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1 Introduction

This research proposal is being submitted to accompany the transfer of my MPhil/PhD registration from the International Institute of Educational Leadership at Lincoln University and is built on exploratory work done there during 2006/7. The proposal is constructed to reflect the requirements outlined in the Doctoral School Guidance Sheet from the Institute of Education web site (IoE, 2003). Illustrative references for some of the background and research themes are provided here. Any abbreviations used are expanded in the Index & Glossary.

1.1 Summary

The proposed research will entail a medium-scale mixed methods study to look at the factors which influence and assist the adoption and embedding of information technology use in English further education colleges. The research will address both learning-related and the business-support uses of technology and look at how the two dimensions offer a 'whole institution' profile that defines a college's degree of e-maturity.

The research is expected to draw heavily on literature from the learning management, change management and knowledge management fields as exemplified by Laurillard (2002) and Biggs (2003), Fertig et al (2007) and Hislop (2005), and to be guided by the educational research principles outlined in the collection edited by Coleman & Briggs (2002).

1.2 Context

Further Education colleges form a significant component of the English education system's provision for post-compulsory education and skills training. This complex sector was born out of the equally complex economic infrastructure of England in the late 19th and 20th centuries when towns and cities created their local colleges to service the skill needs of their local economies, and until 1993 colleges remained very much within the control of whatever local government structure applied to the area they were located in.

This local economy influence was still highly visible when, in 1993, the then 500+ colleges of England were removed from local government control and reformed as 'incorporated colleges', planned and managed by their governors and employees. The national sector became funded (through transparent and volume-related allocation formulae based on

so-called '*management information*') by a single body, the FEFC, which took an early initiative to explore how it could encourage (FEFC, 1996) colleges' adoption of ILT.

The sector was expanded in 2001 to include a large number of '*private training providers*', school sixth forms and adult & community learning and is now funded and overseen by the LSC (Learning & Skills Council) which has encouraged sector-wide adoption of e-Learning (LSC, 2002) and of an MLE approach (JISC, 2003) to developing ILT use.

The FE sector has undergone repeated cycles of change for the last 15 years or so. The most recent cycle has been triggered by the current government's growing awareness of the impact on UK national competitiveness of globalisation. Its impact on the need for skills has been documented for government in the Leitch Report (Leitch, 2006) and has now led, amongst other things, to the recent restructuring of its departmental structure and the creation of DIUS and the new imperative is to offer '*demand led*' skills provision in FHE.

During the same 15-year period the spread of computer technology, and in particular the creation of global communication networks, has transformed many aspects of business activity, social networking and the day-to-day lives of many people, as profiled by the e-Skills UK SSC (2007). A corresponding transformation is expected of those in the education world. Educational institutions are expected, according to the head of the DfES speaking at the Harnessing Technology launch event, (Bell, 2006) to

".. use technology as an essential, normal and integrated aspect of their teaching, learning, assessment and management practice with a clear and simple goal – to improve the quality of learning and raise standards."

This research proposal aims to help us understand better how that can happen in colleges and to increase our knowledge about what enables colleges to become 'e-mature' to the extent they can use technology effectively in pursuit of their developing mission. It is intended that the research will be '*of use*' to sector colleges and staff.

1.3 Scope

The fieldwork which will make up the empirical component of the planned research will be carried out wholly in English further education colleges.

The projected timescale for the research means that it will take place contemporaneously with the national¹ initiatives linked to the Harnessing Technology strategy set out by the then-DfES (2005) and whose delivery is being coordinated by Becta (2006) and which in FE, following a recent announcement from the LSC (2007a), is to be accompanied by a new tranche of investment funds. This is likely to influence positively the reception that my request to colleges to participate will receive.

Becta has recently gone out to tender for research it wants done on Further Education e-maturity (Becta, 2007) and their initiative should present opportunities for triangulation of my research with their findings.

It is anticipated that knowledge gained will be '*of use*' in other post-compulsory education and training settings as well as FE, and the research will certainly draw on evidence from that wider '*higher education*' community which, in most parts of the world, includes much of the activity that in the UK is separated out as "*further education*".

¹ "National" in the context of this study will always mean, except when specifically indicated otherwise, '*relating to England*' rather than the rest of the United Kingdom. Whilst similar culturally and in many other ways to English colleges, colleges in Scotland, Wales & Northern Ireland operate within separate and different funding and control regimes, and are influenced by their own national government e-learning policy agendas.

It is important to note that two of the key agencies involved in the field, Becta and JISC, have a responsibility across all areas of the UK, though the countries' relative size means that the English context usually dominates their work programmes.

