation	17% (4)	6.e. Business development	14% (4)
6.o. Student Volunteering	16% (4)	6.e. Business development	19% (5)	6.n. Staff Volunteering	17% (4)	6.n. Staff Volunteering	14% (4)
6.n. Staff Volunteering	16% (4)	6.n. Staff Volunteering	12% (3)	6.c. Business – spin-out	13% (3)	6.b. Centre for Knowledge Exchange	14% (4)
6.b. Centre for Knowledge Exchange	12% (3)	6.o. Student Volunteering	8% (2)	6.p. Service learning*	13% (3)	6.o. Student Volunteering	11% (3)
6.e. Business development	8% (2)	6.b. Centre for Knowledge Exchange	8% (2)	6.l. Science communication	8% (2)	6.d. Business start up/incubation	4% (1)
6.p. Service learning*	4% (1)	6.p. Service learning*	4% (1)	6.b. Centre for Knowledge Exchange	0% (0)	6.c. Business – spin-out	4% (1)

Table 9: Support knowingly offered by Computing/IT Services, Librarians and Learning Technologists, FE and HE compared, ranked in descending order of the named activities.

	HE Responses	%		FE Responses	%
6.i. e-Learning*:		76.7%	6.i. e-Learning*:		74.0%
6.h. Work-based learning*		62.1%	6.h. Work-based learning		64.0%
6.j. e-assessment*:		51.5%	6.j. e-assessment*:		50.0%
6.g. Distance Learning for external partners:		50.5%	6.k. Continuing Professional Development for external organisations (business or community):		48.0%
6.k. Continuing Professional Development for external organisations (business or community):		47.6%	6.g. Distance Learning for external partners:		28.0%
6.m. Research communication*:		39.8%	6.q. Public/community engagement*:		26.0%
6.q. Public/community engagement*		36.9%	6.e. Business development:		22.0%
6.a. Knowledge Transfer Partnership		33.0%	6.o. Student Volunteering:		18.0%
6.d. Business start up/incubation:		22.3%	6.m. Research communication*:		12.0%
6.f. Product development/exploitation		22.3%	6.n. Staff Volunteering:		12.0%
6.l. Science communication*:		20.4%	6.d. Business start up/incubation:		10.0%
6.c. Business – spin-out		18.4%	6.p. Service learning*:		8.0%
6.o. Student Volunteering:		16.5%	6.a. Knowledge Transfer Partnership:		6.0%
6.e. Business development:		15.5%	6.l. Science communication*		4.0%
6.n. Staff Volunteering		14.6%	6.b. Centre for Knowledge Exchange:		2.0%
6.p. Service learning*:		11.7%	6.c. Business – spin-out:		2.0%
6.b. Centre for Knowledge Exchange		8.7%	6.f. Product development/exploitation:		2.0%

7. Knowledge of JISC

7.1 As already discussed, the Scoping Study demonstrated very low levels of awareness of many JISC services. Figures for responses in the categories of not knowing whether respondents made use of a service or were not aware of the service ranged from 85% for JISC Legal to 13% for JANET (see Table 10). Further questions were asked about awareness of JISC in this second piece of research. Of the 32 people interviewed who commented on their level of awareness, 21 had a very low level of awareness of JISC, 4 had a little knowledge of it, and 7 had a good awareness. 5 mentioned the use of some JISC service, 13 received information from JISC, and 1 attended JISC events. It was observed that the people who were most aware appeared to be those with some former connection with JISC through either a previous job role (in computing or IT) or through involvement in a JISC project.

7.2 Comments included:

- *JISC is just never talked about.*
- *JISC services are of no interest.*
- *JISC is not in my radar.*
- *JISC is not widely known. It has a problem with presenting itself.*
- *JISC is as useful as you make it. It would be more use if it was more accessible.*
- *There's a disjoint because JISC doesn't know what the third stream does, and they don't know what JISC does.*
- *JISC has done lots of good work but with a rather traditional interpretation.*

7.3 However, the survey of Computer Services, Librarians and Learning Technologists shows, as would be expected, much greater levels of awareness (see Table 11) although even here there were JISC-funded services of which this group of people was not aware. For example, 49% of HE respondents and 54% of FE respondents were not aware of Techwatch; 50% of HE and 54% of FE were not aware of OSS Watch, and 65% of HE and 70% of FE respondents were not aware of the Information Environment Services Registry. There are even small numbers of respondents who were not aware of JANET and JISCmail.

Table 10. Scoping Study Question 8. “Which of the following JISC services do you currently make use of to support, either directly or indirectly, any element of your Third Stream activity?” Response – Don’t Know or Not Aware of the Service, cross-referenced to focus of activity and ranked in descending order for each. (Total Number of Respondents: 124)

