Investigating effective resources to enhance student learning

An overview of LearnHigher research, 2005-2008

Kim Shahabudin (University of Reading & The LearnHigher CETL)
# Contents

1. Introduction .......................... 5

2. Background to LearnHigher as a research body .................. 7

   2.1 Methodologies .................. 7

   2.2 Theoretical Frameworks .......... 11

   2.3 Research outcomes .............. 13

3. Research findings ................. 15

   3.1 Student needs, preferences and practices .......... 15

   3.2 Effectiveness of resources .......... 24

   3.3 The use of learning spaces .......... 29

   3.4 The role of learning developers .......... 32

   3.5 Staff interactions with learning development .......... 35

4. Conclusions ......................... 41

List of references .................. 43

 Appendix 1: List of partner institutions and contact details .......... 45

 Appendix 2: Annotated list of research projects .......... 46
Kim Shahabudin is a member of the Study Advice team and LearnHigher Research Officer at the University of Reading.

She wishes to thank all involved in the LearnHigher network who made the production of this report possible by providing data, explanations and advice on the text.

Kim Shahabudin, March 2009

k.shahabudin@reading.ac.uk
1 Introduction

The LearnHigher Centre for Excellence in Teaching and Learning (CETL) is a partnership of 16 universities across England, committed to improving student learning through the provision of excellent resources to support students in their learning development. Funded for five years through the HEFCE CETL initiative, LearnHigher was launched in 2005. LearnHigher resources in each learning area are developed in tandem with research into the effectiveness of interventions, and peer-evaluated by LearnHigher partners and often by other members of the academic community. Partners conduct research into student practices generally at their own institutions, in addition to a more specific focus on one of 20 different learning areas that underpin academic study.

LearnHigher is the largest collaborative CETL, collating research and resources from learning development professionals who work in different roles and positions, are situated in a variety of institutional departments, and respond to the needs of 16 diverse academic and student communities. The CETL is committed to an action research approach, using practice-led enquiry to investigate student needs and the effectiveness of interventions. This reflective approach to learning development practice has been fruitful across the CETL, producing a wealth of insights into student needs and preferences. In addition, LearnHigher partners have conducted and sponsored more formal research projects on topics associated with their own learning areas. As the CETL has progressed, LearnHigher partners have amassed a large quantity of expertise and research data on best practice in learning development interventions with a wide range of student communities.

The strength of the LearnHigher network lies in this capacity to record and investigate a diversity of student experiences from a variety of institutional viewpoints, while retaining a single focus on best practice in the use of learning development resources. LearnHigher is unique among CETLs in that many of its participants are often both continuously involved in student development in their day-to-day work, and working generically rather than solely within a single academic discipline. LearnHigher partners are situated in a variety of positions within institutions including dedicated learning development or staff development departments, academic subject departments, learning support units, and career or counselling services. The student communities they work with include young and mature undergraduates and postgraduates, pre-entry students still in Further Education, distance and part-time learners, students with specific learning difficulties and other disabilities. Some have come directly from school or college, while others have been, or remain, in employment, or have family commitments which impact on their studies. In short, LearnHigher is uniquely placed to obtain insights from a broadly constituted student community in higher education institutions across England.
This report will present an overview of LearnHigher research by collating and organising evidence from the research of individual LearnHigher partners, aiming to locate and expand on key insights, innovative research and areas that may merit closer investigation in the final stage of the CETL and beyond. Its intended audiences include LearnHigher partners themselves as well as the learning development and wider academic communities. It aims both to inform, and to promote debate, about the practice and experience of learning development professionals and the students they work with in higher education institutions. In addition, by surfacing the theoretical and methodological frameworks that underpin the work of LearnHigher partners, it hopes to illustrate the CETL’s role in validating learning development as an emerging field of professional practice.

The report is as much about the ways in which evidence has been collected as the content of that evidence base. The diverse professional roles and institutional positions of LearnHigher researchers have prompted the use of a variety of formal and informal methods of data collection. The collation of so many different types of evidence has been a difficult process, and interpretations can be no more than indicative. However the multi-dimension picture revealed by such diverse insights recommends that this unusual grouping is a fruitful way of accessing the student learning experience.

The report will start with the background to LearnHigher research including a more detailed description of LearnHigher and its aims, and a discussion of some of the main theories and methodologies which inform our learning development research. Following this, sections will report LearnHigher insights and discoveries from research in five key areas of the teaching and learning experience:

- Student needs, preferences and practices
- Effectiveness of learning development resources and interventions
- The use of learning spaces
- The role of learning developers
- Interactions between learning developers and subject academics

The report ends with a summary of the current state of LearnHigher research, and suggestions for future projects. Appendices include a list of partner institutions and an annotated list of research projects undertaken.
2 Background to LearnHigher as a research body

LearnHigher emerged from a group of members of the Learning Development in Higher Education Network (LDHEN) (an online community of practitioners in learning and educational development within higher education), who had been active in ‘The One Stop Swap Shop’. This initiative was founded on the idea that high quality resources to support learning development might be shared between members of the network, capitalising on shared expertise and experience. The aims of LearnHigher built on this principle of resource-sharing, with the establishment of a body of research and evaluation data to inform effective resource development and good practice.

2.1 Methodologies

The CETL describes itself as a ‘network of expertise’ rather than a project. Although there are both global and local aims and outcomes, these tend to be multiple and ongoing rather than single and with a fixed endpoint. However, some key questions for investigation were agreed at the start of the CETL:

- What are students doing, in terms of learning and study practices?
- What is encouraging them to study/learn in this way?
- What is stopping them from studying in a more effective way?

Beyond these common questions, coherence has emerged from shared values and beliefs about the concept and aims of learning development, and through reference to common theoretical frameworks in pedagogy, including socio-cultural theories and academic literacies. This has been a particularly creative approach, encouraging partners to make full use of the diversity of their interests, professional backgrounds, and the student communities within which they operate, while working towards a commonly conceptualised goal of enhancing resource provision.

Writing just before the inception of LearnHigher, John Hilsdon (subsequently a LearnHigher partner himself) argued that the activities of LDHEN justified its description as an “emerging community of practice”. (Hilsdon, 2004.) The same description was subsequently used in the original bid for CETL funding when describing aspirations for LearnHigher itself. Operating as a community of practice means that LearnHigher research has been enacted against a background of continuous sharing of professional experience and expertise, at both network and local level. At the network level, two-day meetings are held three times a year. In addition to learning area co-ordinators, attendees include members of the central operations team and of local LearnHigher teams. Each meeting includes a ‘development day’, aimed at building capacity in the
network through sessions in which partners share experience and expertise in research and evaluation methods. The meetings provide further opportunities for capacity building by operating as a forum where partners can share and discuss (both formally and informally) resource development, projects and initiatives at their own institutions. Further ‘virtual’ discussions and awareness-raising take place through an active JISC mailing list (learnhigher@JISCmail.ac.uk).¹ In addition to these activities which involve the whole network, there are also four geographically-determined ‘cluster groups’ which meet regularly to discuss issues concerned with evaluation (both results and processes).

Evaluation is central to LearnHigher research. In the self-evaluation report on the first year of LearnHigher, Peter Knight noted that, in the context of the network, “Evaluation has been taken to be a form of research that contributes to LearnHigher’s commitment to creation and enquiry in the field of learning development” (Knight & LearnHigher, 2006, 9). Murray Saunders’ RUFDATA template was used to structure thinking about evaluation.² Topics for evaluation include the effectiveness of resources, the practices of learning developers, the use of learning spaces, and institutional impacts. There are three main types of evaluation: self-evaluation (of individuals, local teams and the network as a whole); peer evaluation, by other LearnHigher partners and local teams; evaluative feedback from users (students, subject academics and learning developers outside the LearnHigher network).

As a network concerned primarily with developing effective support resources, user feedback is especially important. The responses of both students and staff to existing and developing resources have been collected using a variety of methods including paper and online surveys and questionnaires; focus groups and Delphi groups; individual interviews, by ‘phone, email and in person. More unusual methods have also been trialled for their utility: a ‘dotmocracy’ voting system at NTU, for instance, or a ‘comments wall’ to gain user feedback in a learning space at Reading. The qualitative and quantitative data obtained has been treated, not as an end in itself, but as a tool to direct continued research and development. It has, for instance, informed the revision of existing resources and working practices, and the development of new resources where gaps were revealed. It has also provided confirmatory evidence for the effectiveness of practices and resources which had previously been generally accepted (within the network and elsewhere) as good practice.

¹ LearnHigher partners also remain active on the original LDHEN mailing list (LDHEN@JISCmail.ac.uk). This list operates as a further and extremely valuable source of expertise from the wider learning development community. A LearnHigher Development Fund project, ‘Learning Development: Past, Present and Future’, has been undertaken to analyse the archives of the LDHEN mailing list and is among the sources drawn on in compiling this report. More details on this project can be found in the Appendix.
² RUFDATA is an acronym describing the elements of evaluation research: Reasons & Purposes; Uses; Focus; Data and Evidence; Audience; Timing; Agency. (Saunders, 2000.)
Producing an overall measurement of the effectiveness of resources in quantitative terms is not a practicable task within the broad and multi-directional scope of the LearnHigher network. The production of quantitative data on reasons for student success or failure is an imprecise exercise even when undertaken in a single course within one institution; the generic nature of LearnHigher resources and the diverse student communities they operate on make the task impossible. Partners have collected quantitative data where appropriate (for instance, how many times a webpage has been accessed and how long readers have remained on the page; increases and decreases in number of attendees at workshops; or the take-up rate of self-help leaflets). However, much of the data associated with evaluative feedback on resources is qualitative. This produces a rich picture, but makes it difficult to communicate research findings. One method which has proved useful is the writing of case studies. This methodological tool has proved popular in recent years in academic literacies research because of its ability to provide what Geertz (1973) describes as “thick description”. (See, for instance, Lea & Street, 1998; Lillis, 2001.) A number of case studies have been published on the LearnHigher website, and some mini-case studies are included in the findings section of this report as local illustrations of the wider issues discussed.

LearnHigher is committed to using practice-led enquiry in its research. This form of investigation adopts the same principles as ‘action research’, described by the social psychologist Kurt Lewin as a process which formed “a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of the action” (Cooke & Cox, 2005, 23). Practitioners typically pursue an iterative cycle of “collective, self-reflective enquiry” into their own practices in order to identify areas for improvement (Kemmis & McTaggart, 1988, 5). This contrasts with more traditional approaches to social science and educational research which have impartial observers reporting on a situation from an external viewpoint. Critics of this approach point to the potential for bias and subjectivity when the researcher is personally invested in the phenomenon they are investigating. (Francis, 1991.) It has also been argued that the focus on context-specific topics for investigation means that research may not have high external validity, that is, that it may not be easily generalisable. (Cook and Campbell, 1976; Berkowitz and Donnerstein, 1982.)