2 Research Questions

The research aims to provide answers to these top-level research questions:-

- What characteristics does an e-mature educational institution have?
- What happens to the people and processes in an institution that becomes e-mature?
- How can institutional leaders and followers organise for, and contribute to, the e-maturation of their institution?

These are clearly complex issues and processes. Becta identify (2005, p.30) five dimensions – Access, Workforce, e-Learning, Resources, Management – along which an organisation’s e-enablement might be profiled. It is anticipated that the empirical component of the research will use models such as this as the basis for development of the research tools to be used (see research project plan on Page 4).

3 Method Of Enquiry

There are evident methodological implications stemming from the breadth of the research questions and the complexity of the processes being researched. The nature of the target populations:-

- the colleges - the 400+ general FE, specialist FE and 6th form colleges of England funded by the LSC
- the people who work in the colleges

demand, for reasons of research coherence *and* convenience, that a variety of research methods will be used for different purposes. At this stage no final decisions have been taken about what inventory of research instruments will be used but, as illustrated by the following sketch, it is likely that both quantitative and qualitative methods will be employed for different purposes.

The 400+ English colleges have the following aggregated staffing profile (LSC, 2007b):-

SIR Data 2005/6	FT	PT	Total
Teaching	50,181	75,225	125,406
Learning Support	12,763	19,140	31,903
Other Support	43,030	38,198	81,228
Total	105,974	132,563	238,537

Whilst it *would not* be impractical to attempt a 100% sample survey of the colleges themselves using an online questionnaire (or even an expensive 100% telephone interview with each institutions’ ‘representative’), it *would* clearly be impossible to interview all the staff in the institutions, irrespective of the time and resources made available for the purpose.

The top-level research questions stated earlier *do* identify both institutions and staff at the centre of the research focus – so *ipso facto* a combination of methods will be needed.

A survey of institutional characteristics might, for example, use survey/questionnaire attitude measures to identify distinctive institutional cultures which are known to affect the uptake of ILT in colleges (LSDA/NLN, 2004). Such measures might be gained from sufficient colleges and college staff to yield data that is amenable to statistical analysis using tools like SPSS.

A “properly integrated methodology” (Morgan, 2007, p.73) might well set out to design ways in which qualitative analysis of transcripts from semi-structured interviews with key stakeholders in an appropriate sample (Teddle and Yu, 2007) of institutions would be used, with the data being organised with tools like nVivo in order to assist that analysis.

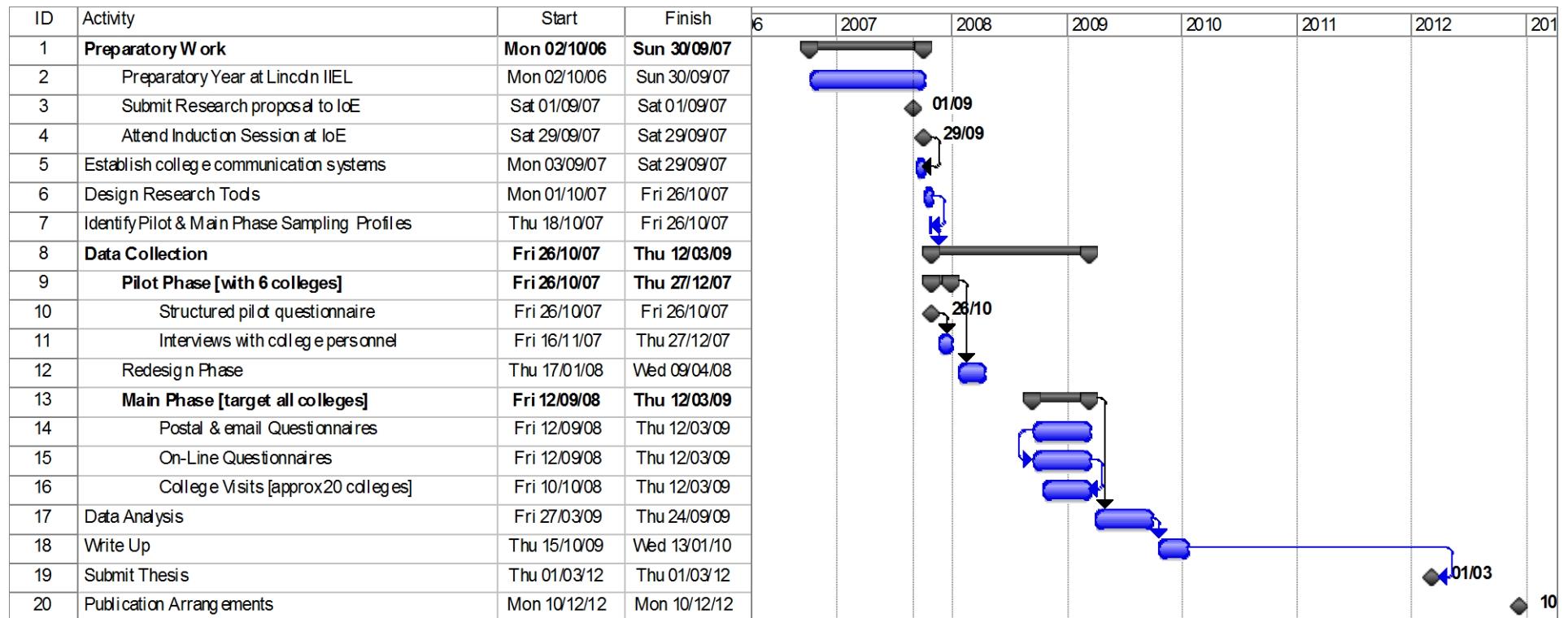
Management of citations and bibliography will continue to utilise the extensive features of EndNote XI and, except where an alternative is required, will adopt (with, as in this proposal, very slight changes to the format used for Web references) the Harvard-derivative referencing format used by the British Journal of Educational Technology.