	Mainly/Only Business	% (Num)	Business and Community equally	% (Num)	Mainly/Only Community	% (Num)
1.	8.j. MIMAS	82% (49)	8.f. JISC Legal Information Service	85% (33)	8.i. Managing Agent and Advisory service for Moving Pictures and Sound (MAAS)	76% (19)
2.	8.o. Technology and Disabilities (TechDis)	82% (49)	8.p. Technology and Standards Watch (TechWatch)	72% (28)	8.p. Technology and Standards Watch (TechWatch)	76% (19)
3.	8.r. UK Mirror Service	82% (49)	8.r. UK Mirror Service	72% (28)	8.t. Video Technology Advisory Service (VTAS)	72% (18)
4.	8.n. Technical Advisory Service for Images (TASI)	80% (48)	8.m. Resource Discovery Network	67% (26)	8.j. MIMAS	68% (17)
5.	8.p. Technology and Standards Watch (TechWatch)	80% (48)	8.t. Video Technology Advisory Service (VTAS)	67% (26)	8.r. UK Mirror Service	68% (17)
6.	8.s. UKOLN	80% (48)	8.i. Managing Agent and Advisory service for Moving Pictures and Sound (MAAS)	64% (25)	8.s. UKOLN	68% (17)
7.	8.t. Video Technology Advisory Service (VTAS)	78% (47)	8.j. MIMAS	64% (25)	8.q. The UK Data Archive	64% (16)
8.	8.i. Managing Agent and Advisory service for Moving Pictures and Sound (MAAS)	72% (43)	8.l. Regional Support Centres	64% (25)	8.a. Arts and Humanities Data Service (AHDS)	60% (15)
9.	8.c. EDINA	70% (42)	8.s. UKOLN	64% (25)	8.b. British Universities Film and Video Council (BUFVC)	60% (15)
10.	8.m. Resource Discovery Network	70% (42)	8.b. British Universities Film and Video Council (BUFVC)	62% (24)	8.m. Resource Discovery Network	60% (15)
11.	8.f. JISC Legal Information Service	67% (40)	8.c. EDINA	62% (24)	8.n. Technical Advisory Service for Images (TASI)	60% (15)
12.	8.b. British Universities Film and Video Council (BUFVC)	65% (39)	8.n. Technical Advisory Service for Images (TASI)	62% (24)	8.c. EDINA	56% (14)
13.	8.k. Netskills	65% (39)	8.q. The UK Data Archive	62% (24)	8.k. Netskills	56% (14)
14.	8.q. The UK Data Archive	63% (38)	8.a. Arts and Humanities Data Service (AHDS)	59% (23)	8.o. Technology and Disabilities (TechDis)	56% (14)
15.	8.l. Regional Support Centres	62% (37)	8.o. Technology and Disabilities (TechDis)	59% (23)	8.e. JISCInfoNet	48% (12)
16.	8.a. Arts and Humanities Data Service (AHDS)	60% (36)	8.e. JISCInfoNet	56% (22)	8.f. JISC Legal Information Service	48% (12)
17.	8.e. JISCInfoNet	60% (36)	8.k. Netskills	56% (22)	8.l. Regional Support Centres	44% (11)
18.	8.h. JISC Plagiarism Advisory Service	57% (34)	8.h. JISC Plagiarism Advisory Service	49% (19)	8.h. JISC Plagiarism Advisory Service	40% (10)
19.	8.g. JISCmail	27% (16)	8.g. JISCmail	28% (11)	8.d. JANET	32% (8)
20.	8.d. JANET	13% (8)	8.d. JANET	13% (5)	8.g. JISCmail	24% (6)

Table 11. Survey of Computing/IT Services, Librarians and Learning Technologists Responses to Question 7: “ Which of the following JISC services are useful to you in your work? (either needed by you to carry out your own role, or in supporting others.)” (Respondents: HE = 103. FE = 50)

	HE	HE	FE	FE
	Useful	Not Aware	Useful	Not Aware
7.a. Arts and Humanities Data Service Useful	44% (45)	24% (25)	46% (23)	26% (13)
7.b. Athens (authentication and access)	90% (91)	0% (0)	94% (47)	0% (0)
7.c. British Universities Film and Video Council	55% (57)	14% (14)	54% (27)	24% (12)
7.d. Digital Curation Centre	28% (29)	43% (44)	8% (4)	60% (30)
7.e. Information Environment Services Registry	11% (11)	65% (67)	6% (3)	70% (35)
7.f. Janet	91% (94)	4% (4)	84% (42)	2% (1)
7.g. JISC Advisory Services*	78% (80)	11% (11)	90% (45)	8% (4)
7.h. JISC Collections – Arts and Humanities	42% (43)	18% (19)	62% (31)	14% (7)
7.i. JISC Collections – Health and Life-Sciences	45% (46)	21% (22)	63% (31)	16% (8)
7.j. JISC Collections – Multi-disciplinary resources	49% (50)	20% (21)	64% (32)	18% (9)
7.k. JISC Collections – Science, Engineering and Technology	41% (42)	21% (22)	56% (28)	16% (8)
7.l. JISC Collections – Social Sciences	45% (46)	19% (20)	60% (30)	16% (8)
7.m. JISC Collections – NESL12 Journal Agreements	40% (41)	31% (32)	16% (8)	42% (21)
7.n. JISC Mirror Service	28% (29)	40% (41)	14% (7)	52% (26)
7.o. JISCMail	82% (84)	10% (10)	64% (32)	12% (6)
7.p. OSS Watch	36% (37)	50% (51)	22% (11)	54% (27)
7.q. Techwatch	38% (39)	49% (50)	24% (12)	54% (27)

*Information about the services included the Regional Support Centres.

7.4 The Second Survey also asked Computer Services, Librarians and Learning Technologists about how they find out about new developments from JISC and what they do with this information. The results are presented in Tables 12 to 16. These indicate that the most common method of obtaining information is to search the JISC or JISC service websites as necessary to look for information. Every category of method had some “never” responses, ranging from 4% for “Checking the JISC Website” to 23% for “Reading updates through JISC’s own JISCMail services. (e.g. JISC-ANNOUNCE)”.

