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Mobile Learning Project Report

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Mobile Learning Project Report

Sue Folley/Abdul Jabbar – July 2010

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1. Introduction

Mobile learning is not a new concept, learning whilst on the move or away from formal educational settings has been happening a long time with the use of books, journal articles, television, radio etc. However what is new is the vast array of devices now available to access learning and to take advantage of being mobile but still being able to capture information and share, collaborate and upload it to a worldwide audience.

Mobile learning (mlearning) is a growing area of pedagogic research, however much of the research so far has focused taking traditional types of instructional learning and putting it on mobile devices, rather than using mobile devices for increased engagement in teaching sessions or for using the devices for capturing information as and when the students are mobile. Herrington et al (2009) claim that although mobile technologies have the potential to be used as powerful learning tools within higher education, “their current use appears to be predominantly within a didactic, teacher-centred paradigm, rather than a more constructivist environment” (p.2). Most mobile learning devices are centred around social learning, e.g. mobile phones, so their pedagogic potential needs to be further explored.

So what is mlearning? Is it to do with use of mobile phones or just the student being able to access information whilst mobile? Kukulska-Hulme & Traxler (2007) define mobile learning as “learning delivered or supported solely or mainly by mobile technologies. These include hand-held computers, PDAs, mobile phones, smart phones wireless laptop pcs and personal media players such as the iPod.” (p.181). However they go on to say that this definition is bound by current technologies, and as technology is constantly changing and improving, we should be flexible in our definition of mobile learning.

1.1 What are the advantages of mobile learning?

- Mobiles are something that most students have and are constantly engaging with by choice, they are already familiar and comfortable with the medium.
- Mobile devices can provide the learning as and when the learners need it – they do not have to be on a computer at home or in classrooms.
- A major benefit of using wireless mobile technology is to reach people who live in remote locations where there are no schools, teachers, or libraries, so has opened up elearning opportunities to a much wider audience.
- They can be used to capture items (e.g. photos, images, thoughts, websites, resources) as and when the students encounters them and shared with others – opens up the potential for instant collaboration.
- It encourages and makes the most of informal learning which is at the control of the learner.
- They have made possible the development of personal learning networks, connecting people around the world with similar interests to discuss issues, share resources and to learn from one another.

1.2 What are the types of mobile learning?

Traxler (2009) identifies the emerging categories of mobile learning (Kukulska-Hulme and Traxler forthcoming):

- **Technology-driven mobile learning** – Some specific technological innovation is deployed in an academic setting to demonstrate technical feasibility and pedagogic possibility

- **Miniature but portable e-learning** – Mobile, wireless, and handheld technologies are used to re-enact approaches and solutions already used in conventional e-learning, perhaps porting some e-learning technology such as a Virtual Learning Environment (VLE) to these technologies or perhaps merely using mobile technologies as flexible replacements for static desktop technologies
- **Connected classroom learning** – The same technologies are used in classroom settings to support collaborative learning, perhaps connected to other classroom technologies such as interactive whiteboards
- **Informal, personalized, situated mobile learning** – The same technologies are enhanced with additional functionality, for example location awareness or video-capture, and deployed to deliver educational experiences that would otherwise be difficult or impossible
- **Mobile training/ performance support** – The technologies are used to improve the productivity and efficiency of mobile workers by delivering information and support just-in-time and in context for their immediate priorities
- **Remote/rural/development mobile learning** – The technologies are used to address environmental and infrastructural challenges to delivering and supporting education where conventional e-learning technologies would fail, often troubling accepted developmental or evolutionary paradigms.

1.3 Pilot Study Overview

Our pilot study is to investigate the potential of mobile learning in teaching and learning by means of four case studies, each focussing on a different use of mobile technology:

- The use of mobile phones to upload marketing images for a marketing course (Informal, personalised, situated mobile learning);
- Using a text wall to engage students in face to face teaching sessions (Connected classroom learning);
- Students creating revision podcast via mobile recording devices/mobile phones (Informal, situated mobile learning);
- The use of SMS to communicate administration messages to students (Mobile information support).

2. Case Study 1 - Mobile Image Upload

2.1 Activity

Students were asked to take pictures/videos using their mobile phones for examples of good/bad branding for a Marketing Course. The students were required to do this over a period of a few weeks and take pictures of posters, billboards, bus stops etc and upload the picture and their comments to a blog. If students did not have a camera phone they could find examples online and post them or use a digital camera to take photos and upload via the internet to Blackboard. The evaluation was carried out by the students completing an online questionnaire online and interviewing staff who took part.

2.2 Results

This trial was only carried out in one module, Digital Marketing.

Approx 15 students took part loading a total of 15 images to the Blackboard site.

2.3 Summary of the Student Questionnaire Results

(A copy of the questionnaire is in Appendix A)

Only 7 students took part in the survey, of which only 3 uploaded photos for the activity. This gives us only limited data, but at least we have a representation of the student's thoughts and opinions. These are the results of the survey:

1. Are you

- a) Female – 4 (57%)
- b) Male – 3 (43%)

2. Which age range are you in?

- a) under 20
- b) 20-29 - 7 (100%)
- c) 30-39
- d) 40-49
- e) 50 or over

3. Do you have a mobile phone?

- a) Yes - I have an iPhone - 1 (14%)
- b) Yes - I have a smart phone - 1 (14%)
- c) Yes - I have a mobile phone (other than an iPhone or smartphone) with a camera - 5 (71%)
- d) Yes - I have a mobile phone (other than an iPhone or smartphone) without a camera
- e) No I don't have a mobile phone
- f) Other (please specify):

4. Do you have price plan/contract on your mobile that allows unlimited or a large number of picture messages a month?

- a) Yes -1 (14%)
- b) No - I am on a monthly contract with now or few inclusive picture messages per month – 3 (43%)
- c) No I am on pay-as-you-go - 2 (29%)
- d) I don't have a mobile phone – 1 (14%)
- e) Other (please specify):

This one answer saying they haven't got a mobile phone contradicts the answers to the question above.

5. Did you take and upload any photos for this activity?

- a) Yes - I added many photos (more than 10) - 0 (0%)
- b) Yes - I added a few photos (between 3 and 10) – 1 (14%)
- c) Yes - I added 1 or 2 photos - 3 (43%)
- d) No I did not add any photos - 3 (43%)

If No - why did you not take part in the activity? These were the three answers we got:

- didn't find anything interesting
- I didn't have a necessity
- I found the pictures on the internet instead

The last of these answers was an acceptable way to engage with the activity – however perhaps due to the way the questionnaire focused on mobile phone to take part, maybe the student thought they had not taken part.

6. How did you take and upload the photos into Blackboard?

- a) Took photos with a mobile phone and uploaded directly to Blackboard via the phone - 0
- b) Took photos with a mobile phone and uploaded to a computer and then to Blackboard – 0
- c) Took the photos with a digital camera and uploaded to a computer and then to Blackboard - 1 (14%)
- d) I did not take/upload any photos -3 (14%)
- e) Other (please specify): - 3 (43%)

The 'Other' answers were all relating to finding images on the internet and uploaded them from there.