4 Research Timetable

The research project plan outlined below covers the period October 2006 – October 2012 and includes the preparatory year spent as a part-time student at the IIEL in Lincoln. I am anticipating that the planned research work will take up to 5 years more from the date of registering at IoE.

The data collection element of the plan has a pilot phase, ‘redesign’ phase and a main data collection phase, followed by data analysis, writing up and final submission by March 2012. The project plan will be maintained throughout the research and steps taken to systematically track progress against planned timelines. At this time the research timetable has substantial flex within it, but it is anticipated that this will soon be lost as the challenging logistics of organising and implementing the envisaged surveys and interviews are addressed.

No attempt has been made to schedule dates that the IoE and/or supervisors may require that I work to – date for consideration of transfer from MPhil status to PhD; min/max study periods; submission ‘windows’ etc – these will be incorporated as and when available.



5 Bibliography²

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² Bibliography formatted using slightly amended EndNote XI British Journal of Educational Technology template.

6 Index & Glossary

B

Becta: British Educational Communications Technology Agency, the government's strategic partner for the development of policy and support of good practice in the use of educational technology in all education sectors..... 2, 3, 5

D

DfES: Department for Education and Skills, responsible for English schools, colleges & universities until 2007 when it was reorganised into the DCSF and DIUS..... 2, 5
DIUS: Department for Innovation, Universities and Skills created in July 2007 to bring together government oversight of both further and higher education sectors in England..... 2

E

e-learning: A term defined in many slightly different ways. In the FE sector e-learning is used synonymously with the term ILT, Information & Learning Technology 2, 5
e-maturity: A concept used to describe the degree to which an organisation is using information technology to add value to the ways it pursues its objectives..... 1

F

FEFC: Further Education Funding Council, created in 1992 to fund the new FE sector in England created by the incorporation of colleges 1, 5
FHE: Further & Higher Education - a term used wherever features shared between the two (otherwise often-different) UK sectors are present - may be used much more now that the DIUS has been created to oversee both sectors 2

H

Harnessing Technology: UK government's national e-strategy for schools, colleges and universities 1995..... 2, 5

I

ICT: Information and Communications Technology 5
ILT: Information and Learning Technology, a term used in UK colleges to include all the activities

that involve the use of ICT in the operation of the college. A holistic term, related to the MLE concept..... 1, 2, 3, 5

J

JISC: Joint Information Systems Committee, responsible for the operation of the Janet network system and e-learning and ICT policy in the Higher Education systems of all areas of the UK2, 5

L

Leitch Report: the Leitch 'Review Of Skills Prosperity for all in the global economy - world class skills' contained, amongst lots more specifics, a general recommendations for development of employer-led 'demand led' provision in FHE2, 5
LSC: Learning and Skills Council2, 3, 5
LSDA: Learning & Skills Development Agency, a successor to FEDA, and now broken up into the QIA and LSN3, 5

M

MLE: Managed Learning Environment, a term used to include the assembly of business processes and technology systems that would exist in an institution that made optimal use of ICT2
MLESG: Managed Learning Environment Steering Group5

N

nVivo: one of the most widely-used tools for carrying out analysis of data from qualitative research URL at;
<http://www.qsrinternational.com/>;

S

SPSS: Statistical Package for Social Sciences, one of the most widely-used tools for carrying out analysis of data from quantitative research URL at; <http://www.spss.com/spss16/index.htm>;
SSC: Sector Skills Council, organisation representing the 'employer voice' in vocational skills training for a particular sector of the economy – for example e-Skills UK for the 'IT industry' and LLUK for the Lifelong Learning 'industry'2