Table 12:- Survey of Computing/IT Services, Librarians and Learning Technologists Question 11. There are numerous ways in which you might get information about JISC services and programmes. Please indicate how much you use each of the following methods. (FE =50, HE = 103)

	Sector	Frequently (at least once a month)	Sometimes (less than once a month)	As necessary to look for specific information	Never	Not relevant
Checking the JISC website.	HE	23% (24)	21% (22)	(49%) 50	6% (7)	0% (0)
	FE	20% (10)	22% (11)	54% (27)	4% (2)	0% (0)
Checking individual service or theme/programme websites	HE	22% (23)	22% (23)	46% (47)	9% (10)	0% (0)
	FE	14% (7)	24% (12)	52% (26)	8% (4)	2% (1)
Reading JISC literature and brochures	HE	17% (18)	38% (39)	37% (38)	7% (8)	0% (0)
	FE	30% (15)	30% (15)	36% (18)	4% (2)	0% (0)
Attendance at relevant JISC funded workshops and conferences.	HE	6% (7)	40% (41)	39% (40)	13% (14)	1% (1)
	FE	8% (4)	32% (16)	46% (23)	14% (7)	0% (0)
Reading updates through JISC's own JISCmail services. (e.g. JISC-ANNOUNCE)	HE	49% (50)	13% (14)	13% (14)	23% (24)	1% (1)
	FE	42% (21)	24% (12)	14% (7)	20% (10)	0

7.5 Table 13 shows that there are significant proportions of respondents (23%) who never receive JISC literature, particularly in HE. Of those who do receive the literature (see Table 14), a majority (79%) do say that they pass it on as appropriate to interested members of staff. 10 (18%) of these respondents from HE were interviewed by telephone to find out more about how they distributed materials to interested colleagues. It transpired that they all used their local knowledge to filter and distribute the materials as appropriate. Only two had regular mailing lists for sending on information, and these people would also forward specific material to others they knew were interested in the topic. While they all acknowledged that there might be staff involved in BCE of whom they were unaware, they were generally confident that the material was being circulated appropriately. Sometimes this would also be achieved by forwarding emails or by making a digest of the information or sending it with a personal email pointing out why it was interesting. However, respondents emphasised the huge number of emails received by colleagues and the lack of time to deal with them, thus stressing the importance of not deluging them with irrelevant information.

7.6 There was not time within this study to explore these claims in more detail, but the confidence of these staff that the information is reaching the right people puts the results of the Scoping Study survey in an interesting light, since, as already discussed, very low levels of awareness of JISC services and programmes amongst BCE staff were discovered. This leads us to speculate that either the passing on of information by intermediaries is in effect quite limited in scope, or that the specific information which is circulated is in itself very limited in scope, even if going to reasonable numbers of BCE staff. Tables 15 and 16 demonstrate similar patterns of response with regard to information from JISC about opportunities to bid for funding, and the same comments apply.

Table 13: Survey of Computing/IT Services, Librarians and Learning Technologists: Question 12. How often do you receive copies of literature from JISC about JISC services and programmes?

HE responses	Computing/ICT Support/Services	Library	Learning Technology	Other	Totals
Frequently (at least once a month)	16% (4)	19% (5)	33% (8)	39% (11)	27% (28)
Occasionally (less than once a month)	68% (17)	51% (13)	49% (12)	32% (9)	50% (51)
Never	16% (4)	31% (8)	17% (4)	29% (8)	23% (24)
Totals	25	26	24	28	103

FE responses	Computing/ICT Support/Services	Library	Learning Technology	Other	Totals
Frequently (at least once a month)	82% (9)	39% (11)	67% (4)	40% (2)	52% (26)
Occasionally (less than once a month)	18% (2)	50% (14)	33% (2)	40% (2)	40% (20)
Never	0% (0)	11% (3)	0% (0)	20% (1)	8% (4)
Totals	11	28	6	5	50

Table 14: Survey of Computing/IT Services, Librarians and Learning Technologists. Question 13. If you answered Frequently or Occasionally to Question 12, we are interested to know what happens with this information. (FE = 46 HE = 79)

	Sector	Yes
13.a. Personal use only	HE	47% (37)*
	FE	44% (20)
13.b. Kept in my office for my staff to refer to	HE	48% (38)
	FE	39% (18)
13.c. Displayed prominently for any member of the institution's staff to refer to	HE	28% (22)
	FE	35% (16)
13.d. Circulated to interested members of the institution's staff as appropriate	HE	72% (57)
	FE	78% (36)

*please note these numbers may add up to more than the total respondents, as it was possible to choose more than one response.

Table 15: Survey of Computing/IT Services, Librarians and Learning Technologists Question 15. How often do you receive information about opportunities to bid for JISC funding for development projects?

HE responses	Computing/ICT Support/Services	Library	Learning Technology	Other	Totals
Frequently	48% (12)	23% (6)	42% (10)	25% (7)	34% (35)
Occasionally	44% (11)	42% (11)	50% (12)	57% (16)	49% (50)
Never	8% (2)	35% (9)	8% (2)	18% (5)	17% (18)
Totals	25	26	24	28	103
FE responses	Computing/ICT Support/Services	Library	Learning Technology	Other	Totals
Frequently	18% (2)	11% (3)	33% (2)	20% (1)	16% (8)
Occasionally	45% (5)	36% (10)	50% (3)	40% (2)	40% (20)
Never	36% (4)	54% (15)	17% (1)	40% (2)	44% (22)
Totals	11	28	6	5	50

Table 16: Survey of Computing/IT Services, Librarians and Learning Technologists Question 16. If you answered Frequently or Occasionally to Question 15., we are interested to know what happens with this information. (HE = 85 FE = 28)

	Sector	Yes
Personal use only	HE	32% (27)*
	FE	50% (14)
Kept in my office for my staff to refer to	HE	26% (22)
	FE	32% (9)
Displayed prominently for any member of the institution's staff to refer to	HE	16% (14)
	FE	21% (6)
Circulated to interested members of the institution's staff as appropriate	HE	80% (68)
	FE	82% (23)

*please note these numbers may add up to more than the total respondents, as it was possible to choose more than one response.