7. What advantages did this activity have to your learning? Please give details - The responses we got to this question were:

- A different way of learning
- allowed us to see what others perceptions of good and bad branding were
- Finding branding that was good and bad was interesting

- interactive, bonded the class
- Interesting to see some branding adverts.
- more interactive
- None

8. Do you think this activity had any disadvantages? If so please explain what they are - The responses we got to this question were:

- it takes a lot of space on memory card
- It was easier to find the photo online than to take it and upload it
- People couldn't be bothered to do it
- Time consuming to find something decent.
- when nobody was posting pictures

9. Can you suggest any improvements to this activity? 3 responses of 'No' as well as these suggestions:

- bigger memory cards
- it would be better if everyone in the class did the activity
- No as you had the option to find it online as well

10. Do you use your mobile phone for any other learning activity? If so please give details

Two people mentioned using their mobile phones for the text wall activity and one responded that they used sms messages.

11. Have you any other comments to make about this activity that we have not covered above?

No other comments were made.

2.4 Comments from Students about the Images

These are a selection of comments that the students made about the images themselves, some more reflective than others.

- "This advert is great. It is funny, memorable and will capture people's attention."
- "This is excellent branding by Umbro"
- "I really like this advert it stands out very well.."
- "Evian Live Young campaign is supported by roller break dancing babies, brilliant advert, definitely backs up the Live Young message they promote"
- "A very clever advert by BMW, Audi trying to compete with their new Audi A4, whilst BMW put an even bigger advert of their new Santa Monica BMW car next to it. This would catch consumers' attention and I personally feel their attention would be more drawn to the BMW as the sign is bigger and funnier."

- "This advert first came out in 1998 and I still remember the first time I saw it. It continues the theme of shocking humour which irn bru have used so successfully in the past. The advert received a number of complaints, which got the public talking about the brand and successfully got the brand name and the advert in a number of newspapers."

2.5 Summary of the Interview with Staff

The tutor reported that the activity was done by the majority of the students who fully engaged with the activity. The activity was done online and offline. The comments that accompanied the image were well thought and articulate. Students did attempt the task but uptake could have been better. This, they reported, could have been remedied if the process of uploading the images to Blackboard was easier. Staff claimed that the mobile picture upload can be used for the development of video and images in pushing different interactive ways in teaching. The tool will become more mainstream in the future and its ubiquity will only lend itself to the learning experience.

2.6 Discussion

All students that took part in the survey had a mobile phone with a camera, so had the necessary equipment to take photos whilst mobile and later (or then) upload them to Blackboard. However most students chose to download photos from the internet rather than take pictures using their mobile phones. Allowing the students to browse pictures from the internet was an important option as it allowed students without a mobile phone or without a camera (either on their phone or otherwise) to participate in the activity. However it was probably seen as an easier option to search the internet rather than taking photos on the move. Hopefully those students who did take part, saw the benefit and it should have raised their awareness of advertising images around them.

Students reported problems with space on memory cards, and some of the students were on pay as you go contracts, and the tutor reported that uploading images to Blackboard was not that easy, so these could have been issues which prevented students fully engaging with the activity. As technology improves and becomes cheaper, these may not be issues in the future.

2.7 Recommendations if this activity was repeated

1. Tie it into assessment – student's rarely waste energy doing work that is not assessed.
2. Consider accessibility issues - always give alternative ways to do a task for those students who do not have a smartphone or even a mobile phone. Don't assume that all students have phones.
3. Encourage the engagement by discussing the images in face to face sessions.
4. Staff reported that it would have been better to start the activity earlier in the year and to develop the activity as part of the assessment.
5. It may have been useful to run this activity over a larger period of time to gain momentum.
6. One idea would be to put the students into groups of 2s or 3s and get one group a week to find an image take a photo and upload it to Blackboard, then using the first 5 minutes of each class to tell the other students about it.

3. Case Study 2 – Using a Text wall to engage the students in lectures

3.1 Activity

A text wall was used whereby student could send message via either their mobile so students can upload their reviews/micro blog what they have found interesting in a lecture, what they have learned or any aspects of the lecture that they found confusing. This was anonymous for students and can encourage discussion outside of the class and facilitate out of context learning. Students only needed a basic mobile phone with text messaging functionality to take part in this activity, if they did not have a phone or the cost of text messaging was prohibitive, the students could also send messages via the internet by navigating to a particular website.

3.2 Results

This trial was carried out in two modules these were Digital Marketing and Communications and Achieving customer engagement.

30 out of 45 students took part (67%) loading.

6.3 Summary of the Student Questionnaire Results:

(A copy of the questionnaire is in Appendix B)

18 Students took part in the survey

1. Are you
 - a) Female -9 (50%)
 - b) Male – 9 (50%)

2. Which age range are you in?
 - a) under 20 - 0
 - b) 20-29 – 17 (94%)
 - c) 30-39 – 1 (6%)
 - d) 40-49 - 0
 - e) 50 or over - 0

3. Do you have a mobile phone?
 - a) Yes - I have an iPhone -3 (17%)
 - b) Yes - I have a smart phone – 5 (28%)
 - c) Yes - I have a mobile phone (other than an iPhone or smartphone) - 9 (50%)
 - d) No I don't have a mobile phone - 0 (0%)
 - e) Other (please specify): - 1 (6%) (They listed this as Nokia – which should really have fallen under category b or c above but it is impossible to tell as they did not list which model of Nokia they had.)

4. Do you have price plan/contract on your mobile that allows unlimited or a large number (500+) texts a month?
- a) Yes – 9 (50%)
 - b) No - I am on a monthly contract with less inclusive texts per month – 1 (6%)
 - c) No I am on pay-as-you-go - 7 (39%)
 - d) I don't have a mobile phone - 0 (0%)
 - e) Other (please specify) – 1 (6%) (defined as flexible credit to spend on text/calls)
5. Did you add any text messages to the text wall?
- a) Yes - I added many messages (more than 10) – 3 (17%)
 - b) Yes - I added a few messages (between 3 and 10) – 8 (44%)
 - c) Yes - I added 1 or 2 messages – 5 (28%)
 - d) No I did not add any messages – 2 (12%)

The reasons for the two not taking part who answered the survey were:

- i do not know how
- i was not in class, dont understand what had to be done

6. What technology did you mainly use to access the text wall?
- a) Mobile phone – 12 (67%)
 - b) iPod Touch – 0 (0%)
 - c) Netbook/laptop – 0 (0%)
 - d) Personal Computer – 4 (22%)
 - e) I did not access the text wall – 2 (11%)
 - f) Other (please specify) – 0 (0%)

7. Which of these did you use the text wall for?

(This was a 'select all that apply' question, so that each response could be up to 100%)

- a) To ask a question – 6 (33%)
- b) To summarise the main learning points – 3 (17%)
- c) To make a comment on something the lecturer said – 12 (67%)
- d) To discuss something with one or more of your peers – 4 (22%)
- e) Other (please specify) – 4 (22%)