The first criticism may (to some extent) be answered by reference to the complexity of university communities that make it difficult for an ‘outsider’ to grasp the range of factors that may be operating on the objects of research. To the second criticism, it should be noted that LearnHigher research is not (necessarily) aimed at generalisable outcomes. Rather, by collaboration and synthesis of observations within the network, it seeks to build internal validity. Thus by collating experiences across a limited but diverse range of
institutions, it is able to offer a broader picture than is possible for individual research projects in single institutions. The network’s overall aim is to build (in its five-year span) a basis for future research in learning development (by existing partners and others) by developing initial understandings of practices, discerning trends and describing suitable methodologies. There are also many advantages to the practice-led approach for members of LearnHigher: for example, it avoids problems with student confidentiality that might arise with an external researcher; enables rapid evaluation of resources and strategies; and builds on existing expertise and experience (often the collective expertise of teams, rather than individuals) to reveal possible future directions for research and development.

Research projects undertaken in individual learning areas have often been prompted by these reflections on practice by LearnHigher partners and the teams they work with. Other prompts for research may be surveys of students and staff (either undertaken by LearnHigher or by other bodies), and requests by individual members of staff who have identified an area of interest from their own practice. An annotated list of research projects is provided in Appendix 2: the varied list of topics illustrates the diversity of interests with which the network has been associated.

Collating an overview from this diverse set of research findings has required a novel methodological approach in itself. Haggis (2007) argues that current epistemological imperatives in research retain structuralist and determinist biases, demanding the implementation of “transcendent categories” to make sense of findings and facilitate the discovery of “causal pathways”. She notes the consequent difficulties in producing meaningful comparative analyses from qualitative and case study based research. Haggis suggests that the principles of complexity theory can offer an alternative in which the focus of analysis shifts from cause to effect:

The inability to identify centralised mechanisms or to infer causal pathways, however, does not mean that relationships cannot be observed between particular sets of interacting variables... and what it is that actually emerges from these interactions... For example, it could be observed that in the case of a particular institution, with specific types of staff, specific types of curriculum, a particular kind of culture and ethos, and students from predominately x and y type of social backgrounds, particular types of result emerge from the interactions of these different things (think of Oxford University, for example). The absence of a central driver in this conceptualisation suggests a potentially fruitful shift from the search for generic causes (or correlations) towards a closer study of what is interacting, over time, and how such interactions may be taking place, in relation to the outcomes that can be observed in a specific situation. Though the causal pathways cannot be identified, aspects of the conditions that give rise to particular types of emergence can.

Haggis, 2007, 41.
Taking a similar approach has proved productive in compiling this report, in which findings are largely described in terms of their implications for learning development as a field of practice rather than as a causal analysis.

2.2 Theoretical frameworks

Coherence in LearnHigher research depends on a broadly conceived, shared understanding of the distinctive features of learning development and its theoretical background, and apt methodologies for the field. This section will briefly discuss some of the larger theoretical frameworks, debates and methodologies that inform learning development and LearnHigher research.³

Learning development is a recently established field of practice in which emphasis is placed on enabling students to develop the practices needed for effective study at university. Practitioners view learning as the situated activity that takes place at the intersection of expert instruction or guidance, and the student practices that facilitate meaning-making, which may include academic writing, note making, reading, giving presentations etc. Learning development concerns also encompass associated practices, including assessment, information literacy and time management. These practices are conceived as emergent rather than finite, in a state of revision and remaking throughout a student’s academic career in response to changing needs. As a consequence learning developers reject standalone ‘study skills’ teaching as an adequate response to the need for support, considering this to represent the tools needed for learning as a single finite set of practices, the teaching of which supplies some kind of ‘deficit’ in the student’s academic capacity.

This understanding is underpinned by sociocultural theories which note the effects of societal and cultural forces on processes which result in knowledge acquisition. A significant influence is the work of the developmental psychologist L.S. Vygotsky in the early years of the twentieth century. Vygotsky noted that “human mind must be understood as the emergent outcome of cultural-historical processes.” (Daniels et al, 2007, 1.) The notion of emergence is important here: the theory is non-deterministic in that although minds are shaped by the cultural and social contexts in which they develop, they also have an influence on shaping those contexts themselves. Vygotsky’s notion of a ‘zone of proximal development’ describes the (constantly shifting) area in which instruction and development interact:

³ Each individual learning area has also identified current research that is particularly relevant to them: surveys are available through the individual learning area sections of the LearnHigher website.
We have seen that instruction and development do not coincide. They are two different processes with very complex interrelationships. Instruction is only useful when it moves ahead of development. When it does, it impels or awakens a whole series of functions that are in a stage of maturation lying in the zone of proximal development. This is the major role of instruction in development... Instruction would be completely unnecessary if it merely utilized what had already matured in the developmental process, if it were not itself a source of development.

(Vygotsky, 1987, 212)

This zone is the area in which learning development interventions operate, aiming to encourage students to develop their learning practices to their full potential. In particular, Bruner’s notion (developed in response to Vygotsky’s theories) of ‘scaffolding’ is significant (Wood et al, 1976): providing frameworks and staging posts for learning development.

Vygotsky’s cultural-historical theory, and theories that derive from it like activity theory, underpin learning development’s concept of learners, not as passive recipients of knowledge, but as meaning-makers themselves in an arena of constantly shifting relations of power and identity. Learning is not a one-way process in which knowledge is bestowed on a learner by a superior mind, but a complex of interactions between teachers and learners, in which meanings may often be contested. These interactions are mediated by actions involving tools, including “the very powerful tools of words, images and gestures.” (Hutchins, 1995, 290.) LearnHigher’s work on developing resources focuses on the provision and use of such tools. Support resources are conceived as ‘scaffolding’ frameworks which function to guide students in their learning practices, rather than being imperative.

Bourdieu’s notion of ‘habitus’ as a set of socially and culturally acquired “dispositions” which inform the understanding and actions of individuals (Bourdieu, 1977, 72) is another significant theoretical notion in understanding learning development. The concept of habitus, and the sets of social and cultural competences it implies, underpin an understanding of the needs of diverse learners in the process of acculturation to different levels of higher education. This addresses a central aim of learning development work: enabling learners to transit from one level of academic practice to a higher level (whether from school to higher education, from first year through to second and Final years, or from undergraduate to postgraduate). Meyer and Land describe the transition points in the learning process as “threshold concepts”, noting that these represent “a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress.” (Meyer & Land, 2003, 1.) Work on threshold concepts has largely focused on subject-specific knowledge and practices, offering productive insights into learning in the disciplines. In addition, more generic 'threshold concepts' in learning
development can also be identified: for instance, an understanding that universities are engaged in the creation of new knowledge, that meaning is often contested, and that a greater tolerance of uncertainty or ambiguity may be required than in previous educational contexts.\(^\text{4}\)

In recent years, the academic literacies approach has been extremely influential in learning development practice and research. This sociocultural approach understands student literacy as a “range of social and cultural practices around reading and writing in particular contexts, rather than individual cognitive activity” (Lea, 2008, 634). Contexts may include subject-specific discourse, cultural competences of students, relationships between students and staff, and the values of the institution itself. Understanding writing practices within these contexts, in an increasingly diverse student community, has prompted the use of an ethnographic approach to research which has been influential on LearnHigher methodologies (as described in the previous section).

2.3 Research outputs

Research outputs from LearnHigher are disseminated via three pathways: through online dissemination on the LearnHigher website itself; through local means of dissemination to teaching and learning communities at partners’ own institutions; through research papers and written texts for presentation and publication to the wider academic community.

LearnHigher research is primarily aimed at informing the development of resources to support learning development. As a consequence, an important research output is the resources themselves. The two types of resource produced are collated in a central website. Some are designed for use by students directly as self-help resources, with interactive exercises and supporting documents to download. Others are aimed at other learning developers and academic teaching staff, including resources to adapt and use in their teaching, advice on the mediated use of these resources with students, and annotated bibliographies and literature reviews on different learning areas. The website also includes reports on individual research projects carried out by partners, or as a result of LearnHigher funding. Anticipated audiences for the website include students as well as learning development communities and those interested in teaching and learning generally, both in the UK and overseas. (Visits to the website were logged from 99 countries in February 2009, for instance.)

At partners’ home institutions, LearnHigher research outputs can be more directly reported to a group of identifiable teaching and learning communities, including local

\(^{4}\) Thanks to Pauline Ridley for this explanation of threshold concepts in relation to learning development.
students, support staff and subject academics. Outputs may include material posted on websites and VLEs, student and staff training workshops, articles in teaching and learning publications, presentations at local seminars and conferences, and reports to policy-making bodies within the institution.

Partners and others who have undertaken research funded by LearnHigher have also produced papers for peer-reviewed journals, commissioned chapters in edited collections on educational and learning development, individually authored monographs, and presentations at national and international conferences and seminars. LearnHigher partners have visited and established links with higher education institutions globally, including the USA, Australia and Japan and undertaken collaborative research projects with international partners. Partners are currently authoring an edited collection on learning development issues, to be published in 2009 by Palgrave Macmillan.
3 Research findings from LearnHigher partners

This section collates findings provided by LearnHigher partners on five areas that are key to our understanding of the development and use of effective learning development resources. In most cases the source and method used to gain evidence is briefly described: sources are anonymised where they refer to personal experiences with employers. As an overview, this discussion seeks to collate discoveries made in diverse situations and institutions and draw out commonalities, rather than developing themes in detail. It is hoped that this synthesis will indicate areas which could be individually developed by partners either individually or collaboratively.

3.1 Student needs, preferences and practices

An overarching aim of LearnHigher research is to address the lack of documented evidence on the needs, preferences and practices of students concerning support resources. When producing resources learning developers draw on expertise largely gained through day-to-day contacts with students and with those who work directly to support their studies. LearnHigher’s practice-led approach has encouraged focused reflection and evaluation on these contacts. This has often prompted more formal investigations which have provided insights both on general practices, and on particular aspects of individual learning areas. The discussion that follows draws together observations under key areas for consideration when developing support resources.