7.7 Finally, the Second Survey asked about the relevance of the Third Stream theme in JISC's work, which of course was very new at the time of the survey (the survey was launched before the change of name to BCE). 35 of 50 FE respondents were not yet familiar with this theme, and 55 of 103 HE respondents (Table 17).

Table 17: Survey of Computing/IT Services, Librarians and Learning Technologists. Awareness of the Third Stream (BCE) theme amongst Computing/ICT Support/Services, Library and Learning Technology staff

FE responses	Computing/ICT Support/Services	Library	Learning Technology	Other	Totals
Relevant	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)
Not relevant	27% (3)	11% (3)	33% (2)	20% (1)	18% (9)
Not familiar with this theme	45% (5)	82% (23)	50% (3)	80% (4)	70% (35)
Don't Know	27% (3)	7% (2)	17% (1)	0% (0)	12% (6)
Totals	11	28	6	5	50
HE responses	Computing/ICT Support/Services	Library	Learning Technology	Other	Totals
Relevant	32% (8)	23% (6)	21% (5)	21% (6)	24% (25)
Not relevant	4% (1)	15% (4)	13% (3)	7% (2)	10% (10)
Not familiar with this theme	48% (12)	58% (15)	54% (13)	54% (15)	53% (55)
Don't Know	16% (4)	4% (1)	13% (3)	18% (5)	13% (13)
Totals	25	26	24	28	103

8. How JISC promotes itself

8.1 The previous section makes it clear that awareness of JISC and its services is generally low among staff engaged in BCE, and numbers, even, of staff in computing services, library and learning technology are not aware of some core JISC products. A number of Librarians and Learning Technologists reported to us that they were very careful in how much they circulated JISC literature, because they were concerned that it was not always easy to understand and because busy academics – and themselves at times - did not have time to read it. Those people who do know about JISC appear to be those people who have had some direct dealing with JISC through projects or through their current or previous work role. Where people are aware of JISC they are generally positive about what it offers, except for the key area of the way in which that information is made available. Unsolicited comments from survey respondents for this study include:

- There is an issue concerning the whole language surrounding JISC and its services which mainly relates to jargon. You might be surprised at the extent of the lack of understanding of just what some (most) communications from JISC (including parts of this questionnaire this far) actually mean in layperson terms. There is JISC-speak for a few, and normal language for the masses.
- Don't see the brochures etc. don't get to me. Leaflets of the "x for Dummies" type approach would be very helpful. Short case studies with links to good practice - whose done, it, whose used it? Things to avoid etc. would be very helpful. Need to be careful how they are labelled too – Web2 means nothing to me – but I have heard of podcasting etc.
- We raise awareness of the services and products, but I feel they are underused by lecturers.
- The JISC website is for JISC.
- What is JISC?
- There is little or no technical skill in the community engagement team so they are dependent on ad hoc or temporary help. This makes continuation of publication of information very difficult.
- Did have a look at JISC Legal – sounded interesting, but a. was a bit surprised to find myself on a separate website, and then b. found myself going further and further away from the JISC website and hard to get back and see the links with other services.
- If the JISC (and all its works) have become such a part of my everyday that they're indispensable, how come I can't persuade my "academic" colleagues?
- Generally find the help and resources from JISC excellent. There is a real sense from training workshops that a sense of FE Community is being created
- JISC services are very useful as they cover lots of areas. Generally best to pick at resources when they are needed.
- JISC Infokit on records management – a very important body of work.
- Sessions with JISC Legal – a great help
- Often e-Learning Technologists in our field adopt a wide range of roles and responsibilities, be they instructional design, staff support, helpdesk support, staff development, technical support, etc. This often means that we do not have enough time to make use of the wonderful resources produced by JISC. I am not sure whether or not this is commonplace, but I would be surprised if it wasn't!

8.2 The research team working on this report found the JISC website difficult to navigate and understand, finding that they frequently went around in circles. Trying to create a definitive list of

services was difficult from the information available on the website, (and repeated elsewhere in some JISC publications). For example, the list provided under “JISC services” includes 37 items. On closer examination, many of these were subsets of one another (e.g. specific items were mentioned which were part of a JISC Collection, but the Collection was also cited), although even here not all items from one Collection were mentioned, and it was not easy to see why some were included and others not. The overall list also includes reference to MIMAS and EDINA, which, although important providers of JISC services, are not services in themselves. There are references to the Advisory Services which variously quote five, six, or seven services, and although it is encouraging to find a new document (March 2007) which features just the Advisory Services, it was surprising to discover that this also included the list of 37 services described above, and that, despite the fact that TechDis was one of the services being promoted, the text on the opening page was presented in small white lettering on a yellow background, which even for someone with good vision is difficult to read.

8.3 A number of people interviewed reported finding out about JISC services through Google rather than going to the JISC website. In experimenting with this, a search for “accessibility education” brought up TechDis as the third entry, but “accessibility university” brought up UKOLN as the 57th reference, and no reference to Techdis was found in the first 20 pages of links. BECTA, on the other hand, often appears at the top of the list. It may be that more people would “stumble upon” JISC services and information if the metatagging of these websites was revisited.