The 'other' comments were:

- To answer a question: - 3 (17%)
- I did not use the text wall: - 1 (6%)

8. Which of these did you **mainly** use the text wall for? (select one only)

- a) To ask a question – 3 (17%)
- b) To summarise the main learning points – 2 (12%)

- c) To make a comment on something the lecturer said – 8 (47%)
- d) To discuss something with one or more of your peers – 0 (0%)
- e) Other (please specify): – 4 (24%)

The 'other' comments were:

- To answer a question: - 3 (18%)
- I did not use the text wall: - 1 (6%)

9. What advantages did using the text wall have to your learning? Please give details

- Can be quite entertaining and for people that are shy can voice their opinions
- Didn't use it enough to really comment, however anonymity of answers is very useful
- gave everyone a say
- get to listen to other students opinions and thoughts
- I am able to express my thoughts about learned experience
- Interactive.
- Interesting to see what other people put
- It was easy to ask multiple people for their insight.
- Its good fun.
- Made it easier to share my ideas
- no advantages-not used
- None

10. Do you think the text wall has any disadvantages? If so please explain what they are

- Actually No.
- Cost
- I dont like giving out my personal number.
- I think it is pointless and doesn't impact learning.
- It can be distracting
- maybe I do not know
- N/A
- No
- slow
- Time to set up
- when you sign up with your name you are no longer anonymous! Also subject to abuse, as messages are uncontrolled

11. Would you like the text wall to be available in more of your classes?

- Yes – 10
- No – 2

12. Can you think of any other use of the text wall?

Summary of the answers to this question:

- No – 3
- Voting/quizzes - 4
- Passing on information - 1
- Reporting student absence – 1
- Lecture cancellations – 1

13. Do you use your mobile phone for any other learning activity? If so please give details

Twelve students answered 'No' to this question. One student reported using their phone to browse the internet for their studies. I suspect that the students interpreted the question as relating to only formal in-class learning activities like the text wall rather browsing the internet.

14. Have you any other comments to make about the use of the text wall that we have not covered above?

All students either answered no to this question or chose not to answer it.

3.4 Summary of the Interviews with Staff

The tutor involved in this activity reported that the intention was to use this activity as part of the communication process between the student and the academic and to additionally to utilise the technology to answer questions during lectures. The academic felt that the students needed as much support as possible in successfully completing this module. With this being a mainly international cohort the use of SMS which was a very natural technology to them could help to open the communication channels and limit the use of English as a barrier. The tutor thought that the activity has the potential for success but more work needs to be done in designing activities around the tool that have a pedagogical underpinning.

The tutor reported that the students did attempt the task but uptake could have been better. The tutor commented that the cohort was very international based. They had overall trouble connecting with the module. Barriers include language, text costs as these students did not have text contracts and attendance. Attendance at the module was poor and this was reflected in the uptake of this activity.

The tutor recommended that the activity would have been more successful if started earlier in the year, and that the activity should have been introduced before the actual assessment. It was also suggested that the activity be possibly built into the assessment, and to design some specific activities around the text messaging tool.

3.5 Discussion

Most of the students were in their twenties – so the survey did not really contain any mature students which could have affected the results of some of the subsequent results. All of the students who took part in the survey had a mobile phone of some description; half had smart phones with only a small percentage with iPhones. These stats will probably change dramatically in the next few years but it is wrong to assume that most or all students have smart phones.

Half the students were on a contract with a large number of inclusive texts, so the cost of taking part in such activity not probably an issue. Quite a few were on pay-as-you-go contracts, which means every text cost them money – individually this is not a huge amount, but could be an issue if students were expected to post a number of texts. Care must be taken not to exclude any students for which cost of taking part could be a potential issue.

It was not really surprising that most students taking part in this activity used their phones to do so rather than other forms of technology as most students own phones and carry them around with them, so they are very accessible to use. Some used PC to take part, which is good as it proved you do not need to use a phone to be included in the activity. Maybe other technologies were not really suggested by staff as alternatives.

In terms of advantages to their learning, students that took part seem to like that the activity was fun and engaging, they liked the fact it was democratic as it gave everyone a say, and that it gave a voice to the shy students who may not speak out in class. One student enjoyed that it enabled them to express their learned experience and another commented that it was interesting to see the responses from other students. It therefore gave rise to peer learning opportunities and points of discussion. Students listed fewer disadvantages, but those stated centred around privacy issues and possible distraction. One student said it had the potential to be abused, but we saw no evidence of this, so perhaps is just a perception. Only one student pointed out cost as a disadvantage. 10 out of the 12 students would have liked text walls to be available in other of their classes, which although from a small samples gives the indication that most students felt it beneficial to their learning experience.

On the whole this pilot seemed to be successful with the majority of students responding that it positively impacted their student experience and stating they would like text walls used in other classes. It is certainly worth scaling up this activity and doing in more modules over a longer period of time, to evaluate its effectiveness more accurately. This was only a very small scale project, so it is quite difficult to make any real generalisations from the results, but it is indicative that students felt more involved in the classes and found it an engaging and democratic way to participate. If students engaged with it over a longer period of time they may develop the skills needed to take the discussions further and get more from the activity.

Use of twitter/text walls within the classroom allow for students to become more reflective and engage more with that the tutor is saying. To condense a thought or question to 140 characters can be challenging, and requires the student to think carefully about the message they are trying to convey. Text walls or twitter also allows for more democracy of participation as all students can take part, not just a few, and can be made anonymous if that is appropriate. The questions and comments can provide diagnostic information to the tutor as to what is being understood and highlights any misconceptions the students may be having. Often it is assumed that in a lecture, what is said by the teacher is automatically understood by the students. This is often not the case, as learning has been proved to be very individual and complex, based on many different factors, and if the teacher has immediate feedback on the how the students are

making sense of the content, they can adapt the session to this information. The texts/tweets can also form a basis for discussion which again which is based on constructivist pedagogy.

3.6 Recommendations if this activity was repeated

1. Consider accessibility issues - always give alternative ways to do a task for the student who do not have a smartphone or even a mobile phone. Don't assume that all students have phones. All students that took the survey on this activity did have a phone, but those who didn't may have chosen not to take part in the activity and therefore not to take the survey. Even students with a mobile phone may not want the cost implications of taking part in an activity like this.
2. Use the start of the face to face class to discuss the texts that have arrived since the last class and explain any misunderstandings. This rewards the students who have taken part, encourages engagement, and helps address misunderstandings immediately before things get worse.
3. Similarly encourage students to summarise the main learning points of a class – this will test understanding, encourage the students to listen and reflect on what is being said and give some rich diagnostic information to the tutor on what the students have understood. Try and leave a few minutes at the end of the class to have a look at these comments as whole. Praise the good ones, and fully explain any misunderstandings before the students leave the class.
4. Keep the texts for doing some diagnostic evaluation on the types of messages and number of responses per student/per topic/per question etc. It would have been nice to have the original messages to do some analysis on for this pilot but they were all deleted to protect the privacy of the students, so no analysis could be done.
5. It was recommended by the tutor that this activity was started earlier in the year, this is a good idea as often it takes a while for the momentum to build and for students to fully engage.
6. Similar to the point above, this pilot activity seems to have been introduced after the assessment, so no wonder students did not fully engage with it. Students tend to be fairly strategic, and focus their attention on assessment tasks. They need to see a clear benefit of engaging with a task such as this.