Understanding academic culture

Bourdieu’s notion of habitus (1977, 72) is especially apt when considering the transition of students to the very specialised environment of higher education, and later to different academic levels within their courses of study. The expectations and assumptions that students hold about higher education are often quite different to the expectations and assumptions that university staff hold about student awareness. This mismatch can lead to poor study practices, with the resulting difficulties and poor marks causing anxiety and loss of academic confidence in students. The opposite – that knowledge is enabling - is also true: reflection on practice working with students at London Metropolitan University (London Met), for instance, prompted the observation that students’ development of study practices can be an emancipatory and socio-political activity. Research at various institutions (including interviews with students at Liverpool Hope) indicated that there is a need for students to understand how universities and academic communities operate in order for them to succeed in developing effective study practices. (See also Tinto, 1993,
Where there is no formal introduction to academic culture, students use various ad hoc methods to revise expectations and assumptions: observing teaching staff and other students; sharing experiences with their peers; using work by other students as models; seeking advice from tutors and support services. Whilst such attempts at self-help are to be commended, poor practice is as likely to be transmitted as good – and students may experience frustration rather than success. Improved understanding in this area could enable the early and timely provision of appropriate support resources. By easing transitions to academic practices at higher education level this would make a significant contribution to retention strategies.

This is an area where finding ways to access the student voice is of paramount importance; for learning developers and subject academics alike, it is difficult to unpick years of immersion in the higher education mindset. At Liverpool Hope, interviews conducted with students indicated that much energy was expended trying to understand the tacit ‘rules’ of higher education assumed by more established members of the academic community: for instance, how to assess the academic reliability of sources. Research with staff and students at Nottingham Trent University (NTU) showed that students also lack knowledge about the level and quantity of writing expected of them at university.

Language is a particular area of concern:

- At Plymouth, records of one-to-one sessions with students showed that students lack knowledge of the terminologies used in higher education. This can lead to mistakes in completing key tasks like interpreting assignment briefs.
- At Lincoln, students and staff commented similarly that students were bemused and alienated by the language of research.
- At NTU, students interviewed about their study practices asked “what is a journal?”

Problems with expectations and assumptions can be magnified in students from non-traditional backgrounds who may begin with less cultural and academic capital than some of their peers. Reflections on practice working directly with students and in staff development at London Met indicated that these students find it especially hard to make the transition to academic reading. Examining student communities who experience greater difficulties (including students with specific learning difficulties, mature students, students with English as a second language) helps to surface the main issues and provide a framework for effective interventions for all students: indeed, the widening participation agenda has promoted much existing discussion of learning and teaching issues especially relevant to learning development (for instance, Lillis, 2001; Northedge, 2003; Haggis, 2006).
Learning by example can be an effective strategy if the examples are well-mediated, and learning advisors and academic teaching staff from many institutions report that students often ask if model answers are available. This can be problematic: without markers’ comments, it may be unclear why a piece of work is good or bad. However where there are comments, they may vary widely in the amount and type of feedback given. In addition tutors are often reluctant to show students recent work in their subject areas in case it has an undue influence on their assignments. In response to such concerns, the WrAssE project at Plymouth is collating samples of genuine student work for various types of written assignment, annotated by subject academics to show what makes them effective as pieces of academic writing. It aims to avoid the problems outlined above by establishing a common framework for comments on texts submitted to the collection, and by registering all works with plagiarism detection software databases. This is a model for the practical resource outcomes from research that LearnHigher aims to produce.

Difficulties with practices that arise from incorrect expectations reinforce the belief held by many learning developers that support resources should be constructed around a development model rather than the more finite ‘skills’ or ‘deficit’ model. (See, for instance, Lea & Street, 1998; also discussion in 2.2 above.) Students often believe that they ‘know’ how to write an essay, or do research, or make notes, because they have already learnt this at school or college. (Cook & Leckey, 1999) This point was reiterated in a survey of records of one-to-one sessions at Reading, and in research into transition at NTU where students who assessed themselves as ‘confident’ about writing at university level then made it clear that they had little knowledge about how it would be different: not knowing about correct referencing practices or what a journal was, for instance. Support resources that encourage students to first understand the principles of academic culture in higher education will show how they can build on their pre-existing practices, rather than feeling that they should either continue using their old ‘skills’, or discard them wholesale in favour of completely new ‘skills for university’.

**Particular areas of difficulty**

LearnHigher partners have also highlighted practices which students find especially difficult. With staff resources in learning development often stretched, identifying these core issues can assist strategic planning for the provision of workshops and self-help resources, as well as informing one-to-one support.

Good structuring practices are a key component of effective written communication, the basis of most assessed work at university:
In one-to-one sessions at institutions including Plymouth, high student demand for guidance and tutorial help on structuring communications indicated that this is a particular area of difficulty.

Focus groups and interviews with students at Reading also mentioned poor structuring as an area frequently commented on by markers.

However, interviews with students and other members of the academic community at NTU highlighted a lack of opportunities to practise academic writing outside of formal assessments.

Coursework marks are increasingly significant in the final assessment of modules, and where students lack either models or the opportunity to get feedback on formative work, first assignments can get unexpectedly low marks, causing a loss of academic confidence. However the provision of formative assignments is dependent on the ability to provide staff resources to mark work. This is an area where resources to support practices like peer assisted and self-reflective learning may be useful.

Another area of particular concern for students is in developing good practices in interpersonal communications. With the increasing use of group work for assessed presentations and projects, and with interpersonal communications identified as one of the seven key transferable skills students should develop through their university studies, this is an area where timely and appropriate support resources are in growing demand. Feedback and comments collated at Leeds from workshops and conferences indicated that interpersonal communications may be a particular problem for students who need to develop these for professional practice. This is especially the case for students in medical and healthcare professions, where assessment of these practices counts as high as more traditional written forms of assessment. Student concerns in this area are also prompted by increasing use of new interactive technologies (Web 2.0) as tools for study. A survey undertaken at Leeds of online and distance-learning students, using online chat and seminar discussion, showed that it has become important to develop effective ways of communicating in synchronous and asynchronous chat. This is now relevant to study as well as leisure communications, with increasing numbers of students undertaking distance learning courses, and receiving tutorial and peer support in online groups, for instance, while away from their home universities on placements.

Scarcity of resources is a longstanding problem for all students: at Liverpool Hope it was noted that the availability of resources could have a significant impact on the topics students chose to study – more so than interest in the topic. The easy accessibility of online resources has made them highly popular with students, but also prompted new questions about academic practices: how to select and evaluate electronic sources, and
how to reference them. One well-received online tutorial on evaluating websites is the Internet Detective (now in its 3rd edition, developed and evaluated at MMU in collaboration with Intute at the University of Bristol). At Bradford, questions from students in workshops and feedback on the referencing website has also suggested a need for more support resources on referencing electronic sources. While most students are able to find information on how to cite a straightforward webpage, this does not answer concerns about, for instance, citing blogs, podcasts or e-journals. This is an area where new types of source are emerging all the time. As a consequence, resources that build knowledge about the purpose and underlying principles of referencing offer a more sustainable form of support than providing ever-expanding ‘how to’ lists.

With continued prominent warnings from institutions concerning plagiarism, referencing remains an area of especial concern for students. There is increasing use by departments of plagiarism detection software which offers no way of distinguishing between intentional and unintentional plagiarism, a practice which can create more anxiety. However at Kent, the software package Turnitin was used in a pilot, not only for plagiarism detection, but also as a formative writing tool. Evaluation of this usage suggested that students found it beneficial for their understanding of referencing. Students at Bradford were concerned about a particular issue associated with plagiarism: how to decide what counts as common knowledge. This is an area where a collaborative approach, working with subject specialists to produce resources adaptable to particular disciplines, may be most profitable.

One final area of difficulty, identified at Lincoln through the evaluation of student work and a survey of support materials, is in the understanding (at undergraduate level especially) of research methods and the need for validity and reliability. However, the success of students who have the opportunity to take part in projects like UROS/UROPS (Undergraduate Research Opportunities Scheme) operating at universities including Lincoln and Reading, or the SPUR (Supporting Undergraduate Researchers) scheme at NTU, shows that this understanding can be swiftly learnt when appropriate support is provided in conjunction with opportunities to practice alongside academic researchers. This reiterates the benefits of inter-personal activity with other members of academic communities in enhancing study practices.

While the observations above point to difficulties found in a broad demographic of students, it should also be remembered that there are groups that may have issues with particular practices. For instance, a project on Developing Inclusive Curricula at Worcester noted the particular neurodevelopmental profiles of dyslexic students and their implications for teaching. Research at Reading showed that mature students often have

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5 The Internet Detective can be found at [www.vts.intute.ac.uk/detective/index.html](http://www.vts.intute.ac.uk/detective/index.html)
particular issues with time management because of their additional commitments. This kind of observation may emerge more readily from qualitative and less formal research methods like reflections made on practice, showing the value of the range of research methods used by LearnHigher partners.

**Working independently and with peers**

With A-level classes in schools and colleges becoming larger, and more preparation for university taking place in intensive one year Access courses, it is perhaps inevitable that most students’ recent experience of education should have been more structured and directed by their teachers than has been the case in the past, when smaller classes allowed more exploratory practices. Whatever the reasons, fewer students arrive at university prepared for the level of independent study expected in UK higher education.

Research at NTU with first year students on their prior learning experiences yielded observations including:

- On notemaking – “The teacher would highlight which bits were important as they didn’t want students to fail.”
- On time management – “Teachers helped you keep track of everything.”

Independent study can be a particular problem (especially at postgraduate level) for international students whose previous academic culture has been more authority led. The model offered by learning development (as opposed to the ‘study skills’ approach) aims to produce resources that support students in developing their practices, rather than offering another imperative top-down approach that works against independence.

Many LearnHigher partners have made observations about areas where students have difficulties with independent study. At MMU, students on an information literacy course were observed to be unable to effectively find information sources, extract information from books or create contexts for their research, without guidance. In cases like this where students are being introduced to independent study practices, a staged approach may be helpful. For instance, focus groups with students who had undertaken a Combined Studies community project at Manchester revealed the need for scaffolding frameworks - ‘staging posts’ between directed and self-directed study. Difficulties with acting independently can also influence the choices students make in their studies. At Lincoln it was observed that students will allow convenience to determine research methodology, for instance using a questionnaire because everyone else is rather than considering the right tool for the job. This recalls the earlier observation from Liverpool Hope on the influence that availability of resources could have on choice of subject.
In addition to independent study, students also need to become independent thinkers. Baxter Magolda (1992) describes four stages of knowing that students need to progress through, from ‘absolute knowing’, where students expect to be able to find a single definitive answer, through ‘transitional’, ‘independent’ and ‘contextual’ knowing. As they move through these stages, students become more confident about dealing with uncertainty.