8.4 General understanding of what JISC has to offer may also be hampered by a lack of clarity about the relationship between the services. Much of the content of the work of the Advisory Services appears to overlap, and, although there may be good policy reasons for this, it is not entirely clear to a new user why this should be the case (thus both TechDis and JISC Legal feature items about the impact of the Disability Discrimination Act). All the Advisory Service websites make some reference to the other services, but not in a way which presents them as a unified offering of help and advice to support ICT projects and understanding. The TechDis site does make reference to the other “4” advisory services (TASI is not included in this list) but only in its FAQ section. In addition, many of the JISC Infonet Infokits are comprehensive resources, but appear to be very generic in their focus, covering topics such as general Project Management rather than the management of ICT-related projects, and Netskills offers a training programme which also appears to be about generic project management. When reviewing the services through their websites to try to understand their respective roles, discovering such generic resources is potentially quite confusing. Finally, all of the Advisory Services offer training of various types (in addition to the training offered by Netskills, which is more clearly a training service), and yet there appears to be no source of information about this training which brings all the offerings together in one place.

8.5 During the interviewing process for this study, a hypothetical “Community Engagement Practitioner” (modelled on someone known to the research team) was used to test out the possible processes for using JISC support and advice. When, in one interview, we asked how this person would go about putting together, even at a simple level of understanding for preliminary planning, the development of an ICT related project (say, for example, to use podcasting) the response was that they would, in effect, need to talk to each of the JISC Advisory Services separately in order to get the full range of technical and legal information they needed, and that they would probably then need to turn somewhere else for advice about the production process itself (e.g. pros and cons of using a professional producer, scripting *etc*). Our respondents were aware that this range of areas of consideration were integral to implementing a new application of a technology, and that this in itself could discourage them from embarking on it. As one person said

There are so many things to think about it makes your head hurt!

It may well be that there is someone within their own institution who can provide this overview (for example the Universities of Leeds and Leicester have some detailed guides to podcasting on their websites), but as yet there is no simple guide from JISC that brings all of this together, or even

explains where the variety of information may be obtained (although the new JISC Advisory Services brochure goes some way to addressing this). The attractiveness of this concept was tested out with 12 of the BCE people interviewed, (larger numbers were not possible, as the idea developed during the course of the study), and they all thought that this would be valuable. Interview respondents regularly made the point that JISC could help by producing 'toolkits' which would enable them to evaluate the potential of software applications for BCE purposes. What could therefore be of great long-term benefit would be to create a JISC Advisory Centre, which could be promoted independently of the other JISC services and programmes, and could become known to HE staff as the place to turn to for the essential information that they need about new technologies and their applications.

Reaching out to individuals

8.6 Although many of the actual resources produced by JISC services are of interest to individual academics and BCE staff in their work, the Scoping Study and this study indicate that this information does not seem to be reaching them very effectively. Until now there was clearly a case for concentrating on intermediaries, such as Librarians and Computing Services staff to broker and mediate information flows. Where this was aimed primarily at teaching and learning and research this approach may have been effective. However, it has been shown that the link between these intermediaries and BCE staff is far from perfect and needs supplementation. In addition, the rapid growth of the use of ICT and its developing ubiquity now suggest that a new approach is needed. Web2 technologies in particular emphasise the personal over the institutional and use of them can be limited to specific projects, with, in many cases, the technology being implemented "locally" fairly readily. Development of the use of these technologies can, and perhaps should be, driven as much by demand from potential users as by leads from institutions.

8.7 In this context it seems reasonable to suggest that communication and promotional techniques based on a much clearer use of market segmentation within the HE and FE communities, and appealing directly to end users, should be considered. The Scoping Study reported that the work of the Regional Support Centres was well received, and this study provided further support for that view.

8.8 This study also suggests that there is clearly a need for greater interpretation and brokerage between end users and the services that JISC offers. This may not necessarily be through the RSCs themselves, but their models for support, and in particular the way some of the RSC websites bring together updates, news and summaries presented in a readily understandable format and language, and a more attractive style than through JISCmail notices, could be emulated in some way within HE. The Scottish RSC, for example, has a fortnightly newsfeed (see Appendix G for an extract), which is more of a digest, bringing together a range of information under headings such as 'JISC news'. Something like this might be more useful to end users than the current "JISC-ANNOUNCE" service", which, although it is a compendium of recent news and developments, covers the full spectrum of JISC activity, with the most recent including items such as "SHERPA wins prestigious European award", "Unearthing key archaeological resources online", "Capital programme: calls worth £5.3m to be issued" and "JISC tackles 'brave new world of Web 2.0'".^{13 14}

8.9 Many BCE staff are members of relevant professional bodies, such as AURIL, and the current development of the Institute of Knowledge Transfer, in addition to existing organisations, should provide a route into communicating with some BCE staff. We are strongly of the view, however, that the JISC must have something new to offer in the way of promotion and information, as described above, which directly engages with the interests of end users, before it promotes its services through these networks.