4. Case Study 3 - Podcasts for Reflection

4.1 Activity

This task was for the students in pairs/small groups to create a podcast of their choice and upload it to Blackboard, given them a choice of topics for that course. The purpose of the activity is to allow students in their small groups to summarise the key points of the topic they have chosen in a short podcast by using a mobile phone or a digital recording device. This audio recording can then be uploaded to Blackboard for the other students to access. This has the benefit of the students working collaboratively on a task to plan it in addition to engaging with the subject matter. This can then form the basis for a series of revision resources for the students to listen to at assessment time, in addition they could also add the podcasts to a resource bank for future cohorts of students – this giving them more purpose. Having the students in pairs or threes makes the task more enjoyable and less daunting and also develops collaborative and team working skills. The audio could also be added to the students' portfolios. Students could use their mobile phones for this task if it had recording functionality, alternatively they could use digital recording devices or free online recording software on their laptops or personal computers.

4.2 Results

This trial was only attempted in one module BFO0110.

No students took part in this activity.

6.4 Summary of the Student Questionnaire Results:

(A copy of the questionnaire is in Appendix C)

Only 6 students answered this survey and due to the fact that no one actually undertook this activity most of the questions were not relevant – the results of the survey were as follows.

1. Are you

- a) Female - 3 (50%)
- b) Male - 3 (50%)

2. Which age range are you in?

- a) under 20 – 2 (40%)
- b) 20-29 – 3 (60%)
- c) 30-39 - 0
- d) 40-49 - 0
- e) 50 or over - 0

3. Do you have a mobile phone?

- a) Yes - I have an iPhone - 0
- b) Yes - I have a smart phone (other than an iPhone) – 2 (33%)
- c) Yes - I have a mobile phone but not an iPhone or smartphone - 4 (67%)
- d) No I don't have a mobile phone - 0
- e) Other (please specify) - 0

4. Do you have a recording device that enables you to create audio recordings (podcasts)? (select all that apply)

- a) Yes - I have a recording facility/application on my mobile phone – 3 (50%)
- b) Yes - I have another mobile recording device I could use, such as a dictaphone, digital recorder - 0
- c) Yes - I have recording software on my pc/laptop - 0
- d) No - I have no device I could record a podcast on – 3 (50%)
- e) Other (please specify) - 0

5. Did you take part in this activity?

- a) Yes - I created (or helped to create) a podcast - 0
- b) No - I did not create (or help create) a podcast for this activity – 6 (100%)

If Yes - then how did creating the podcast help your learning? – No answers

If No - why did you not take part in the activity? These were the six answers we got:

- I didn't remember
- I had forgotten about it, sorry.
- I was not aware of it
- not required to
- We did not do this activity, only asked if the idea would be helpful to my academic work
- We never really got round to it and kind of forgot...which is a terrible excuse I know...

6. If you did create a podcast - which method did you use?

- a) I used my mobile phone
- b) I used recording software on my pc/laptop
- c) I used a digital recording device
- d) I did not create a podcast - 6 (100%)
- e) Other (please specify):

7. If revision podcasts had been created (by students for this activity) for each topic - would you have listened to them at exam/assignment time?

- a) Yes - I would have listened to all of them – 1 (17%)
- b) Yes - I would have listened to some of them that related to my assignment/revision – 5 (83%)
- c) No - I would not have listened to the podcasts
- d) Other (please specify):

If you would not have listened to them - please explain why not: - No responses to this question.

8. Would you have taken part in this activity if it had been part of the assessment?

- a) Yes – 5 (83%)
- b) No – 1 (17%)

9. Have you any other comments to make about this activity that we have not covered above?

No other comments were made.

4.3 Summary of the Interviews with Staff

The intention was to utilise this activity to allow students to embed recording techniques as part of the research collection phase. It was envisaged that this activity was to be embedded in to a portfolio of activities they were involved in as part of the course assessment. The students were asked to record their findings and to upload their results into Blackboard as a resource to be used by other students in the classroom. Unfortunately the activity was unsuccessful. The students did not engage in the process even though an effort was made to integrate the activity as part of the research process. The students did not engage with the task for a number of reasons in the opinion of the tutor. The tutor commented that the workload was quite heavy and the contact time with the tutor is minimal. The activity was not assessed; students were too focused on finishing the project and to cover the minimum required. There may have also been one or two students who did not have the necessary technological skills.

4.4 Discussion

Unfortunately the students did not engage with this task. The most probable reason for this is that it was not tied to assessment at all, and would have been quite time-consuming for the students. Other reasons were due to lack of technological know-how and lack of confidence in creating audio recordings. The tutor also identified sharing as being a big issue, developing resources and sharing them across peers. I imagine not many students answered the survey due to all of them not engaging with the task. The survey did ask the question about the reasons for not taking part in the session, but most answered that they forgot or weren't required to, so it sounds like they were not really given any motivation or real encouragement to do so. It is interesting that all the students who took part in the survey would have liked to have made use of the podcasts at revision/assignment times. It is perhaps not a surprise that most of the students would have done the activity had it been built into the assessment.

4.5 Recommendations if this activity was repeated

1. As this would have been quite a time consuming activity, it would have been good to build the activity into the assessment. If it was part of the assessment, students would have considered the time investment worthwhile, and maybe would have enjoyed an alternative to traditional assessment types like written assignment and exams.
2. Consider accessibility issues - always give alternative ways to do a task for those students who do not have a smartphone or even a mobile phone.
3. The tutor suggested that this activity was started earlier in the academic year to allow the students more time to work on it.

5. Case Study 4 – Using SMS to Communicate with Students

5.1 Activity

This activity involved making use of the University SMS system for communicating with students across a wide range of modules within the Business School. Students on registration were allowed to 'opt-in' to the SMS communication service. Those that chose to be part of the system then received administrative messages from tutors such as room changes, postponed lectures, assignment deadlines, reminders and so on. Students only needed text messaging capability on their mobile phones to take part in this activity and all of the messages were also posted as Announcements on Blackboard to cater for those without a mobile phone, or for those students who chose not to be communicated to in this way.

5.2 Results

This trial was only carried out across the Business School. Students could opt into the system.

5.3 Summary of the Student Questionnaire Results:

(A copy of the questionnaire is in Appendix D)

110 students answered the survey.

