An analysis of existing data about students’ experiences of technology at the IOE

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Introduction
This report is an output from the JISC-funded project, “Digital Literacy as a Postgraduate Attribute”, based at the Institute of Education, University of London (IOE). The project is part of a programme of work on digital literacies funded by the JISC (see http://www.jisc.ac.uk/developingdigitalliteracies).

The first phase of this project involves ‘baselining’ activities, intended to assess the IOE’s current policies, students’ needs and staff practices. This document is a report on the first part of this baseline work: an analysis of an existing data set to identify issues and priorities that could inform the remainder of the project.

The methodology, including a description of the survey that produced the data set, is presented below. This is followed by an overview of the findings, organised in relation to a programme-wide framework for conceptualising digital literacies. The report ends by drawing conclusions about digital literacies at the IOE, and identifying implications for the project.

Methodology
The IOE undertakes surveys of students’ experiences during their studies twice each year. Data collected from the Autumn 2009 and Summer 2010 surveys was made available to the project team. These data consisted of quantitative responses to Likert-scale items and qualitative responses to open questions about experiences of arrival; living; learning; and support; as well as recommendations to the IOE for improvements.

The quantitative data, being responses to questions about the entire student experience, did not address the project’s focus on digital literacy. Consequently, these data were discarded.

The qualitative comments, by virtue of being open responses, did contain responses that were, at face value, relevant to the project. Consequently, the entire qualitative data set was reviewed.

The first review of this dataset selected all responses that made any mention of technology, the library, access to information, or technology-mediated contact with staff or students. This subset of comments contained both complaints and praise, relating to areas that included infrastructure, patterns of use, administration, teaching and so on.

An attempt was made to code the data set against these categories, and this identified five areas about which comments were made: learning and teaching; administration;
the library; personal ("living") technologies; and the institute’s infrastructure. However, it should be noted that these areas reflect the questions posed in the survey (around arrival, learning, living, support and 'recommendations'), rather than students' spontaneous, unprompted accounts of their experiences.

Within each of these areas, it was possible to distinguish different kinds of comments – for example, comments focused on access as opposed to personal development. This distinction rapidly began to resemble an existing framework in use in the programme (Sharpe & Beetham, 2010), which distinguishes between functional access; skills development; situated practices; and identity work (‘creative appropriation’ in the original model, modified in later presentations for the JISC programme). Given the fit between this model and the preliminary analysis, it was decided to use this as a framework to analyse the comments in relation to each of the five areas. This provided the added advantage of ensuring the comparability of the work undertaken here with that of other projects in the programme.

Where separate sentences within comments addressed two or more of these themes, they were split and each part categorised separately; where two or more themes seemed to be addressed within the same sentence, they were classified in terms of the ‘higher’ category (prioritising identity relative to access). Statements were classified as being about identity where they made statements about what people or services are (e.g. “is excellent”); as practices where they described patterns of interaction or activity; as about skills and guidance where they discussed competence, advice or development; and about access where they described finding things, logging in or directly used the term ‘access’.

In the following section, the data are described, using the five themes and four levels.

**Results**

In total, 103 relevant comments were made. These were classified as followed:

<table>
<thead>
<tr>
<th></th>
<th>Learning and Teaching (inc. resources)</th>
<th>Administration</th>
<th>Library (and reading resources)</th>
<th>'Living' technologies</th>
<th>IT services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Practices</td>
<td>13</td>
<td>13</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Skills</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Access</td>
<td>10</td>
<td>6</td>
<td>20</td>
<td>5</td>
<td>6</td>
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</tbody>
</table>

The comments made in relation to each of these categories are summarised in the subsections that follow, organised primarily using Sharpe & Beetham’s framework and secondarily by thematic area. This decision reflected the intention to make these findings usable across the programme.
Identity
Comments in this category included claims about what things were, or were not. Few, if any, were about the students themselves – having been asked to comment on their experiences of the institution, most were about people or things with which they had come into comment.

When students did refer to themselves, it was usually an indirect reference. For example, one student described themselves in passing as “mature” and another as someone who was only studying online (an ‘online learner’). There were also two comments that suggested some kind of developmental trajectory: one asserted that they “were starting to feel like a real academic”, while another added, “I wish we will remain students and not become customers in future.”

Learning and Teaching
Comments about teachers were predominantly positive, whereas comments about teaching resources – primarily Blackboard – were critical. Interestingly, some settings in which learning and teaching took place were also singled out for comment.

Students asserted that teaching was “good”; that a supervisor was “high quality”; that lecturers were “experienced” and “recognised internationally”.