¹³ JISC Headlines - Issue 43, April 2007

¹⁴ see Appendices G and H for the examples

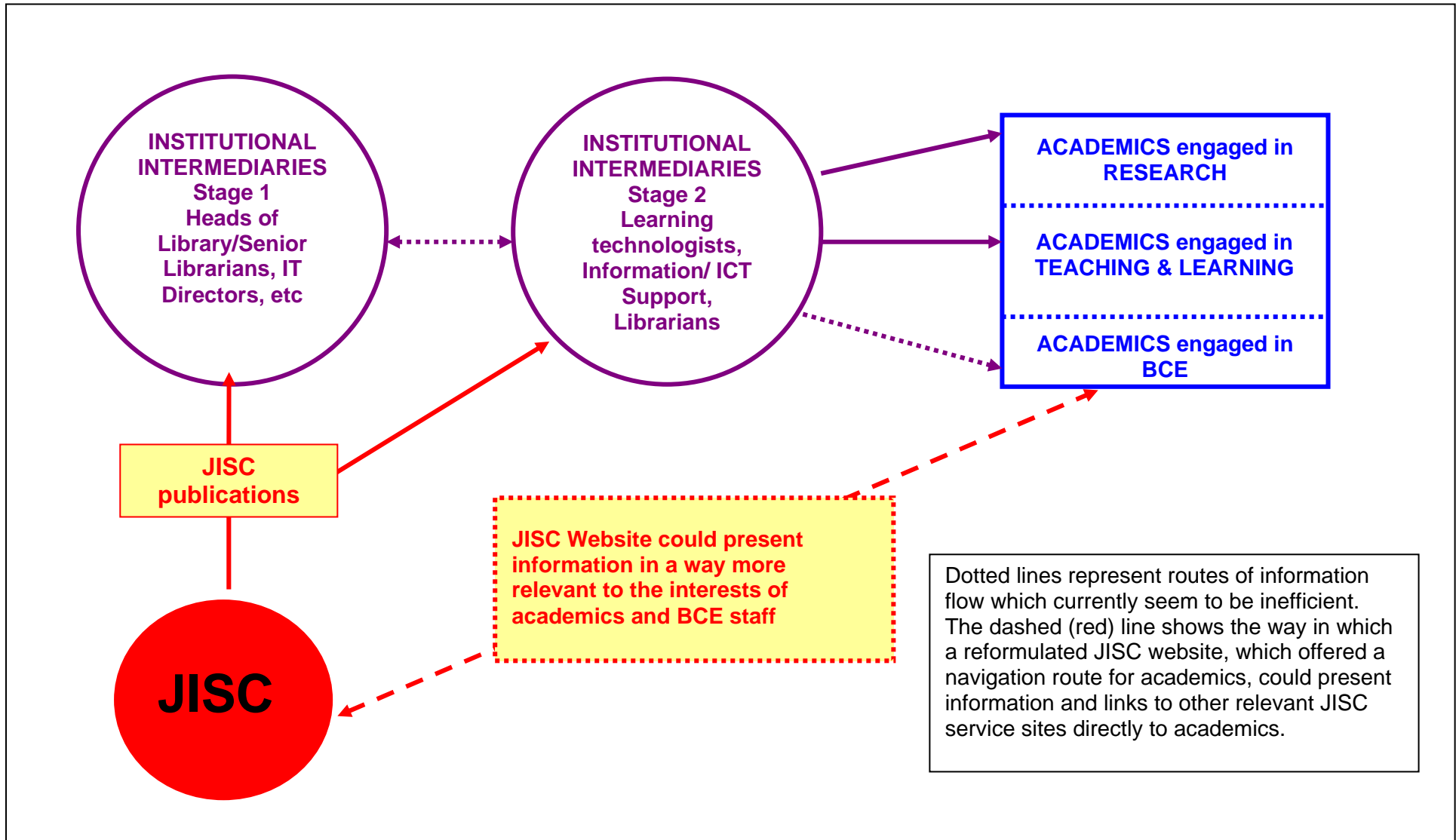


Figure A: Diagram to show the flow of information from the JISC to institutional intermediaries and then to academics.

9. Findings

The conclusions from the Scoping Study still hold.

1. The way that BCE is carried out across and within institutions is complex and complicated, and will become increasingly so as this work is further embedded within the work of institutions. This creates a challenging and difficult area of work for JISC to engage with and from which to deliver measurable outcomes.
2. The number of people dedicated to BCE, although relatively small in relation to the total number of staff employed in HE and FE, is growing, and through the work of the IKT will become increasingly professionalised and recognised.
3. JISC needs to understand how its market and audiences are differentiated and segmented, and respond in a more tailored way to ensure greater awareness of its work and services.
4. JISC services are not always joined up or cross-related. Thus at the moment the Advisory Services are individual services working in different areas, and are not presented as a co-ordinated set of services under one umbrella, separate from all the other JISC activities (*cf* JISC Collections, which has its own website).
5. Potential users have great difficulty in understanding JISC terminology.
6. A significant number of respondents expressed the view that JISC's publications and website were written in language which was more suitable for JISC staff than for the practitioners who were the indicated audience.
7. JISC could have a more explicit interpretational role. Practitioners need help in acquainting themselves with and understanding ICT applications and would welcome something that is a straightforward summary of new developments with examples of applications (like the Educause "Seven things you need to know about...."¹⁵). Whilst this should not necessarily be accomplished through the RSCs, the models for communication and brokering used by the RSCs could be transferred to other aspect of the JISC's activities.
8. Constraints on users' time are highly significant – people supporting and active in BCE do not have time to search for and understand what is possible. At the same time, as the use of ICT becomes more and more extensive and resources increasingly migrate to electronic format, the key intermediaries that JISC prioritises in its communication strategy, i.e. IT/Computer Service staff, Librarians and Learning Technologists, are increasingly stretched and the strategic priorities of such staff may not be ones which address the range of interests of BCE staff.
9. There is now even more interest in CRM, with Business and Community focused units at different stages of development. In some cases HEIs have already committed to

¹⁵ http://www.educause.edu/content.asp?page_id=7495&bhcp=1 "7 Things You Should Know About...pieces provide quick, no-jargon overviews of technologies and related practices that have demonstrated or may demonstrate positive learning impacts. Any time you need to explain a new learning technology or practice quickly and clearly, look for a 7 Things You Should Know About... brief from ELI"

substantial investment in new, institution-wide systems, so further work by JISC would need to take account of this and look at what is already happening. Equally, some institutions are only just looking into CRM and would welcome guidance on the choice of appropriate software and systems.

10. Web2 technology is developing and becoming of growing interest to end users. However, many BCE staff are interested in a wide range of ICT tools for collaboration, including more established technologies such as web technologies and video-conferencing, etc. In addition, the nature of the ways in which these technologies might be used may vary between Business and Community Engagement. At this time interest in Web2 seems to be greater in Community than in Business Engagement.