1. Are you

- a) Female – 71 (65%)
- b) Male – 38 (35%)

2. Which age range are you in?

- a) under 20 - 17 (15%)
- b) 20-29 - 66 (60%)
- c) 30-39 - 11 (10%)
- d) 40-49 - 13 (12%)
- e) 50 or over - 3 (3%)

3. Which department of the Business School are you in?

- a) Accountancy - 22 (20%)
- b) Leadership and Management - 24 (22%)
- c) Strategy and marketing - 27 (25%)
- d) Law - 24 (22%)
- e) Other (please specify): - 11 (10%)

Other options listed as:

- Business Studies – 8 (7%)

- CIPD – 3 (3%)

4. What level of course are you studying for?

- a) Foundation degree - 6 (6%)
- b) Undergraduate degree - 78 (72%)
- c) Masters degree (MA/MSc/MBA) - 14 (13%)
- d) PhD - 3 (3%)
- e) Other (please specify): - 7 (7%)

Other responses listed as:

- ACCA – 1
- CIPD – 2
- LLB – 1
- Postgrad - 3

5. Do you have a mobile phone?

- a) Yes - I have an iPhone – 16 (15%)
- b) Yes - I have a smart phone (one with applications and capable of internet browsing etc) – 37 (34%)
- c) Yes - I have a mobile phone (other than an iPhone or smartphone) – 54 (50%)
- d) No I don't have a mobile phone – 1 (1%)
- e) Other (please specify): – 0 (0%)

6. Did you opt in to the text messaging scheme?

- a) Yes - 49 (44%)
- b) No - 61 (56%)

If not - why did you choose not to take part?

Summary of answers to this question:

- Were not aware of the scheme – 48
- Preferred not to (no reason as to why not) – 2
- Out of the country so would have incurred costs to receive texts – 2
- Not sure/can't remember – 2
- Doesn't like texts – 1
- Doesn't have a mobile phone – 1
- Prefers communication by email – 1
- Didn't want loads of texts – 1
- Didn't consider it important – 1
- Forgot – 1
- Didn't have option - 1

7. Approximately how many messages did you receive?

- a) None - 30 (28%)
- b) 1-5 - 23 (21%)
- c) 6-10 - 2 (2%)
- d) 11-20 - 1 (1%)
- e) More than 20 - 1 (1%)
- f) I did not take part in the scheme – 52 (48%)

8. Select each of these that apply *(these were just tick boxes in each of the table cells)*

Which of these types of text message....	have you received over the last academic year?	would you like to receive in the future (if the situation arises)?	would you prefer not to receive at all in the future?	would you prefer the information via another communication method like Blackboard or email?	would you prefer to receive by text rather than any other way of communication (like Blackboard or email)?
a room change message	6	81	1	15	36
a cancellation of a class message	7	77	2	15	33
a coursework deadline reminder	2	55	6	32	22
a message giving you feedback about an assignment	0	40	8	43	19
a message containing your results/grade on an assignment	1	54	7	33	21
An exam date/time/room reminder	2	66	4	27	26
A 'Haven't seen you recently' message	2	42	23	22	19
An attendance reminder	1	46	17	22	20
A message to let you know you have missed a	0	49	11	27	18

deadline					
A message to inform you of a social event	0	33	16	36	17
A message to let you know about a tv/radio programme/event relevant to your course	0	41	15	32	19
A message to arrange a personal tutor meeting	3	58	5	26	23
A guest lecture alert	0	39	12	39	18

9. Do you think the text messaging service has improved your student experience?

- a) Yes - 14 (13%)
- b) No - 25 (23%)
- c) I didn't take part in it. – 71 (65%)

Please explain the reasons for your answer

These were the reasons given – I have listed them in full as I think the system has the potential for improving the student experience, but from the responses it appears the system could have been used a lot better than it was...:

- although I did not take part in it - I wish I knew about it as it sounds like a good idea.
- Although one lecturer did inform us of a cancellation, other cancellations or room changes made by others went on without any contact - if this service took off and lecturers used it, it would be extremely useful.
- because I don't have a mobile phone
- Because I had a few messages in first year.
- because they give more information and keep updated
- Because I only get texted for modules that I do not go to!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
- But I think it would improve my student experience.
- cannot remember being given the opportunity
- Didn't know the scheme was being tried out.
- don't have a reason
- Even though we had cancelled lessons and room changes, the system was not used.
- I did not receive any sms.
- I have never received any text message but I believe it would have improved my student experience
- I only received one text message. However I think it could if used daily.
- I opted in and never received a single text in the 4 years

- I received only one text and it was year ago. As I can remember.
- I think it could have been used more than it was.
- I was not given an opportunity to take part
- I was unaware of this
- Never received a text
- No, it made it worse. We were promised texts for room changes and cancellations and didn't get any.
- not much difference
- Only one text message received throughout the year. It could be used many more situations.
- receive up-to-date information from school
- So far I have received only one text message about cancellation of a class in the last semester. However, we guys got the message late as we were waiting for the tutor to come. I am not sure what has caused this though.
- The course didn't make much use of the system as not many people had signed up to it.
- Throughout the entire time I have been opted into the scheme, I have only received one text message and that message wasn't even relevant to my pathway, modules or section of the school.
- unaware of its existence
- Was not made aware, had I been made aware I would have opted in
- Yes it has because it enables you to find out if a lecture is cancelled, this is useful for those people who have to travel long distances to get to university

10. Do you think the text messaging service has any disadvantages?

- a) Yes – 30 (31%)
- b) No - 66 (69%)

The disadvantages listed can be summarised as follows:

- Those relating to the system not being used well by the University staff – 9
- Those saying it is unreliable (i.e. they may lose their phone or not check it) – 7
- Those saying it could be disruptive (i.e. phone going off at a bad time or too many messages) – 4
- Those mentioning privacy issues - 3
- Those mentioning they didn't know the system was available – 2
- Misc reasons including some advantages - 5

11. Did you have any concerns about your privacy with the text messaging scheme?

- a) Yes - but I did still opt into the scheme - 11 (11%)
- b) Yes - so I chose not to opt into the scheme - 3 (3%)
- c) No - and I did opt in the scheme - 36 (36%)
- d) No - but I didn't opt in the scheme for another reason - 40 (40%)
- e) Other (please specify): - 10 (10%)

These 10 'Other' responses were all to do with not being aware of the scheme, (nothing to do with privacy issues).

So 14 students did have concerns re privacy but most of them (11) still opted into the scheme. 75 students were not worried about privacy issues.

12. Did you receive any text messages or calls on your mobile from the Business School staff that you thought were inappropriate or invasive of your privacy?

- a) Yes – 1 (1%)
- b) No - 95 (99%)

The only person who answered this as 'yes' gave the reason as the message being irrelevant to them as not relating to a module they were on. I would class this as irrelevant rather than inappropriate.

13. What did you think of the timing of the messages (on the whole)?

(This was a 'select all that apply' question so the totals do not add up to 100%)

- a) The timing was generally good – 17
- b) The messages often came a bit too late (please give details below) - 8
- c) The messages often came a bit too early (please give details below) – 1
- d) I got some messages at unsociable hours (please give details of the times you thought were inappropriate to send you text messages) - 0
- e) I did not take part in the scheme - 63
- f) Other (please specify): - 12

All the 'other' responses related to people not getting sent any text messages apart from one who mentioned one of the messages was too late, so that they had already commuted to University before they got the message saying the class had been cancelled.