This first stage of ‘absolute knowing’ is especially reflected in research findings:

- Student and staff comments at Lincoln showed that students do not see themselves as able to undertake their own research when they start university, expecting a didactic approach to learning where they are told what to believe.
- Tutors at Manchester noted that students have problems coming to terms with the idea that there may not necessarily be a ‘right answer’. This notion of independent thinking can seem at odds with academic practices like referencing.
- Workshop feedback at Bradford showed that students find it difficult to understand the relationship of referencing to the development of ‘their own voice’ in academic writing.
- This concern is supported by observations from one-to-one sessions at Reading, where students voiced their confusion over apparently conflicting instructions to both ‘be original’ and ‘use evidence from your reading’.

Managing study time is a particular issue in enabling students to become independent. (Haggis, 2006.) At Reading, a survey of course structures over a five year period was undertaken which showed increasing modularisation. This has prompted changes in the way students manage their time with more of the co-ordination of study demands from different modules being placed on the individual student rather than being designed at department level. At Brunel it was observed that, with quantitative modules being assessed at the end of the year, students tend to leave the learning of numeracy topics till the end of the course, failing to budget time to practice questions and develop numeracy practices. Further research with students in focus groups and interviews at Reading showed that distraction is a growing problem with students using the same online ‘spaces’ for study and socialising. The same blurring of work/leisure boundaries was seen to promote a ‘24/7 study’ culture where students feel guilty whenever they are not studying. In the past there has been a tendency to believe that good time management is an inherent quality rather than a set of practices that can be developed (a similar observation was made at Brunel with regards to maths). More recently, however, increasing numbers of students have been asking for strategies to improve
their time management, suggesting that attitudes are changing, and that learning to manage time has now become part of students' discourse about study.

Although independent working is fundamental to university study, students also need to interact with their peers effectively:

- Student interviews at Liverpool Hope indicated that students use each other as a major source of support and information, often in preference to the formal mechanisms put in place by institutions.
- Support for this insight comes from Kent, where a survey showed that students tend to go first to other students when seeking help.
- Interviews at Worcester also showed that dyslexic students learn effectively from their peers in informal settings, and that they respond to smaller groups.
- However, at Leeds, evidence from the National Student Survey suggested that larger student groups are making it more difficult for students to develop close working relationships with their peers.

**Engagement and validation**

While the observations above suggest some of the learning development resources that may benefit students, it is also important to consider how to persuade them to utilise the support provided. Examining the way that students engage with their studies and how they decide which information is authoritative can help to inform promotion and dissemination strategies.

Observations from one-to-one sessions and discussions with subject academics at Plymouth showed that students need to feel some kind of ownership of their studies in order to be active independent learners. At Lincoln, Reading and NTU, for instance, students taking part in undergraduate research schemes like UROP, UROPS and SPUR have found it extremely stimulating and rewarding when given the opportunity to engage in genuine research alongside a member of staff. It was observed at London Met that teaching active learning practices in areas like reading and notemaking also promoted greater engagement with study.

Students are influenced by the attitudes of those around them, both their peers and their tutors. Word-of-mouth recommendations from other students can give resources authority, as can integrating students’ own tips. This is especially effective in areas which are more tied up with the student experience, such as time management.
There is also evidence that students need to feel that staff are engaged with a learning area in order to engage with it themselves:

- At Bournemouth, research into personal development planning showed that in cases where subject academic staff felt that the topic was irrelevant, students also failed to engage.
- At London Met it was also observed that advice on notemaking and reading was most effective when taught in ‘spirited small group sessions’: in an attempt to capture this dynamism, a teaching session was released as a video clip on YouTube.

Further evidence of the greater authority students place in advice from their subject area was found in student focus groups at Kent, where students indicated that tutor feedback was the most important factor in improving their learning. Similarly, at Hope interviews with students indicated that they were far more likely to utilise available support for academic writing if they were individually directed to it by their tutors. This need for validation at subject level may be reinforced by research that points to advice about study practices being more effective when embedded in subjects, rather than treated as an ‘add-on’ (Wingate, 2006). It points to the importance of learning developers building good relationships with subject academics when developing and disseminating resources. (There is more on this topic in section 3.5.)

Decisions by students on which activities to undertake and which to ignore are often informed (at least, initially) by a narrow perception of instrumentality:

- In support sessions at Brunel, it was observed that students tend to forego understanding of maths theory and skills in favour of a focus on instrumental uses to their subject area.
- Similarly, a study at Kent on using Turnitin as part of a formative task showed that students tend not to complete formative assessments unless they can see directly how they will benefit (i.e. through feedback etc).
- A similar observation has been made about student attitudes to referencing: research at Bradford is investigating instrumental uses of citation including citations simply to mimic academic writing, or to satisfy institutional demands.
- Finally, observations from one-to-one sessions and discussions with staff at NTU suggest that students view academic writing as a necessary evil to pass their course rather than a skill that will benefit them in the wider world.

Students can change their attitudes over the course of their careers: in the second or third year, they often reassess their use of study practices in the light of experience and feedback from tutors. The question here for learning developers may be whether it is
possible (or desirable) to exploit this early career tendency to chase instrumentality by promoting support resources as more tools to help achieve success, as a first step towards a more holistic approach to independent study.

3.2 Effectiveness of learning development resources and interventions

An understanding of the factors to take into account when developing an effective resource is crucial (BournemoAs well making sure it responds to student needs, it must also be appropriate and attractive, and the content itself must be effective. Knowing how resources are used also helps to inform development.

Evaluation is built into LearnHigher’s aims and objectives, and is considered a significant source of research data. Before resources are made available for public dissemination, the views of students, academics and other learning developers are canvassed through various methods, and continuous review is provided through requests for feedback through the LearnHigher website. In addition, partners who have direct contact with students reflect on their experiences of using support resources in their work, including but not restricted to those peer reviewed through LearnHigher’s work. The discussion that follows draws together comments on the effectiveness of resources in terms of their formats, use and dissemination.

Formats for resources

Format is often overlooked in the concern to get content right. However it can make the difference between a valuable resource being used, and being ignored. Online resources are increasingly used as an economical and accessible option. There can be disadvantages to this: there are issues of sustainability to consider; development and production can be expensive; not all students are uniformly tech-literate, or financially able to equip themselves for a variety of technologies. In addition a reliance on online resources to provide support can atomise student communities, removing opportunities for valuable inter-personal support.

LearnHigher makes its resources in all formats available through its website. However some have been designed specifically for online use, and evaluations of these have confirmed their popularity with student and staff users, in the UK and worldwide. For instance, the Making Group-Work Work resource has increased in popularity month on month with over 1,000 unique visitors in October 2008. The resource is accessed worldwide 24 hours a day, 7 days a week, with users recorded from 35 countries from Antigua to Vietnam. The Referencing website produced at Bradford has an 83% rating of
excellent to good by users, and has been particularly popular with undergraduates. The SCIPS (Strategies for Creating Inclusive Programmes of Study) website at Worcester is used internationally by staff in countries including Australia, the USA and Canada, has a Google page rank of 5 out of 10, and is bookmarked for future use by 78% of those who visit the site through Google.

There are particular issues to be considered when producing online resources. For users, ease of access seems to imply ease of maintenance and updating: perhaps more so than with paper-based resources. If this assumption is not met, users can lose trust in the authority of resources.

Thus online resources require careful consideration and commitment:

- At Bournemouth, it was essential to constantly monitor and update online resources such as their personal development website, in order to keep the interest of staff and students.
- The need for flexibility in resource design to allow updating and further development is also an issue, highlighted at Bradford by feedback from trial users when developing the Making Group-Work Work resource (in collaboration with Brunel and Leeds).
- However tutor logs at Manchester indicated that online environments can be constraining when developing learning materials.

It has been widely assumed that online resources are always preferred by students, because of the format’s simultaneous use for leisure and ease of accessibility. The popularity of online resources is supported by research like that at Leeds on the Making Group-Work Work resource, where all students surveyed were positive about the resource. Certainly students are being expected to use more online resources: at Leeds an increased strategic emphasis on new technology in universities was noted.

However, LearnHigher research at various institutions suggests that the electronic versions of resources are not always preferred by students in practice:

- At Brunel, NTU and Reading, paper resources were a particularly popular way for students to get ‘takeaway’ advice on study issues from student support areas: this remained the case even when the same information was available online.
- In addition to general study guides, more specific resources are also used in paper versions: at Liverpool Hope, interviews and focus groups showed that students used paper copies of their module handbooks, while at Bradford printed workbooks on referencing were well-used by students.
Online and paper resources clearly both have attractions to different users in different situations. In observations on support sessions at NTU, it was noted that, while students enjoyed using online resources, they liked to have paper copies of resources to take away. At Reading, students were asked to rate the same information on time management in paper, online and oral formats. The online format was popular for accessibility, but students found it easier to understand and remember information in paper format. Further questions in the same project indicated that students actually use a mixture of tools to help them plan their time, in both paper and electronic formats. At Brunel, observations on support sessions also noted the need to provide resources in a diverse set of formats to address the different ways that students learn. Evidence like this supports the need to take a catholic approach, considering what is appropriate and providing alternative formats where possible.

**Use of resources**

Developing mediating strategies for the effective use of resources must be informed by an understanding of how they are used, both by students and by academic and learning development staff. For instance, research at Reading on a particular time management resource showed that 60.7% of student respondents referred to the resource more than once: this prompted a change in format to make the resources easier to file and find. Another example of probable uses informing development was recorded by the collaborative team working on the Making Group-Work Work resource (Bradford, Leeds and Brunel). Here it was noted that staff felt that the resource needed to be flexible: capable of being built into a blended learning environment or used independently by students. This response was echoed in interviews at Reading with staff on resources for report writing, who felt that the most useful resources were those that could be adapted to the needs of their disciplines. This preference for discipline-specific resources is also discussed below in reference to dissemination.

While building adaptability into resources is an important factor to consider, it has also been noted that models of good practice in one learning area can also be applied to others. An example was given at Plymouth, where the critical thinking model was also applied to research interview structure and research planning. However at Bradford it was noted that role questionnaires imported from management training (e.g. Belbin) were also used to organise student groups, without consideration of the differences
between management and student group norms. As with formats, the evidence points to the constant need to consider what is appropriate for the intended end users.

A number of partners noted issues in the usage of online resources:

- At Leeds, student focus groups revealed that not all felt confident using IT, and felt that they did not get the support they needed to help them make the most of technologies, particularly in regard to Web 2.0.
- Case studies and interviews at Bradford showed similarly that there was a lack of material to support online learning, perhaps driven by the assumption that digital natives can collaborate online intuitively.
- Student comments at Plymouth drew attention to problems with downloading large documents in electronic formats, with html documents (i.e. webpages) preferred to PDF (Portable Document Format) or Word files. Again, providing alternative formats may be the answer to these problems.