It terms of settings and resources, lecture halls as classrooms were described as “very poor”; and Blackboard was “very confusing” (a recurrent comment), “very disorganised”, and not “user friendly” (also repeated several times).

Library
The library staff were described positively: as “fantastic”, “experienced and helpful”, “always willing to help” and “very patient and tolerant”; the library was described as “world class” and “excellent”.

IT services
IT services were described on one hand as “great”, but on the other, as “not very qualified for the job”.

Practices
Learning and Teaching
There were comments about various aspects of teachers’ interactions with learners that involved technology. All of these were critical of current practice.

Many comments focused on a lack of dialogue. In particular, these described Blackboard as a barrier to communication or as a missed opportunity (“Feedback is just a letter on blackboard, nothing more constructive”; “It would be good to use Blackboard more, as a means for students sharing and staff responding to students”; “One of our modules was condensed due to the lecturer’s research commitments abroad. […] We can now only access our lecturer via Blackboard yet it is supposed to be a face to face module.”).
There has been so much confusion on this course with regards to tasks going up on Blackboard, finding them, trying to access them, understand where they are and how they relate to the handbooks, it has been more about learning how to understand the way the course is taught that the actual content of the course which has been extremely frustrating and time wasting for a lot of us.

Also related to this issue were comments about use of email, and particularly, the lack of a timely response (for example, “my mentor did next to nothing to sort out the issues and very rarely even replies to my emails”).

Further comments focused on poor uses of PowerPoint (there were several such comments, such as, “Lecturers seem to just read what is on powerpoint which means we switch off and just read the slides”; “We had a professor who came with 40 slides, only went through 20, left at break having just touched the subject and referred to the rest of the slides for further information”). There was an expectation that slides should be made available through Blackboard in advance of the session.

There was also the suggestion that staff are re-using resources as a way of teaching beyond their expertise (“many seem uncertain when asked questions or unfamiliar with their material, maybe because there are shared Powerpoints or lectures to create consistent teaching”).

Administration
Like the comments in relation to learning and teaching, many comments about administration practices focused on failed communication. Some of these were very general (“Communication systems don’t seem to work like they should”), but some specifically concerned the use of email. Particular criticisms included the institutional policy to email information to students’ official IOE addresses (e.g. “you must send us information to our preferred email addresses, not your preferred email addresses, like this one. We don’t check it, it is clunky and it isn’t student friendly”; there were several similar comments), and failure to respond to emails in a timely manner (“I have had problems with ‘admissions’ losing my information, entering incorrect information into the computer, taking a long time or ignoring e-mails”). It may be worth noting that comments about a lack of response were, primarily, in relation to queries about the administrative processes for securing accommodation.

There were also demands to overhaul enrolment and allow online registration.

Finally, there were comments that, implicitly, suggested that the IOE is over-estimating some students’ digital literacy. For example: “some of the information was very difficult to find [...] just having guides available online can be confusing for people who have just arrived”; and, “there has been an over reliance on electronic systems to communicate information”. These could be seen as being in conflict with the previous comment, asking for more of the processes to be moved online, suggesting variability in students’ digital literacy.
Living Technologies
The small number of comments in this section focused on the lack of a welcome email from societies, and also included a comment about accommodation.

IT services
Of the three comments in this category, two were critical of the institution’s policy on passwords (“Over zealous password changes for the ICT systems is ridiculous”), while the third focused on the delay in getting a username and password set up at the point of registration.

Skills

Learning and Teaching
The two comments in this category asked for orientation to the online services available; there was also a request for staff to be trained in “VLEs accessible and useful for their students, they shouldn’t be treated as just dumping grounds for reading.”

Administration
Of the two comments here, one concerned the skills of administrators who had failed to accurately input student data, and the other concerned an introduction to the institution’s systems and support.

Library
The only comment in relation to the library concerned the desirability of library induction. (This is, in fact, already provided – for groups, individuals, and also as an online self-study resource.)

IT services
The only comment in this category concerned a student’s problems with passwords and Blackboard; this was classified as a skills issue as the IT Services support staff were described as being “friendly and helpful” while helping the student to learn how to address the problem.

Access
More comments were classified as being about access than any of the other three categories. In particular, for both the themes of administration and IT services, there were more comments about access than there were for any other category. This may be because barriers to participation were seen as operational concerns, although access issues were visible in relation to all areas of institutional activity.

Learning and Teaching
Access issues in relation to learning and teaching were almost exclusively about Blackboard. These included numerous comments about initial delays in getting access to the Virtual Learning Environment as a result of delays with enrolment; this problem
delayed students‘ access for up to two weeks. In some cases, students were issued with guest logins as a work-around for this issue.