If you would like to explain your answers to the above question any further or if you have any other comments on the timing of messages, please give details here: We received three responses to this:

Two people commented on the fact they had received cancellation messages too late as they had already started their journey into University. The third person just commented that timing of messages was crucial otherwise the value of the message is undermined, which of course is a really important point.

14. Can you think of any other use of the text messaging service or any ways to improve it?

Way to improve it suggested can be summarised as follows:

- All lecturers use it/targeting the right group of students – 6
- No – it is a good service as it is – 3
- Suggested not to over-use it so that students take notice – 2
- when lectures/tutorials have been cancelled it would be nice to get a text message informing me before I'd set off for the journey to find out when I got to Uni - 1

- For teaching - 1
- library/ book return reminders – 1
- they could be sent when the deadline of re-registration in September is close so no one misses it - 1
- In an emergency situation - for instance to let us know about severe weather conditions such as heavy snowing, flooding, etc which may disrupt academic activities – 1
- Make sure it's used for a wider range of reasons as suggested in the previous question - 1

15. Have you any other comments to make about the text messaging service?

- Actually send the texts.
- How do I opt in?
- I appreciated the lecturer that did use it and hope that others follow.
- I believe in efficient and effective communication. So, your text message service can be utilised to deliver the expected outcome.
- I feel I could benefit from it a lot!!
- I have opted into the scheme since it began yet have never received messages about cancellations of classes or room changes.
- I would have found it really useful as I am a part time student with a full time job.
- It would be a good idea regarding class cancellations/room changes. I have received e-mails in the past telling me a class has been cancelled an hour before the class starts...by this time I have already left for the class and cannot see the email so it is no use to me. At least with a text message I would get the message.
- More awareness of it to be promoted on the campus
- only use it for certain things where only short messages are required.
- Should be used more often
- Without such a scheme the onus is on the student to check Blackboard regularly, which is not very customer focused and leads to frustration, particularly where room changes and or cancellations are concerned, and can lead to wasted journeys and time, so appropriate use of text messaging would be beneficial
- would be very helpful and appreciated as it would make studying easier

5.4 Summary of the Interviews with Staff

This activity was used by the academics:

- To notify students of a lecture cancellation/ room change, assignment hand in dates
- To monitor student attendance
- To communicate with students regarding their work

The academic staff who took part in this considered the scheme to be a great success for the students who signed up for the service. They claimed that it was easy to communicate with the students and tasks were done really quickly. For example student panel minutes were done very quickly and reported student response rates to be a lot faster.

The staff claimed that the uptake for the scheme could have been a lot higher. The activity has a lot of potential but due to the system being opt-in this was a lost opportunity in engaging students on a much larger scale. They recommended that the system be made as the default being that they were in but to allow students to opt out individually if they wanted to. It was thought that the activity was a great help in administering the course and allowing increased and more efficient student communication and engagement that otherwise would have been difficult.

5.5 Discussion

In the survey the demographic information indicated that approximately two-thirds of the students who answered were female, and the sample represented all age groups from 18 to over 50. There appears to be a fairly even spread of responses from the differing departments of the Business School, and representation from all levels of study, with approximately three-quarters of the responses from undergraduate students.

Most of the people who did not take part in the scheme did not do so because there were unaware of the system. Most of the comments said they just did not know about it, with many following that up with a statement saying they wished they had known and would have opted into the scheme for sure. Interestingly not one student mentioned anything to do with privacy as to a reason not to take part. Out of those that did take part, many did not receive any messages or some received very few. This is important – as it raises students' expectations about the use of the system if they are given the choice to opt in. It appears that the use was not taken up by many staff, and only in a very small amount by others, and from the results of the survey it looks like increased and consistent use would very much welcomed by the students.

5.6 Recommendations if this activity was repeated

1. Consider accessibility issues, in addition to sending texts - always post the messages on Blackboard or send my email as well. Don't assume that all students have phones. Some students did not want to give their numbers to the University; others may lose/replace their phones without passing the information on the University.
2. Consider having an online system where students can both change their mobile numbers, opt in or out of the scheme and choose which types of messages they want to receive.
3. At the moment the system was all one way messages from tutors to students – consider using these for students to similarly contact tutors if they are going to be absent or to confirm/change personal tuition meetings.
4. Many students did not know about the system but would have liked to have taken part. It needs to be publicised better.
5. Many students signed up but then didn't get any messages. Signing up raised their expectations which were then not met. Make sure staff know how to use the system, and a consistent approach across the School is used. If some students are getting messages and others aren't, it could cause dissatisfaction.
6. The timing of messages needs to be checked, in general the timing seems to be good but messages need to be communicated early enough to be useful especially cancellation of classes, to prevent students making unnecessary journeys.

7. Care needs to be taken that the messages are sent to the right group of students. Many of the complaints seem to be getting messages that were not relevant to students.
8. It seems to be a very popular system – so make the most of it and it needs to be used more widespread across the School. Most students really wanted to receive most types of messages this way and were disappointed if they didn't know about the system or opted in and didn't get messages.

6. Conclusion

It is all too easy to become overly enamoured with particular kinds of electronic wizardry and forget that the technology is fundamentally dependent on the underlying pedagogy and learning principles (Yellowlees 2006).

Universities in the United States and the UK have already run trials where they have attempted to embed the technology within their institutions. Notable examples include Duke and Leeds Universities. Duke University have used the model that they want the students to be innovative and creative in how they use the technology. This is a very bold idea and does not fully make use of the value of this kind of technology. Leeds University have a slightly different model in that there is a greater focus on students using the technology to access the content from a remote location or in the field.

It can be argued that the use of devices in this manner where the focus is on content delivery is pedagogically conservative and regressive (Herrington et al 2009). This kind of formula tries to duplicate what happens in the offline world into the online world. No real advantage is taken of the unique capabilities of new technologies.

Both approaches have their merits, but can universities feasibly continue to afford to give away such expensive equipment on an annual basis? It can be argued that this kind of model is just not sustainable from a content development and cost perspective. With these kinds of pedagogical models the focus starts to shift away from the use of technology in learning and we may see a move towards the acceptable maintenance of the hardware.

This project has tried to focus more on the development of learning pedagogy and how this can be used within the learning environment with technology that is accessible and easy to use. Hence by looking at the results the most successful activities were the ones that focus on the use of SMS. The activities that required more complex interaction between the student and the device had some of the lowest uptake.

Looking at the results the majority of the students interacted and engaged with activities that were easy to use, fun and accessible. It would be prudent to assume that activities need to be designed which make use of the strength of the devices; these include ubiquity, accessibility and communication. This is supported by Switzer and Csapo's (2005) observation that mobile technologies afford learners opportunities for collaboration in the creation of products and for sharing them among their peers.