However carefully developed self-help resources may be, there is plenty of evidence that they work best when there is some mediation to show their utility to individual students:

- As a novel format, the folding year planners developed by Reading and Brighton received negative feedback in the pilot study from students who thought them too big and clumsy: once visual mediation demonstrating their use was provided, the negative feedback diminished.
- At Bournemouth it was noted that online resources were felt to have more benefit when linked to transition and induction activities.

There was also evidence that resources which involved an element of interactivity were especially effective.

- Student comments on resources at Lincoln noted that an element of interactivity allowed them to check their understanding and to put ideas into practice.
- At London Met, whilst the logic behind active reading and notemaking is taught, students are also encouraged to rehearse active notemaking and reading in taught sessions. Reflection on these sessions has been used to inform the development of an interactive notemaking tool (in collaboration with the RLO-CETL); and will be extended into an active reading tool.

While online and paper resources play a significant role in the support matrix, evidence repeatedly points to the irreplaceable value to students of personal contact. At Brunel, Reading and NTU, for instance, feedback from one-to-one support sessions was especially positive about this method of providing support. Students felt that advice in
these sessions could be tailored to their specific needs, while advisers felt that building a relationship with an individual student enabled them to offer more effective support. These comments are a useful reminder that self-help and teaching resources provided electronically are most effective as part of a multi-layered support network.

**Dissemination of resources**

Some students and staff will actively seek out resources to develop study practices: for these users, it is important to make sure that they are accessible and easily navigable (for instance, taking account of research such as that carried out at Worcester on the needs of disabled students). However it is also useful to consider how to promote resources to those who are not so pro-active. This may include demonstrating the importance of effective study practices to success in discipline-specific study: at London Met, for instance, it was observed that students (and staff) often did not recognise the difference that good notemaking practices could make. Accessibility can also be increased by timeliness in communication. At Manchester, focus groups to evaluate a generic study skills website revealed that communicating resources at appropriate points in units increased their utility and the likelihood of their being used.

There is much evidence that students prefer resources that are in some way authorised – whether by their peers or their subject tutors. Findings from Liverpool Hope in 3.1 that students relied on their peers for advice may be compared with research undertaken in the development for the Making Group–Work Work resource: this revealed that there was little support material available that uses practical examples of real student groups. However, students are keen to offer their tips and experiences: at Reading a ‘one question survey’ on tips to avoid procrastination prompted over 300 responses in a short space of time. The tips were used to structure a student workshop on the topic, which was well received: feedback commended the relevance of tips to real student lives.

At Kent, student focus groups commented that they preferred resources to be personally recommended, either by their lecturers or by learning development staff, as they did not have time to ‘wade through’ a number of generic resources in support of assessment practices. There was a great deal of evidence that resources that could be linked with a specific academic discipline were more highly valued by students studying that discipline. This was both reported by students (focus groups at Leeds) and by staff (interviews on report writing resources at Reading). At London Met this was practically evidenced in the success of reading assignments built into subject module assessment. However, at Lincoln it was observed that, despite claims that resources need to be subject-specific,
there were in practice broad groupings with only pockets where interpretations needed to be very specific.

### 3.3 The use of learning spaces

The notion of effective resources does not only refer to advice, but also to the spaces in which learning development interactions take place (and to learning developers themselves, as discussed in 3.4). LearnHigher capital funding has made it possible for each partner to fund a ‘learning space’ at their home institutions. This funding has proved significant in many ways to learning developers who are often less well-funded (and institutionally marginalised) compared to other university departments. At Worcester, the existence of a ‘protected space’ for meetings, staff development and research activity was described as ‘invaluable’. There has been much positive feedback from users of these spaces: at Bournemouth, for instance, LearnHigher rooms are well used for a wide range of learning and leisure activities, becoming something of a hub for the university community. At London Met, it was noted that the ability to provide ‘quality’ spaces for students had a positive impact in itself, making students feel valued and welcomed into higher education, and giving rise to unexpected outcomes including Breakfast and Writing Clubs.

The ways in which spaces have been provided vary according to the situation. Funding has sometimes been pooled to provide larger dedicated teaching and learning spaces (e.g. Liverpool Hope, Plymouth); existing spaces have been refurbished (e.g. Bournemouth, MMU); new individual spaces have been built (e.g. Reading). In some cases, funding has provided ‘virtual’ learning spaces, enabling dedicated student conferences (London Met) and a portfolio of individual projects (Brighton). Spaces have been provided for independent working by students, for learning development and teaching and learning activities generally, and for academic staff training and meetings. The development of these spaces has been utilised as an opportunity to reflect on issues like design and facilities, and to gain user feedback.

**Design of learning spaces**

Considerations about both users and usage have proved important in designing learning spaces. Design can have a significant effect on the way that spaces are conceptualised by users:

- At Plymouth, for instance, team reflections on practice prompted the observation that students need to feel comfortable and safe in spaces used for tutorial purposes.
- At London Met it was noted that students chose to use their small Learning Workshops space in preference to the more extensive technical spaces, again suggesting that more bounded spaces are preferred by some students.

- At NTU, interviews with writing support providers revealed a perception that support is most effective when it takes place in a consistent location, highlighting the importance of building a definite identity for a learning space.

The size of the available space has inevitably impacted on design decisions. In smaller individual rooms, building in flexibility has been important:

- Feedback from students and subject academics at Plymouth showed that flexible spaces were necessary to enact interactive teaching practices in topics like critical thinking.

- At Bradford, interviews with users of their flexible space revealed increased level and quality of group work interaction.

Flexibility has often been achieved through attention to facilities:

- Feedback from facilitators using the space at Lincoln, for instance, noted the importance of such features as modular furniture, mobile smart boards, good lighting and climate control.

- Student and staff feedback at Reading was enthusiastic about the use of foldaway computer workstations that converted an IT workspace into a more traditional writing desk.

At other institutions, where larger spaces were available, a more mediated approach has proved beneficial:

- At Leeds, subject academics appreciated having a space designed to accommodate specific tasks (e.g. developing effective interviewing skills).

- At MMU a large learning space has been successfully ‘zoned’ by the use of different types of furniture, providing a variety of well-used spaces for different study activities.

There have been problems which have become clearer once the space is in use:

- At Kent, an overview of booking statistics revealed that the room was under-used. Possible reasons for this included the room’s location, the fact that it was locked to protect data equipment, and that it was not bookable by students.

- The learning space at Worcester has proved useful for small meetings and staff development sessions but is not ideal for teaching as it has a pillar in the centre of the room.
• At Bradford, a delay in completion allowed a review of usage before the design for the space was finalised, enabling necessary revisions and prompting the observation that a developmental approach to learning spaces should be used where possible.

**Usage of learning spaces**

Evaluation has provided much evidence about the use of learning spaces. Many spaces are used by students for independent study:

• At Liverpool Hope students interviewed on the proposed Student Success Zone expressed a view that there is a need for ‘student-owned’ learning spaces.

• At Manchester it was observed that students value being trusted to self-manage the booking of rooms for independent working.

• A number of partners noted an increasing demand for spaces where students can work independently in groups (Leeds, Reading, Liverpool Hope) and “make a noise!” (Manchester).

• However, at Brunel students said that they liked to have access to staff if necessary while they were working independently: perhaps harking back to a school or college model of more directed ‘independent’ study.

There is also evidence about the use of facilities in learning spaces:

• At Leeds, monitoring of learning space usage showed that students valued access to equipment for practising presentations.

• Manchester also commented on the utility of being able to book access to teaching technologies.

• Also noted at Manchester was a need for computer equipment to be available on a non-cluster basis for individual use.

• However, there can also be problems with providing access to technologies: at Lincoln it was observed that it could take up to a quarter of an allocated teaching hour to get everyone logged onto the wireless network.

Patterns of usage were also a subject for comments. At particular times (assignment deadline periods, exam revision), it was observed that spaces dedicated to student use could become especially busy (Reading) and support staff availability could be stretched (NTU). At Reading an informal booking and access system for the learning space had to be made more formal at times of heavy demand, to ensure fairer access for all students. This suggests that Bradford’s observations (on the need for a developmental approach to learning spaces) apply to processes as well as design.
3.4 The role of learning developers

LearnHigher’s focus on reflective practice in developing and using resources has also encouraged reflection on the role of learning developers: with their embodied experience and expertise, a valuable resource in themselves. A discrete research project on ‘Learning Development: Past, Present and Future’ (Plymouth & Falmouth) is investigating many aspects of this topic through a survey of the archive of the JISCmail list for the Learning Development in Higher Education Network (LDHEN). The aim is to identify themes to help explore the definitions of learning development and the scope of the field of practice. The discussion below draws together observations by partners, often made as a result of reflections on practice. Because some comments relate to personal employment experience, sources are not always identified as in other sections.

Being a learning developer

The working definition of learning development included in LearnHigher’s 2008 self-evaluation report notes that its ultimate object is “the empowerment of all students through the enhancement of their academic practices” and draws the distinction between learning developers and teachers as stemming from a “primary focus on enhancing personal capacity to learn as against a primary focus on actual learning.” (LearnHigher, 2008, 14.) While all working broadly towards this goal of enhancing academic practices, LearnHigher partners have a variety of professional functions and positions; they can be working directly with students in learning and other support units, or taking a “second order perspective” (Worcester) in staff and educational development. Given this diversity within the learning development community it is, perhaps, not surprising that students in focus groups at Brunel and Reading were not fully aware of the services offered by learning developers at their institutions, with many believing that these were primarily aimed at students with a specific learning disability (e.g. dyslexia). At Reading, a similar lack of awareness was also found in some other parts of the university community including academic and other support staff. At other universities, comments from subject academics and senior management indicated that the conception of learning development as a ‘remedial’ rather than developmental service is still common.

These lingering misconceptions can have a negative effect on status and use. Research conducted by one partner showed that learning developers feel that they need to continually justify their existence and demonstrate where resourcing is coming from. Personal experience of other partners showed that learning development was not valued when it came to professional progression. Those partners who have previously worked as

32
academic specialists noted differences in institutional status. At Bradford it was noted that learning developers may be devalued because their field is conceptualised as generic by institutions that value specialists. The argument that learning development work needs to be embedded in the curriculum may suggest that those working in the field could be productively situated within academic departments. However research conducted at Lincoln noted that there is also a need for extra-curricular support at times, and that learning developers need to find a compromise between integration and independence. Where this compromise position would be best situated remains to be established: partners currently institutionally located in departments including Human Resources and Counselling commented on the difficulties caused by differences in epistemologies. At other institutions, no separate learning development team exists, with support functions spread across a diverse range of departments. However there are new dedicated departments being established, the Learner Development Unit at Bradford (situated within Learner Support Services) being a case in point.