11. Concerns about legal and security issues related to the use of JISC and HE funded services and resources in work with businesses and the community are also becoming more noticeable.

12. Issues about licensing, exploitation and legal matters are not just about clarification, but about opening up access to commercial and wider use, especially to users in less well resourced domains such as SMEs and the voluntary and community sectors.

13. Responses to surveys indicated that there is a desire for an integrated and accessible package of training opportunities.

10. Recommendations

There are a number of recommendations which flow from this work. The JISC should:

1. consider sustaining a specific focus on the needs of BCE and extending the life of the BCE Working Group to support this, because as BCE work becomes more embedded in institutions it may become more difficult for the JISC to isolate its specific needs.
2. give careful consideration to how it addresses the interests of BCE staff when their priorities are not the same as those of the IT Services in institutions.
3. in order to establish and sustain communication channels with BCE staff, both continue to work through intermediaries such as Computer Services, Librarians and Learning Technologists, but also develop its relationships with representative and professional bodies such as the HEFCE BCE Good Practice Networks, AURIL and the IKT. The JISC should also consider how it can, through such links, offer support to BCE intermediaries such as business development managers and KTP managers to improve their understanding of the ways in which ICT might contribute to effective BCE activity.
4. create a JISC Advisory Centre to bring together information about the JISC services, and to act as a one-stop shop for academics and others seeking advice about how JISC could support their BCE-related activities.
5. consider differentiated navigation through its website, so that different users can find what they are interested in more quickly. (For example, in the same way that most HEI websites support navigation for users based on their interests such as employers/prospective students, current students/staff, etc.) It may even be that more than one website is needed, to separate out the very technical information, invitations to tender etc, from the more promotional content about JISC funded services, etc. It is recognised that each service has its own website, but as already mentioned, it is not always easy to understand the relationship between them.
6. find ways to respond to bottom-up expressions of need from academic staff – through helping them find out about what might be possible.
7. categorise services to make them more manageable, and do it from a user's perspective.
8. promote the Advisory Services as one discrete set of services, and get them working together more effectively so that they work as a package and do not overlap or compete.
9. consider how internal staff development activities could support JISC staff in understanding better the context within which BCE practitioners are operating and can quickly raise levels of awareness so that it becomes routine to consider the needs of BCE in programme planning and service enhancements.
10. produce toolkits or guidance to help BCE practitioners evaluate software applications, and in particular CRM systems.
11. pursue work on CRM, since this is clearly a sector wide and immediate need, which will help not only to improve BCE activity but also to integrate it in a more strategic way into the work of institutions. At the same time ensure that the guidance helps institutions implement CRM systems in a way which integrates with other institutional systems in line with the e-framework strategy.

12. pursue the planned Social Software pilot, but recognise that this appears to be of more interest to people involved with Community Engagement than Business Engagement.
13. pursue plans to support the effective exploitation of Web 2 technologies, but recognise that most of the respondents in our research had little experience of it and little time to develop applications for it. They therefore need information in non-technical terms with practical examples of how this technology might support BCE activity.
14. pursue work on licensing and legal issues, but widen this to consult about issues of widening access to people outside the HE/FE community.
15. co-ordinate training opportunities in order to promote an integrated training programme (they are currently scattered around the services).
16. provide more support and development for intermediaries (Librarians, IT specialists, *etc*) to help them understand BCE.

List of Appendices

- A List of institutions responding/consulted
- B Glossary of Acronyms
- C Scoping Study Survey Results
- D Second Study Survey Results (HE)
- E Second Study Survey Results (FE)
- F Table showing the range of software used by institutions to support their BCE work
- G Examples of RSC website
- H Extracts from JISC ANNOUNCE

Appendix A

Institutions and Organisations of all respondents - (including questionnaires and interviews)

- | | | | |
|-----|---|-----|---|
| 1. | Abingdon and Witney College | 48. | Fluent Europe |
| 2. | Adam Smith College | 49. | GATE |
| 3. | Anglia Ruskin University | 50. | Gloscat |
| 4. | Aston University | 51. | Great Barr Campus |
| 5. | Bath Spa University | 52. | Great Yarmouth College |
| 6. | BECTA | 53. | Harper Adams University College |
| 7. | Bell College | 54. | Hertford Regional College |
| 8. | Bicton College | 55. | Hills Road Sixth Form College |
| 9. | Bioknex | 56. | Hopwood Hall College |
| 10. | Birkbeck College, University of London | 57. | Hull College |
| 11. | Bournemouth University | 58. | I10 |
| 12. | Bridgwater College | 59. | Imperial College London |
| 13. | Brunel University | 60. | Institute of Grassland and Environmental Research |
| 14. | BSCKE | 61. | Joseph Priestley |
| 15. | Buckinghamshire Chilterns University College | 62. | King Edward VI College |
| 16. | Business and Community Knowledge Exchange | 63. | King's College London |
| 17. | Business in the Community | 64. | Kingston University |
| 18. | Canterbury Christ Church University | 65. | Knowledge East |
| 19. | Cardiff University | 66. | Knowledge West |
| 20. | CCLRC | 67. | Lancaster University |
| 21. | Central School of Speech and Drama | 68. | Lauder College |
| 22. | Centre for Excellence in Work Based Learning – | 69. | Leeds Metropolitan University |
| 23. | Chelmsford College | 70. | Leek College of FE |
| 24. | City College | 71. | Lewisham College |
| 25. | City of Bath College | 72. | Liverpool Hope University |
| 26. | City of Bristol College | 73. | Liverpool John Moores University |
| 27. | City University | 74. | London South Bank University |
| 28. | Clydebank College | 75. | Loughborough University |
| 29. | Coatbridge College | 76. | M1 Knowledge Exchange |
| 30. | Construction KE | 77. | Maurward College |
| 31. | Contact KE | 78. | Merseyside & NW |
| 32. | Courtauld Institute | 79. | Middlesex University |
| 33. | Coventry University | 80. | Morley College |
| 34. | Cranfield University | 81. | Motorsport KE |
| 35. | Crime Solutions through Partnerships | 82. | National Rural KE |
| 36. | Dartington College of Arts | 83. | Newcastle University |
| 37. | Digital KE | 84. | Nirvana |
| 38. | Dublin Institute of Technology | 85. | North Devon College |
| 39. | Duchy College (Cornwall College) | 86. | North East Wales Institute of Higher Education |
| 40. | Dunstable College | 87. | North Glasgow College |
| 41. | Durham University | 88. | North Hertfordshire College |
| 42. | E Midlands NTI KE | 89. | Norwich School of Art and Design |
| 43. | East Down Institute of Further and Higher Education | 90. | Nottingham Trent University |
| 44. | Edinburgh College of Art | 91. | Queen's University Belfast |
| 45. | Edinburgh's Telford College | 92. | Redbridge College |
| 46. | Exchange | 93. | Reid Kerr College |
| 47. | FDMX | 94. | Research Councils UK |
| | | 95. | Robert Gordon University |
| | | 96. | Royal Holloway, University of London |