As the hardware becomes more technically superior and this becomes more widely available, activities could be designed to include pictures, notes, audio and video recording. In the future this could be expanded to include "apps" as part of the learning process for a number of different uses e.g. an e-portfolio tool.

The key thing to remember as these new pedagogies start to mature is that it is important not to get too immersed with the technology and lose focus of the pedagogy. This is an easy mistake to make so any use of these types of pedagogies needs to be carefully managed. Technology moves so fast that what was maybe innovative and transparent yesterday may not be the best technology for doing a certain task or activity in the future.

7. Links to Web Resources

The top 50 mobile learning resources:

<http://www.upsidelearning.com/blog/index.php/2009/11/02/top-50-mobile-learning-resources/>

The Ethics of Mobile Learning

<http://cloudworks.ac.uk/cloud/view/3142>

Journal of the Research Centre for Educational Technology Vol 6 No 1 2010 – Special Edition on Handheld Learning 2009 <http://www.rcetj.org/index.php/rcetj/issue/current>

Mobile in 5 Paragraphs

<http://blog.learnlets.com/?p=328>

Podcasting, ipadio and the metropolitan museum

<http://www.livinginthe4thscreen.com/podcasting-ipadio-and-the-metropolitan-museum>

8. Relevant Academic Articles

Ebner M., & Maurer H. Can Weblogs and Microblogs Change Traditional Scientific Writing? *Future Internet*. 2009; 1(1) pp.47-58. (Available online at: <http://www.mdpi.com/1999-5903/1/1/47>)

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Kukulska-Hulme, A. & Traxler, J. (2005) (Eds) *Mobile Learning: A handbook for educators and trainers* Routledge: Abingdon

Lefoe, G., Olney, I., Wright, R. and Herrington, A. (2009), Faculty development for new technologies: Putting mobile learning in the hands of the teachers, available online <http://ro.uow.edu.au/edupapers/77> (Accessed 8/12/09)

Mantei, J. and Kervin, L. (2009) Using iPods to capture professional dialogue between early career teachers to enrich reflective practice, in Herrington, J., Herrington, A., Mantei, J., Olney, I. and Ferry, B. (Eds), *New technologies, new pedagogies: Mobile learning in higher education*, Faculty of Education, University of Wollongong, <http://ro.uow.edu.au/edupapers/82> (Accessed 15/5/10)

Olney, I, Herrington, J and Verenikina, I, (2009), Digital story telling using iPods, in Herrington, J., Herrington, A., Mantei, J., Olney, I. and Ferry, B. (Eds), *New technologies, new pedagogies: Mobile learning in higher education*, Faculty of Education, University of Wollongong, <http://ro.uow.edu.au/edupapers/79/>

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Appendix A – Questionnaire for Students Uploading Marketing Images

Welcome!

Thank you for agreeing to complete this survey to evaluate the effectiveness of the marketing activity. It should take no more than 10 minutes to complete. The answers you give are confidential, will be completely anonymous and no individual will be identified. Please be as honest as possible with your answers.

Please note it is not possible to return to a page once it has been completed. Therefore, please think carefully before responding so that your views are accurately represented.

Thank you - if you need any further information, please email: s.folley@hud.ac.uk

Once you click 'continue' you will be directed to the first section of the survey

1. Are you

- c) Female
- d) Male

2. Which age range are you in?

- f) under 20
- g) 20-29
- h) 30-39
- i) 40-49
- j) 50 or over

3. Do you have a mobile phone?

- g) Yes - I have an iPhone
- h) Yes - I have a smart phone
- i) Yes - I have a mobile phone (other than an iPhone or smartphone) with a camera
- j) Yes - I have a mobile phone (other than an iPhone or smartphone) without a camera
- k) No I don't have a mobile phone
- l) Other (please specify):

4. Do you have price plan/contract on your mobile that allows unlimited or a large number of picture messages a month?

- f) Yes

- g) No - I am on a monthly contract with now or few inclusive picture messages per month
- h) No I am on pay-as-you-go
- i) I don't have a mobile phone
- j) Other (please specify):

5. Did you take and upload any photos for this activity?

- e) Yes - I added many photos (more than 10)
- f) Yes - I added a few photos (between 3 and 10)
- g) Yes - I added 1 or 2 photos
- h) No I did not add any photos

If No - why did you not take part in the activity?

6. How did you take and upload the photos into Blackboard?

- f) Took photos with a mobile phone and uploaded directly to Blackboard via the phone
- g) Took photos with a mobile phone and uploaded to a computer and then to Blackboard
- h) Took the photos with a digital camera and uploaded to a computer and then to Blackboard
- i) I did not take/upload any photos
- j) Other (please specify):

7. What advantages did this activity have to your learning? Please give details

8. Do you think this activity had any disadvantages? If so please explain what they are

9. Can you suggest any improvements to this activity?

10. Do you use your mobile phone for any other learning activity? If so please give details

11. Have you any other comments to make about this activity that we have not covered above?

Thank you for very much for taking the time to complete this survey - your answers will help us improve our teaching and learning in the future.

Appendix B – Questionnaire for Students using the Text Wall

Welcome!

Thank you for agreeing to complete this survey to evaluate the effectiveness of the text wall activity. The survey should take no more than 10 minutes to complete. The answers you give are confidential, will be completely anonymous and no individual will be identified. Please be as honest as possible with your answers.

Please note it is not possible to return to a page once it has been completed. Therefore, please think carefully before responding so that your views are accurately represented.

Thank you - if you need any further information, please email: s.folley@hud.ac.uk

Once you click 'continue' you will be directed to the first section of the survey.

1. Are you
 - a) Female
 - b) Male

2. Which age range are you in?
 - a) under 20
 - b) 20-29
 - c) 30-39
 - d) 40-49
 - e) 50 or over

9. Do you have a mobile phone?
 - a) Yes - I have an iPhone
 - b) Yes - I have a smart phone
 - c) Yes - I have a mobile phone (other than an iPhone or smartphone)
 - d) No I don't have a mobile phone
 - e) Other (please specify):

10. Do you have price plan/contract on your mobile that allows unlimited or a large number (500+) texts a month?
 - a) Yes
 - b) No - I am on a monthly contract with less inclusive texts per month
 - c) No I am on pay-as-you-go
 - d) I don't have a mobile phone
 - e) Other (please specify)

11. Did you add any text messages to the text wall?
- a) Yes - I added many messages (more than 10)
 - b) Yes - I added a few messages (between 3 and 10)
 - c) Yes - I added 1 or 2 messages
 - d) No I did not add any messages

If no – why did you not take part in the activity?