Being a part of the CETL has had positive effects on the status and visibility within institutions for some partners. Some noted more involvement in planning at strategic levels (e.g. committee membership). The value of collaborations – between LearnHigher partners, with academic and other support staff and with other CETLS – were noted by a number of partners:

- At Reading the increase in staff time made possible by CETL funding enabled the establishment of better communications with other sectors of the university community, which in turn raised awareness of the learning development service and the status of team members within the university community.
- The importance to effective working of such networks of learning developers with support staff and academics was also noted at NTU.

There have been other benefits too, including the opportunity to develop new areas of interest for research and increased capacity in a variety of professional practices across the CETL:

- At Bradford it was felt that being part of LearnHigher had enabled partners to develop expertise in a particular learning area that helped to overcome the stigma of ‘genericism’. It also drew other institutions to seek advice and information on the particular learning area, promoting a conception of specialisation, both externally and within the home institution.

However learning developers need to regard their own development as a continuous process: it was noted at Leeds, for instance, that expectations from students for richer multimedia resources had implications for future training needs.
Working practices

Learning developers need to consider the effectiveness of their own interactions with students as much as they consider the effectiveness of the resources they provide. At Plymouth the observation was made that effective learning developers will put themselves in the role of student. What this means might be illuminated by a comment from Worcester with reference to those working in educational development that, although staff might be considered ‘learners’ too, the dynamic is entirely different from students because tutors hold the power to judge, award marks etc. There is a greater investment for the student in ‘getting it right’ – and a concomitant anxiety about getting it wrong. However, students should not be seen as passive recipients of learning development advice. Examining records of one-to-one sessions at Plymouth revealed that students can solve their own study problems, provided they are given the right tools to do so.

Getting support to the students who need it is another concern for learning developers. At NTU, reflections on practice revealed that the students and student groups who need support most are often the most difficult to access. Evaluation of work at London Met with students from non-traditional backgrounds has shown the value of support provision to this group of students. One way to access students who are less likely to seek support is to take the support out to ‘student-owned’ spaces by offering events in, for instance, Student Union buildings (as is being done at a number of institutions) and coffee shops. However, reflections on practice at NTU showed that it was also important to have a central point that linked resources and groups.

In their working practices, learning developers are often constrained by staffing and other resources: doing what they can, rather than what they have witnessed from experience to be most effective:

- Research undertaken at Lincoln showed that the provision of one-to-one support was felt to be critically important although time-consuming.
- At Brunel students themselves commented that they would like more time to be spent on helping them to develop and build basic practices.
- However at other institutions, service reviews and directives from senior management have reduced direct contact hours with individual students, or insisted that support is mostly channelled through subject academics.

The relationship between learning developers and senior management can be problematic, with no easily assessed quantitative measure of value to justify the
provision of support. LearnHigher partners have also reported problems caused by repeated institutional restructuring, and by increased centralisation of control over working practices. Here the increased visibility of learning developers participating in the CETL initiative can lead to difficulties, putting them under closer scrutiny from senior management. However, it was also noted that the support of management was crucial in attempts to initiate any changes in practice or culture.

3.5 Interactions between learning developers and subject academics

The core business of a university is research and teaching in specific academic disciplines, while the work of learning developers is aimed at enhancing a student’s ability to learn, in their discipline and beyond. A proper understanding of the relationship between these two should inform the effective development of resources. This relationship may seem clear to learning developers, both in their mutual aims of student success and their differences – reflections at Bournemouth on practice with subject academic colleagues revealed a distinctive learning development perspective. However evidence from interactions with other subject academics suggests that it is not always so well understood. Building appropriate and productive working relationships with subject academics, while not adding to the workloads they already experience, is an important challenge for learning developers: as well as being necessary to develop effective resources (noted by Brunel as a result of reflection on practice), the involvement of subject academics can authorise resources for students, making them more likely to be used. Good relationships with subject academics are also a crucial tool in embedding learning development in institutions and promoting changes in the culture of teaching and learning. However we also need to understand how subject academics see their role in enhancing student learning practices.

Subject academics and learning development

LearnHigher partners have reported many useful interactions with subject academics:

- At London Met, Brunel, Manchester and Reading, academics have been keen to work with learning developers to develop student practices, both generally and in particular areas.
- At NTU developing relationships with academics is a priority, demonstrated through their Academic Writing Readers Groups and their New Writing Across the Curriculum (WAC) project.
- In some institutions it was observed that there were particular areas that attracted more interactions: referrals for advice on statistics and especially information retrieval were noted at Lincoln, for instance.

However, there is evidence that the ‘deficit’ model of learning development is still current with some subject academics. This was noted in discussions at Bournemouth, while at Kent it was observed that subject academics tend to seek support from learning developers in response to specific and immediate problems.

Being part of LearnHigher has produced many opportunities for partners to work in collaboration with other academics:

- At Plymouth new networking opportunities have occurred, including partnerships with other CETLs.
- London Met have become involved in the collaborative establishment of Writers’ Clubs working with staff at their own institution and others.
- It was observed at both Plymouth and Reading that being engaged with LearnHigher research had opened up avenues for dialogue with colleagues across disciplines.
- At London Met, the status bestowed by CETL membership had provided leverage for subject academics who had previously been discouraged from accessing learning development support for module and resource development.
- However the active role that learning developers could play in producing these collaborations was highlighted at Manchester, where staff indicated in discussions that they needed intermediaries to bring them together to share resources and enable networking.

The involvement of those who work directly with students in training and developing subject academics in learning development issues is still variable:

- At Bournemouth it was noted that more staff development activities are needed.
- However at other institutions, whilst learning developers are invited to collaborate in the development of some staff development workshops, but not to take part in the development of formal courses.
- At Reading, learning developers teach a number of staff development sessions including some on the institution’s Post Graduate Certificate in Academic Practice, but are not involved in development.
- Learning development staff at NTU are similarly involved in teaching sessions on their institution’s PGCHE.
If learning developers are to build relationships with subject academics, it will help to be aware of the types of engagement that work:

- At Worcester, experience on other projects showed that an Appreciative Inquiry approach worked well in engaging staff with inclusive academic practice; an online questionnaire on inclusivity was also found to be a useful way to identify staff development priorities.
- However, at Reading it was found that academics were more engaged by individual face-to-face interviews than online questionnaires; although the interviews took up more time, they were more familiar because they modelled the kind of discussions and debates about best practice in subject disciplines conducted with academic colleagues.

(There are also examples in the section below of areas of student practices in which academics are keen to engage.)

**Subject academics and student practices**

The idea that the development of study practices is best achieved through embedded tasks within subject modules has been raised in various places in this discussion. Most learning developers would agree with the point made at Lincoln that there needs to be a mixture of embedded and stand-alone support. However, if embedded support is to succeed, research is needed into the ways that academics view student practices and activities to support and enhance them.

As course tutors and as personal tutors, subject academics are often the first place that students seek support for their studies. Taking an appropriate attitude in these individual sessions is as important with subject academics as it is with learning developers:

- At Worcester, for instance, research with dyslexic students showed that they responded better to tutors who were approachable.
- However, in discussions at staff training sessions, subject academics at Reading noted how difficult it can be to maintain a balance between approachability and authority in tutorial sessions.

Subject academics can have a strong influence on students’ first impressions of university:

- One-to-one sessions with students at Plymouth showed that some academics make assumptions that students arrive at university already possessing certain knowledge
which is not always the case: this led to students misunderstanding assignment briefs and terminology.

- At Lincoln, examining subject-specific support material revealed that preparation for independent study was interpreted very differently across disciplines, with some focusing on information literacy while others concentrated on qualitative analysis. In addition, while some introduced considerations of methodology (rather than just methods), this strategy was not widespread, although it would have promoted deeper understanding.

- However, new initiatives at Leeds have seen an increase in faculty supporting student preparation for independent study at the pre-entry stage. This has in turn led to learning developers working with subject specialists to create suitable ‘transition’ resources.

There are some areas of student practices in which it is easier to engage subject academics, often the ‘hard’ skills that they most readily identify with their own academic practice:

- At Bradford, for instance, staff were especially interested in referencing, with high attendance at and good feedback from workshops.

- At NTU, an academic writing readers’ group was established: discussions showed that academics recognised that academic writing is an issue that needs to be tackled, and that some were aware of the importance of their own roles in this process.

- Identifying these areas of interest provides useful opening topics that can produce further opportunities to discuss other areas: at London Met, for instance, it was observed that discussing student reading practices could be used to lead into a discussion of (less popular) notemaking practices.

However interested subject academics may be in ‘hard’ skills, the ‘soft’ skills and employability agenda is still popular in universities as a whole. Examples of ongoing initiatives include ‘Leeds for Life’, BOLD (Brunel Opportunities for Learning Development) and SOAR (Skills Opportunities At Reading). At Leeds an increase in the use of group work in the curriculum evidenced the growing importance of listening and interpersonal skills in collaborative teaching and learning situations. Another area where universities see the need for staff training (particularly following the introduction of the Special Educational Needs and Disability Act (SENDA) and the successful progression of the Disability Discrimination Bill (2005) is inclusion. Feedback from various universities on development materials for this topic produced at Worcester show that they have been well received.
In some areas, subject academics are less eager to engage:

- At Reading, interviews with staff revealed that, while they recognised the importance of effective time management to student success, they did not see it as an academic practice.
- Interviews and group discussions at Bournemouth showed that some staff gave only nominal support to personal development planning (although many were enthusiastic). However they were better engaged with the topic once background and theoretical underpinnings were explained.

This demonstrates the importance for all LearnHigher partners of linking research with practice in these situations. If appropriate modes of discourse increase the engagement of students, the same lesson must apply to communications with subject academics.

Academic staff expressed preferences in content and formats of support resources:

- Academics at Reading noted that what took most time was finding examples to include in their teaching: the WrAssE project at Plymouth may offer the beginnings of a solution to this issue.
- At Kent feedback showed that staff preferred to stay in their subject areas when seeking teaching and learning support and did not have time to go through generic resources that might not directly address their needs.
- Kent staff expressed a preference for web-based support resources.
- However, feedback at Liverpool Hope noted that subject academics often struggle to keep up-to-date with electronic resources.

This might be a further reminder that we need to consider appropriate formats for resources, and to provide alternatives where possible.