97. Royal Veterinary College, University of London
98. Royal Welsh College of Music and Drama
99. SEEVIC College
100. Selby College
101. Sheffield Hallam University
102. Sheffield University Enterprises Ltd
103. Shipley College
104. Software Factory
105. Somerset College of Arts and Technology
106. South Devon College
107. South East KE
108. Southampton Solent University
109. St Brendan's Sixth Form College
110. Staffordshire University
111. Stanmore College
112. Stevenson College Edinburgh
113. Stoke on Trent College
114. Sutton Coldfield College,
115. Swansea College
116. Swindon College
117. The Institute of Cancer Research
118. The Open University
119. The Sixth Form College, Colchester
120. UKERNA
121. University College for the Creative Arts
122. University College London
123. University of Aberdeen
124. University of Bath
125. University of Birmingham
126. University of Bradford
127. University of Brighton
128. University of Bristol
129. University of Cambridge
130. University of Central England
131. University of Central Lancashire
132. University of Derby
133. University of East Anglia
134. University of Edinburgh
135. University of Essex
136. University of Glamorgan
137. University of Glasgow
138. University of Gloucestershire
139. University of Greenwich
140. University of Hertfordshire
141. University of Huddersfield
142. University of Hull
143. University of Kent
144. University of Leeds
145. University of Leicester
146. University of Lincoln
147. University of Liverpool
148. University of Manchester
149. University of Northampton
150. University of Nottingham
151. University of Oxford
152. University of Paisley
153. University of Plymouth
154. University of Portsmouth
155. University of Reading
156. University of Salford
157. University of Sheffield
158. University of Southampton
159. University of St Andrews
160. University of Strathclyde
161. University of Sunderland
162. University of Surrey
163. University of Teesside
164. University of Ulster
165. University of Wales Aberystwyth
166. University of Wales Institute, Cardiff
167. University of Warwick
168. University of West of England
169. University of Westminster
170. University of Wolverhampton
171. University of Worcester
172. University of York
173. Upper Bann Institute
174. West Focus
175. West Yorkshire Knowledge Exchange
176. Western Vocational lifelong Learning Network
177. Weston College
178. Wiltshire College
179. Writtle College
180. York St John University College

Appendix B – Glossary of Acronyms

ABS	Association of Business Schools
ACF	Active Community Fund
AHRC	Arts and Humanities Research Council
ALT	Association of Learning Technology
AOC	Association of Colleges
AURIL	Association for University Research and Industry Links
BCE	Business and Community Engagement
CKE	Centre for Knowledge Exchange
CPD	Continuing Professional Development
CRM	Customer Relationship Management
DELNI	Department of Employment and Learning (Northern Ireland)
DETINI	Department of Enterprise, Trade and Investment (Northern Ireland)
ESF	European Social Fund
FE	Further Education
FEC	Further Education College
FEI	Further Education Institution
HE	Higher Education
HEACF	Higher Education Active Community Fund
HE-BCI	Higher Education Business and Community Interaction (survey)
HEFCE	Higher Education Funding Council (England)
HEFCW	Higher Education Funding Council (Wales)
HEI	Higher Education Institution
HEIF	Higher Education Innovation Fund
ICT	Information and Communication Technologies
IPR	Intellectual Property Rights
ISP	Internet Service Provider
JANET	Joint Academic Network (high-speed computer network for the academic community)
JIBS	Joint Internet-based Sources
JISC	Joint Information Services Committee
JOS	JISC Organisational Support
KE	Knowledge Exchange
KT	Knowledge Transfer
KTP	Knowledge Transfer Partnership
MIMAS	Manchester Information and Associated Services
MLE	Managed Learning Environment
NESLI2	National e-Journals Initiative
OSI	Office of Science and Innovation
OST	Office of Science and Technology (now Office of Science and Innovation)
RCUK	Research Councils UK
RSC	Regional Support Committee
SCONUL	Society of College, National and University Libraries
SFC	Scottish Funding Council
TASI	Technical Advisory Service for Images
TQEF	Teaching Quality Enhancement Fund
TechDis	Technology and Disability Advisory Service
UCISA	University Computing Information Services Association
UKERNA	United Kingdom Education & Research Networking Association
VLE	Virtual Learning Environment