6. What technology did you mainly use to access the text wall?

- a) Mobile phone
- b) iPod Touch
- c) Netbook/laptop
- d) Personal Computer
- e) I did not access the text wall
- f) Other (please specify):

7. Which of these did you use the text wall for? (select all that apply)

- a) To ask a question
- b) To summarise the main learning points
- c) To make a comment on something the lecturer said
- d) To discuss something with one or more of your peers
- e) Other (please specify):

8. Which of these did you **mainly** use the text wall for? (select one only)

- f) To ask a question
- g) To summarise the main learning points
- h) To make a comment on something the lecturer said
- i) To discuss something with one or more of your peers
- j) Other (please specify):

9. What advantages did using the text wall have to your learning? Please give details

10. Do you think the text wall has any disadvantages? If so please explain what they are

11. Would you like the text wall to be available in more of your classes?

12. Can you think of any other use of the text wall?

13. Do you use your mobile phone for any other learning activity? If so please give details

14. Have you any other comments to make about the use of the text wall that we have not covered above?

Appendix C – Questionnaire for Students Creating Podcasts

Welcome!

Thank you for agreeing to complete this survey to evaluate the effectiveness of creating podcasts to your learning. Please complete the survey even if you chose not to do this activity. It should take no more than 10 minutes to complete. The answers you give are confidential, will be completely anonymous and no individual will be identified. Please be as honest as possible with your answers.

Please note it is not possible to return to a page once it has been completed. Therefore, please think carefully before responding so that your views are accurately represented.

Thank you - if you need any further information, please email: s.folley@hud.ac.uk

Once you click 'continue' you will be directed to the first section of the survey.

1. Are you

- c) Female
- d) Male

2. Which age range are you in?

- f) under 20
- g) 20-29
- h) 30-39
- i) 40-49
- j) 50 or over

3. Do you have a mobile phone?

- f) Yes - I have an iPhone
- g) Yes - I have a smart phone (other than an iPhone)
- h) Yes - I have a mobile phone but not an iPhone or smartphone
- i) No I don't have a mobile phone
- j) Other (please specify):

4. Do you have a recording device that enables you to create audio recordings (podcasts)? (select all that apply)

- f) Yes - I have a recording facility/application on my mobile phone
- g) Yes - I have another mobile recording device I could use (such as a dictaphone, digital recorder etc)
- h) Yes - I have recording software on my pc/laptop
- i) No - I have no device I could record a podcast on
- j) Other (please specify):

5. Did you take part in this activity?

- c) Yes - I created (or helped to create) a podcast
- d) No - I did not create (or help create) a podcast for this activity

If Yes - then how did creating the podcast help your learning?

If No - why did you not take part in the activity?

6. If you did create a podcast - which method did you use?

- f) I used my mobile phone
- g) I used recording software on my pc/laptop
- h) I used a digital recording device
- i) I did not create a podcast
- j) Other (please specify):

7. If revision podcasts had been created (by students for this activity) for each topic - would you have listened to them at exam/assignment time?

- e) Yes - I would have listened to all of them
- f) Yes - I would have listened to some of them that related to my assignment/revision
- g) No - I would not have listened to the podcasts
- h) Other (please specify):

If you would not have listened to them - please explain why not:

8. Would you have taken part in this activity if it had been part of the assessment?

- c) Yes
- d) No

Other (please specify)

9. Have you any other comments to make about this activity that we have not covered above?

Thank you for very much for taking the time to complete this survey - your answers will help us improve our teaching and learning in the future.

Appendix D – Questionnaire for Students using the SMS Service

Welcome!

Thank you for agreeing to complete this survey to evaluate the effectiveness of the text messaging service that the Business School has been taking part in. The survey should take no more than 10 minutes to complete. The answers you give are confidential, will be completely anonymous and no individual will be identified. Please be as honest as possible with your answers.

Please note it is not possible to return to a page once it has been completed. Therefore, please think carefully before responding so that your views are accurately represented.

Thank you - if you need any further information, please email: s.folley@hud.ac.uk

Once you click 'continue' you will be directed to the first section of the survey.

1. Are you

- c) Female
- d) Male

2. Which age range are you in?

- f) under 20
- g) 20-29
- h) 30-39
- i) 40-49
- j) 50 or over

3. Which department of the Business School are you in?

- f) Accountancy
- g) Leadership and Management
- h) Strategy and marketing
- i) Law
- j) Other (please specify):

4. What level of course are you studying for?

- f) Foundation degree
- g) Undergraduate degree

- h) Masters degree (MA/MSc/MBA)
- i) PhD
- j) Other (please specify):

5. Do you have a mobile phone?

- f) Yes - I have an iPhone
- g) Yes - I have a smart phone (one with applications and capable of internet browsing etc)
- h) Yes - I have a mobile phone (other than an iPhone or smartphone)
- i) No I don't have a mobile phone
- j) Other (please specify):

6. Did you opt in to the text messaging scheme?

- c) Yes
- d) No

If not - why did you choose not to take part?

7. Approximately how many messages did you receive?

- g) None
- h) 1-5
- i) 6-10
- j) 11-20
- k) More than 20
- l) I did not take part in the scheme.

8. Select each of these that apply *(these were just tick boxes in each of the table cells)*

Which of these types of text message....	have you received over the last academic year?	would you like to receive in the future (if the situation arises)?	would you prefer not to receive at all in the future?	would you prefer the information via another communication method like Blackboard or email?	would you prefer to receive by text rather than any other way of communication (like Blackboard or email)?
a room change message					

a cancellation of a class message					
a coursework deadline reminder					
a message giving you feedback about an assignment					
a message containing your results/grade on an assignment					
An exam date/time/room reminder					
A 'Haven't seen you recently' message					
An attendance reminder					
A message to let you know you have missed a deadline					
A message to inform you of a social event					
A message to let you know about a tv/radio programme/event relevant to your course					
A message to arrange a personal tutor meeting					
A guest lecture alert					

9. Do you think the text messaging service has improved your student experience?

- d) Yes
- e) No
- f) I didn't take part in it.

Please explain the reasons for your answer

10. Do you think the text messaging service has any disadvantages?

- c) Yes
- d) No

If 'yes' please explain what they are

11. Did you have any concerns about your privacy with the text messaging scheme?

- f) Yes - but I did still opt into the scheme
- g) Yes - so I chose not to opt into the scheme
- h) No - and I did opt in the scheme
- i) No - but I didn't opt in the scheme for another reason
- j) Other (please specify):

12. Did you receive any text messages or calls on your mobile from the Business School staff that you thought were inappropriate or invasive of your privacy?

- c) Yes
- d) No

If yes - please give full details

13. What did you think of the timing of the messages (on the whole)? (select all that apply)

- g) The timing was generally good
- h) The messages often came a bit too late (please give details below)
- i) The messages often came a bit too early (please give details below)
- j) I got some messages at unsociable hours (please give details of the times you thought were inappropriate to send you text messages)
- k) I did not take part in the scheme
- l) Other (please specify):

If you would like to explain your answers to the above question any further or if you have any other comments on the timing of messages, please give details here:

14. Can you think of any other use of the text messaging service or any ways to improve it?

15. Have you any other comments to make about the text messaging service?

Thank you for very much for taking the time to complete this survey - your answers will help us improve our communication with students in the future.