Other problems with Blackboard included its layout (so that, for example, tasks or readings could not be found), and “malfunctions” such as down-time for maintenance.

The only other comment in this category concerned access to computers:

There are not enough computers in the Institute, especially in areas where you can talk in groups/plan a presentation etc.

Administration

Comments relating to administrative access primarily criticised the decision to provide information online, and particularly in Blackboard. Again, while these comments are explicitly about institutional issues, they also reflect students’ views of their own digital literacy.

So much is online and there is an assumption we know what to do, where to go. We all (the students) have to glean it from each other.

However, another student commented that “in this day and age” processes such as registration should be possible online.

Related comments concerned things like accessing course handbooks.

I wanted to get the Programme Handbook of my own and a related course online but was unable to do so. This limited my choice of option modules because I was unable to get the information I needed in sufficient time to make an informed choice.

Library

Unlike the other categories within ‘access’, there were positive comments about access to the library and its resources.

The experience of being in the library and having access to articles and researchers is fantastic.

There were, however, a majority of comments that were negative. These include insufficient access to computers (a repeated concern), slow sign-on, limited number of books (when recommended to whole course cohorts), limited access to databases, and having to log in separately to Athens. There was a request for “more access to online books and journals”.

Alongside these comments were points made about the temperature, noise, crowding and so on that influenced what people felt that they were able to do within library spaces.
Living technologies
Comments here all concerned the way in which institutional systems were ‘locked down’ to prevent certain kinds of activity (e.g. “downloading music and television programmes, talking to friends on Skype”). Students comments that this “makes the communication of students difficult”, so that one student reported that “I had to purchase my own WiFi”.

*The Internet in Woburn Square is horrible. We pay the same money, why we have bad Internet quality?*

IT services
Within this category, some comments focused on a lack of access to hardware, such as computers, printers and scanners. There were also criticisms of the speed of the institutional network, and “that IT support was so rigidly in office hours and no weekend support. For a part-timer that’s difficult to access.” However, there was also one positive but very general comment (“The university is well equipped”).

Conclusions and recommendations
Few of the comments made in the iGraduate survey are directly useful to the project, or even to informing the development of practice at the institution. The most prevalent issues – such as problems with passwords, the organisation of Blackboard and access to computers – are well known already. Some of these have already been addressed (e.g. Blackboard is being replaced with Moodle, partly because users preferred this alternative), or are in the process of being addressed (e.g. ‘business process reengineering’ is taking place within registry, partly to support the development of online registration). Others cannot be addressed under current economic circumstances (e.g. creation of more spaces with computer access). Even with the other issues, caution remains prudent: there is no real indication of the prevalence of any given concern, for example. (Examples of such cautious development are suggested below.)

However, for this project, the primary problem with the data is that they reflect the survey that generated them rather than the aims of this owrk. For example, the topic areas identified by analysing the quotes are primarily a reflection of the topic areas in the survey (e.g. “learning”). Moreover, they focus on students’ experiences of the institution – not on the students or their actions *per se*. It remains possible to infer some things about students’ digital literacies – for example, from the comments that putting information online is undesirable, or the request to support online enrolment. However, these two examples point to differing levels of digital literacy, but the data provide no clues about the prevalence or characteristics of respondents who want more or less online engagement.

In spite of these issues with the data, there are some specific areas that can be used to develop institutional practice, such as the problems of poor PowerPoint presentations, which could be addressed by further promotion of training for teaching staff. Similarly,
some of the problems with passwords and locked-down network use could be considered as part of a revision of current IT policies, as could the decision to direct correspondence to an official student IOE email account rather than their preferred address. Administrators dealing with student enquiries could also come to an agreement about response times to emails, and communicate this more clearly to students or enquirers.

In terms of supporting the development of students’ digital literacy, there are passing references that suggest particular processes or forms of engagement are of use. For example, there was reference to support from peers and ‘on demand’ support from librarians or IT staff. Such comments do not answer the project’s concerns, but they do at least raise questions about students’ support networks and their personal development that the project could explore in later parts of the baseline work. Similarly, there were several comments that suggest that the environment – not just the computer or system, but the material and social setting – had some influence on their ability to engage with learning and teaching. This aspect will be explored further, within the longitudinal, ethnographic phase of work.

In summary, while the analysis here is reassuring – in that it confirms existing expectations and ideas about students’ needs – the data set is too limited to advance the project in any substantive way. It is, however, helpful in clarifying topics that warrant further investigation in later phases of the baseline work.

References