At Leeds a noticeable increase has been noted in schools and faculties bidding for funding to develop discipline-specific resources. The focus here (and at other institutions) is moving towards learning developers enabling subject academics to adapt generic resources, by using subject specific examples. This suggests that it would be useful to investigate ways to disseminate resources through the HEA Subject Centres.

One final issue is that (unless they are team-teaching) subject academics tend to work on their own modules in isolation. This means that there can be difficulties when staff give inconsistent advice (evidenced in regard to referencing by research at Bradford). However, in some areas it may be useful to take a multi-agency approach: for instance, at Reading reflections on practice showed that supporting student time management practices might involve collaborative support from personal tutors, course tutors,
learning developers, counsellors and peer supporters or mentors. These instances may provide useful case studies that model the benefits to student practices of collaboration between subject academics and learning developers.
4 Conclusions

To some extent, the research described in this report provides confirmation of existing (but previously under-investigated) beliefs by learning developers about the development of study practices, and the resources that best support this process. However, it has also revealed new areas of interest – and the fast-changing and complex nature of university communities. Changes in student populations run in parallel with changes in university teaching and with the influence of external pressures. As a result, learning and educational developers are always responding to circumstances to maximise the effectiveness of their interventions. The benefit of research like that carried out by LearnHigher is in the collected series of ‘stories’ it provides, produced in diverse communities but always with the same focus.

By adding the experience of conducting research to their existing professional expertise, LearnHigher partners have developed their own capacities and are in a position to offer consultancy for research projects proposed by other learning developers. In this way, the benefits of LearnHigher research can move beyond both the individual institution in which it was carried out, and the partner institutions that form the network. Rather than the definite findings, which can be highly context-specific, it is this efficacy by consultancy which may be LearnHigher’s greatest legacy to the learning development community.

LearnHigher research has been directed particularly at understanding student needs and practices and their use of support resources. A selection of research insights relating to these are below:

- Difficulties with independent study are reported as a problem by both students and academic staff. Managing time and critical thinking are two particular areas of concern, partly prompted by lack of independent study at school or college, and partly because of the increasing demands on student time, both on- and off-campus.

- Issues around transition are already the subject of further investigation by a number of institutions, including some LearnHigher partners. This area has a strong impact on retention. Although originally prompted by the widening participation agenda, it is now clear that all students may benefit from support around transition, not just those from non-traditional backgrounds.

- Student tendencies to seek support from their friends have prompted attempts to incorporate the student voice into resources. While evaluation continues on these

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6 The systematic examination of archived posts from the LDHEN mailing list, conducted for the ’Learning Development: past, present and future’ project has surfaced many of the same concerns and conclusions.
resources, their initial popularity suggests that this may be a productive route to pursue further in the future.

- Unsurprisingly students have expressed a preference for interpersonal support, though increasing demands on staff resources and the labour-intensive nature of one-to-one sessions are driving many to seek supplementary ways to provide support.

- The more novel and creative support resources that research has prompted will no doubt continue to develop, and themselves be overtaken by newer ideas - though not necessarily newer technologies. For instance, a variety of visual formats for support resources have been trialled as well as written ones: these include complex video resources and simple PowerPoint demonstrations as well as low-tech paper folding planners.

- Online resources are certainly popular and can provide high levels of interactivity. However they do not provide a definitive solution to accessibility and resourcing issues. Indeed, the need to think carefully about the format of resources and to provide alternatives is a recurring theme. The ‘one size fits all’ approach is not an effective one when supporting student practices.

- Students are more likely to engage with resources that are embedded in subject teaching, but subject academics are time-pressed and sometimes reluctant to deliver learning development interventions. Building adaptability into resources, and working in collaboration with subject academics are important aspects of resource development.

However, some of the most interesting insights produced by LearnHigher research are about the processes themselves, rather than the findings. As a relatively new field of practice, learning developers are still discovering which research methodologies are most apt, and how they might operate in this field of practice. The utility of an ethnographic approach, using case study research and practice-led enquiry, is shown in the results described above.

What this overview of research shows above all is that the work of learning and educational developers is deeply implicated in every aspect of the teaching and learning experience: that it is so much more than just ‘how to write an essay’.
References


Berkowitz, L. & E. Donnerstein (1982), External validity is more than skin deep: some answers to criticisms of laboratory experiments, American Psychologist, 37.3, 245-257.


### Appendix 1: LearnHigher partner institutions and contact details

<table>
<thead>
<tr>
<th>Institution</th>
<th>Learning Area/s</th>
<th>Learning Area Co-ordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bournemouth University</td>
<td>Personal Development Planning</td>
<td>Christine Keenan&lt;br&gt;<a href="mailto:ckeenan@bournemouth.ac.uk">ckeenan@bournemouth.ac.uk</a></td>
</tr>
<tr>
<td>University of Bradford</td>
<td>Group Work</td>
<td>Peter Hartley&lt;br&gt;<a href="mailto:p.hartley@bradford.ac.uk">p.hartley@bradford.ac.uk</a></td>
</tr>
<tr>
<td></td>
<td>Referencing</td>
<td>Martin Sedgley&lt;br&gt;<a href="mailto:m.t.sedgley@bradford.ac.uk">m.t.sedgley@bradford.ac.uk</a></td>
</tr>
<tr>
<td>University of Brighton</td>
<td>Visual Practices</td>
<td>Pauline Ridley&lt;br&gt;<a href="mailto:p.ridley@brighton.ac.uk">p.ridley@brighton.ac.uk</a></td>
</tr>
<tr>
<td>Brunel University</td>
<td>Maths, Numeracy &amp; Statistics</td>
<td>Martin Greenhow&lt;br&gt;<a href="mailto:martin.greenhow@brunel.ac.uk">martin.greenhow@brunel.ac.uk</a></td>
</tr>
<tr>
<td></td>
<td>Oral Communication</td>
<td>Linda Murray&lt;br&gt;<a href="mailto:linda.murray@brunel.ac.uk">linda.murray@brunel.ac.uk</a></td>
</tr>
<tr>
<td>University of Kent</td>
<td>Assessment</td>
<td>Judy Cohen&lt;br&gt;<a href="mailto:j.cohen@kent.ac.uk">j.cohen@kent.ac.uk</a></td>
</tr>
<tr>
<td>University of Leeds</td>
<td>Listening &amp; Interpersonal Skills</td>
<td>Julia Braham&lt;br&gt;<a href="mailto:j.braham@leeds.ac.uk">j.braham@leeds.ac.uk</a></td>
</tr>
<tr>
<td>University of Lincoln</td>
<td>Doing Research</td>
<td>Andy Hagyard&lt;br&gt;<a href="mailto:ahagyard@lincoln.ac.uk">ahagyard@lincoln.ac.uk</a></td>
</tr>
<tr>
<td>University of Liverpool</td>
<td>Understanding Organisations</td>
<td>Janet Strivens&lt;br&gt;<a href="mailto:strivens@liverpool.ac.uk">strivens@liverpool.ac.uk</a></td>
</tr>
<tr>
<td>Liverpool Hope University</td>
<td>Mobile Learning</td>
<td>Sylvie Steward&lt;br&gt;<a href="mailto:stewars@hope.ac.uk">stewars@hope.ac.uk</a></td>
</tr>
<tr>
<td>London Metropolitan University</td>
<td>Notemaking</td>
<td>Sandra Sinfield&lt;br&gt;<a href="mailto:s.sinfield@londonmet.ac.uk">s.sinfield@londonmet.ac.uk</a></td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td>Sandra Sinfield&lt;br&gt;<a href="mailto:s.sinfield@londonmet.ac.uk">s.sinfield@londonmet.ac.uk</a></td>
</tr>
<tr>
<td>University of Manchester</td>
<td>Independent Study &amp; Self Directed Learning</td>
<td>Ann Barlow&lt;br&gt;<a href="mailto:ann.barlow@manchester.ac.uk">ann.barlow@manchester.ac.uk</a></td>
</tr>
<tr>
<td>Manchester Metropolitan University</td>
<td>Information Literacy</td>
<td>Bob Glass&lt;br&gt;<a href="mailto:n.r.glass@mmu.ac.uk">n.r.glass@mmu.ac.uk</a></td>
</tr>
<tr>
<td>Nottingham Trent University</td>
<td>Academic Writing</td>
<td>Ed Foster&lt;br&gt;<a href="mailto:ed.foster@ntu.ac.uk">ed.foster@ntu.ac.uk</a></td>
</tr>
<tr>
<td>University of Plymouth</td>
<td>Critical Thinking &amp; Reflection</td>
<td>John Hilsdon&lt;br&gt;<a href="mailto:jhilsdon@plymouth.ac.uk">jhilsdon@plymouth.ac.uk</a></td>
</tr>
<tr>
<td>University of Reading</td>
<td>Report Writing</td>
<td>Judy Turner&lt;br&gt;<a href="mailto:j.e.turner@reading.ac.uk">j.e.turner@reading.ac.uk</a></td>
</tr>
<tr>
<td></td>
<td>Time Management</td>
<td>Judy Turner&lt;br&gt;<a href="mailto:j.e.turner@reading.ac.uk">j.e.turner@reading.ac.uk</a></td>
</tr>
<tr>
<td>University of Worcester</td>
<td>Learning For All (Inclusivity)</td>
<td>Val Chapman&lt;br&gt;<a href="mailto:v.chapman@worc.ac.uk">v.chapman@worc.ac.uk</a></td>
</tr>
</tbody>
</table>
Appendix 2: Annotated list of research projects carried out or funded by LearnHigher partners

This list compiles individual research projects conducted at single partner institutions and as collaborative ventures. Non-LearnHigher collaborators are given in parentheses.

These projects are in addition to the literature reviews, baselining, general development and evaluation research conducted by partners in their respective Learning Areas. More details of these can be found on individual Learning Area pages on the LearnHigher website (www.learnhigher.ac.uk).

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Institution(s)</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>The impact of institutional habitus on student transition</td>
<td>Bournemouth University</td>
<td>Considers institutional norms and practices as a factor in student retention and progression, focusing particularly on pre-induction, induction and enrolment processes.</td>
</tr>
<tr>
<td>Student perceptions of the role of referencing in academic writing</td>
<td>University of Bradford</td>
<td>Explores student perceptions of the role of referencing in academic writing. Identifies the main difficulties students encounter with referencing and explores ways for tutors to present the principles and practice of referencing in more creative ways.</td>
</tr>
<tr>
<td>Making group-work work</td>
<td>University of Bradford, Brunel University, University of Leeds</td>
<td>Research into student practices in group work and their preferences for resource formats, to inform the development of a multimedia support resource.</td>
</tr>
<tr>
<td>Visual assessment practices</td>
<td>University of Brighton, University of Kent, (University College Falmouth)</td>
<td>Evaluating visual assessment practices in different disciplines. A resulting web-based resource for students will be made available.</td>
</tr>
<tr>
<td>Perceptions of learning support or advice</td>
<td>Brunel University</td>
<td>Research with users and non-users of the Effective Learning Advice Service (ELAS) at Brunel University, which seeks to determine whether students distinguish between the labels of 'advice' or 'support', and how this affects their perceptions and expectations of a learning advice service.</td>
</tr>
<tr>
<td>Using Turnitin as a formative writing tool</td>
<td>University of Kent</td>
<td>A pilot of Turnitin was run and evaluated in 2006/2007. Staff and students participated in focus groups, resulting in recommendations that Turnitin be used initially as a formative writing tool. University Guidelines on Turnitin were approved and published on the Academic Integrity site: <a href="http://www.kent.ac.uk/ulet/ai">www.kent.ac.uk/ulet/ai</a></td>
</tr>
<tr>
<td>Students’ perception of assessment</td>
<td>University of Kent</td>
<td>Report on student views on assessment practice, concluding that students feel rushed by current timings of assessment, but that they value alternative forms of</td>
</tr>
</tbody>
</table>


Students also reported that varied forms of assessment allow them 'to show their knowledge in different ways'.

<table>
<thead>
<tr>
<th><strong>Developing online assessment</strong></th>
<th>University of Kent</th>
<th>Developing formative assessment in an online environment: particularly how the interface enhances/blocks student engagement and how students develop as independent learners when using self access materials.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developing the Assignment Skills Kit (ASK)</strong></td>
<td>University of Kent, Manchester Metropolitan University, (Staffordshire University)</td>
<td>The Assignment Skills Kit (ASK) has been developed as an assignment aid for students. Further work will include evaluation of the resource, how students engage with online resources (the ASK) and further developments to include exam revision, presentations, studio critiques, reports and other forms of assessment.</td>
</tr>
<tr>
<td><strong>Interpersonal Skills in Virtual Worlds</strong></td>
<td>University of Leeds</td>
<td>Two research projects have been undertaken. One explores changes in student/teacher relationships in synchronous chat and looks at ways in which a tutor’s cognitive load (when managing multiple simultaneous, synchronous chat groups) can be reduced by supporting students to assume group facilitation roles and to develop the interpersonal skills required to manage learning interactions. The second study expands this theme. Online learning makes use of socio-collaborative theories of learning and teaching. There is an emphasis on establishing social presence and concepts of community, which are best achieved through effective induction programmes. This project will suggest ideas for online learning induction activities which focus on developing students interpersonal skills.</td>
</tr>
<tr>
<td><strong>Students’ use of resources: Who hides the books?</strong></td>
<td>Liverpool Hope University</td>
<td>Provides a broad picture of student behaviour around the use of resources at Liverpool Hope University. Investigates the study practices students engage in and the factors that help and hinder those practices.</td>
</tr>
<tr>
<td><strong>Friend or foe? The role of an online tutorial in an institution experiencing rapid change</strong></td>
<td>London Metropolitan University</td>
<td>Describes the benefits of a collaborative approach to the development of an e-resource for writing development.</td>
</tr>
</tbody>
</table>
### ‘A journey into silence’: exploring the relationship between policy, pedagogy and the student experience

**London Metropolitan University**

A critical analysis of the government’s ‘Harnessing Technology’ document, particularly with regard to the non-traditional student in Higher Education. Considers how government policies have impacted on the student experience and university practice, especially in e-learning and Widening Participation.

### Raising the student voice

**London Metropolitan University**

An evaluation of the Get Ahead conference, ‘for students and mainly by students’.

### Attaching information to space: the development of a web and mobile-based notemaking tool

**London Metropolitan University**

The use of an electronic notemaking resource to help students avoid plagiarism by providing tools to use for reconceptualising and re-authoring ideas.

### Long-distance information

**University of Manchester**

An evaluation of student use of a static text-based online resource for generic study skills support, with recommendations for future resources.

### Engaging students in the research process

**Manchester Metropolitan University**

Considers how student participation informed two major research projects: [1] the design of the LearnHigher Suite of Learning Spaces at MMU [2] the progress made within the first year of a three year Online Information Literacy Audit project.

### Analyse this!

**Manchester Metropolitan University**

Research into methods of teaching data analysis to inform the production of an interactive web-based support resource.

### “What’s a journal?”: the prior learning experiences of students entering Higher Education

**Nottingham Trent University**

Investigates similarities and differences between student learning experiences at school/college and in the first year of university.

### Other people’s writing: peer mentoring for academic writing

**Nottingham Trent University**

Reports on a scheme in which postgraduate students were employed as writing mentors.

### What are academics looking for in students’ written work?

**University of Plymouth**

The WrAssE project (Writing for Assignments E-Library) is investigating the underlying criteria used to judge student writing by offering examples of assignments, with comments by academics identifying their key functions and qualities. The project aims to provide a learning resource which will help students gain an understanding of what academics are looking for in their written work.

### Learning

**University of**

Conducting a systematic analysis of
Development: past, present and future

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plymouth (University College Falmouth)</td>
<td>Postings to the JISCmail discussion list and contributions to symposia of the Learning Development in Higher Education Network (LDHEN); aims to establish and publish preliminary classification and critical analysis of learning development issues and concerns.</td>
</tr>
</tbody>
</table>

Using practice-led enquiry to investigate student time management

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Reading</td>
<td>Evaluating the utility of an action research approach to resource development. The development process for an entry-level resource was used to investigate student needs and preferences for formats and content in advice on effective time management.</td>
</tr>
</tbody>
</table>

Needs of subject academics in supporting student report writing

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Reading</td>
<td>Survey of academic teaching staff over a wide range of academic disciplines, aiming to discover similarities and differences between perceived resource needs for teaching report writing in diverse disciplines.</td>
</tr>
</tbody>
</table>

The LearnHigher Year Planner

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Reading</td>
<td>Using a student year planner as a vehicle to investigate: the utility of a folding sheet format; the success of year planners in helping students manage their time; the use of paper-based customisable resources to disseminate and promote LearnHigher resources to students and staff in HEIs outside the LearnHigher network.</td>
</tr>
</tbody>
</table>

University of Brighton

Using a student year planner as a vehicle to investigate: the utility of a folding sheet format; the success of year planners in helping students manage their time; the use of paper-based customisable resources to disseminate and promote LearnHigher resources to students and staff in HEIs outside the LearnHigher network.

In addition to these, the University of Brighton chose to spend a large amount of its capital funding on providing equipment at the university to enable a variety of small projects associated with its Learning Area (Visual Practices) to be conducted. These are listed in brief below: more detailed information is available at http://staffcentral.brighton.ac.uk/learnhigher/vp%20projects.htm.

Faculty of Arts & Architecture

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaqueline Cattaneo (Northbrook College)</td>
<td>Assessment through poster presentations</td>
</tr>
<tr>
<td>Alice Fox (Arts &amp; Communication)</td>
<td>Access to Art (co-funded by InQbate CETL)</td>
</tr>
<tr>
<td>Frank Gray and Elaine Sheppard (Screen Archive South East)</td>
<td>'Film Bank' pilot project</td>
</tr>
<tr>
<td>Patrick Letschka &amp; Jill Seddon (Architecture &amp; Design, Historical &amp; Critical Studies)</td>
<td>&quot;See what I say&quot; visual research and object-based learning (co-funded by CETL-D)</td>
</tr>
<tr>
<td>Glenn Longden-Thurgood (Architecture &amp; Design)</td>
<td>Developing ICT teaching material for Architecture</td>
</tr>
<tr>
<td>Phil Taylor (Arts &amp; Communication)</td>
<td>Animation for Illustrators</td>
</tr>
<tr>
<td>Teresa Whitfield (Northbrook College)</td>
<td>Drawing Forum</td>
</tr>
<tr>
<td>Name (Institution)</td>
<td>Activity</td>
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<tr>
<td>Kate Williams (Sussex Downs College)</td>
<td>Developing critical skills on the Multimedia FdA</td>
</tr>
<tr>
<td><strong>Brighton &amp; Sussex Medical School</strong></td>
<td></td>
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<tr>
<td>Helen Smith (BSMS) in conjunction with Brighton PhotoBiennial</td>
<td>Learning to Look (co-funded by with Inqbate CETL)</td>
</tr>
<tr>
<td><strong>Faculty of Education &amp; Sport</strong></td>
<td></td>
</tr>
<tr>
<td>Ross Adamson &amp; Jess Moriarty (School of Languages)</td>
<td>Web-based study of intercultural communication</td>
</tr>
<tr>
<td>John Doyle (Chelsea School)</td>
<td>Visual Ethnography: Football4 Peace (with InQbate CETL)</td>
</tr>
<tr>
<td><strong>Faculty of Health</strong></td>
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<tr>
<td>Kay Aranda, Sharon Davies and Sharon de Goeas (School of Nursing &amp; Midwifery)</td>
<td>Image-based teaching in mental health nursing</td>
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<tr>
<td><strong>Faculty of Management and Information Sciences</strong></td>
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<tr>
<td>Pete Burns &amp; Jo Ann Lester (School of Service Management)</td>
<td>Tourism and Photography - visual assessment</td>
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<tr>
<td>Lynne Pemberton (School of Computing, Maths and Information Science)</td>
<td>Use of tactile diagrams in teaching programming for vision impaired students</td>
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<tr>
<td>Cathy Grundy (School of Computing and Information Science)</td>
<td>Vis-ability: An interactive visual research gallery</td>
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<tr>
<td>Julia Winckler (School of Computing, Maths and Information Science)</td>
<td>Developing critical skills in photography</td>
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<tr>
<td>Sarah Atkinson (School of Computing and Information Science)</td>
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<tr>
<td><strong>Faculty of Science and Engineering</strong></td>
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<tr>
<td>Angela Macadam (School of Pharmacy and Biomolecular Sciences)</td>
<td>Enhanced communication module in Pharmacy</td>
</tr>
<tr>
<td>Hamid Isfahany (School of Environment and Technology)</td>
<td>Developing Engineering Students' Drawing and Visualisation Skills</td>
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<tr>
<td>Norman Moles (School of Environment and Technology)</td>
<td>Geology Field Sketchbook Skills</td>
</tr>
<tr>
<td>Noel Painting (School of Environment and Technology)</td>
<td>Drawing skills for built environment students</td>
</tr>
<tr>
<td>Becky Taylor (Plumpton College)</td>
<td>Video diaries for PDP</td>
</tr>
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